Criterion 1 – Curricular Aspects

1.3 Curriculum Enrichment:

1.3.2: Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Computer Science

Name of the Course: M.Sc. I (Sem.–I & II)

(Syllabus to be implemented from w.e.f. June 2020)

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

M. Sc. I year (Computer Science)

Syllabus (Semester – I and II)

(Choice Based Credit System)

With Effect from June 2020

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
M.Sc. (Computer Science)

1. Introduction: A broad introduction of computer science is provided, including the key technologies and skills needed for employment. Student can explore his / her personal interests through a variety of optional modules. Advanced intellectual, teamwork, communication and other transferable skills are developed. These students are expected to lead new generation of computer scientist. The students would be true knowledge workers prestigious to the Nation.

2. Eligibility: The candidate passing any of the under graduate degree, namely, B.Sc.(Computer Science), B.Sc. (Entire Computer Science)., B.Sc. (Computer Technology), B.Sc. (Mathematics), B.Sc.(Statistics), B.Sc. (Electronics) will be eligible for admission to M.Sc. Computer Science.

3. Admission / Selection Procedure: A student shall be held eligible for admission to the M. Sc. (Computer Science) course provided he / she has passed the B.Sc. examination in the subjects mentioned in Eligibility, and has passed the entrance examination conducted by the University. The students with B.Sc. from other universities shall be eligible if they qualify through entrance examination and they score minimum 55 percent B+ marks in the subject at the B.Sc. examination. While preparing the merit list for M. Sc. (Computer Science) admission, the performance at B.Sc. III and the performance at the entrance examination will be given equal weightage (50:50)

4. Duration of the Course: The M.Sc. is offered on full time basis, the course is of two years duration named as M.Sc. (Computer Science), each year is divided into two semesters for the convenience of teaching and examination. In each semester there will be teaching for 14 weeks followed by end of semester examination.

5. Passing Standard: Passing standard is same as that of other M.Sc. courses in the Solapur University. The candidate has to appear for internal evaluation of 30 marks and external evaluation (university exam) for 70 marks for each paper / practical / project. In case of theory papers internal examination/s will be conducted by the school / department. The nature of internal evaluation of practical and project will be decided by the respective schools / departments. The internal evaluation is a process of continuous assessment.

A student who failed in Term End examination (theory) & passed in internal assessment of a paper (subject) shall be given FC (Failed in Term End Exam) Grade. Such student will have to appear for Term End examination only. A student who fails in internal assessment and passed in Term End examination (Theory) shall be given FR (Failed in Internal Assessment) Grade. Such student will have to appear for Term End examination as well as internal assessment.

In case of year down candidates from the mark scheme the candidates shall appear for the same 80 marks paper of the external examination and his performance shall be scaled to 100 marks.

6. Structure of the Syllabus – M.Sc. (Computer Science):

Part – I Semester-I

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core - Theory						
HCT 1.1	Object Oriented Programming using C++	04	20	80	100	4
HCT 1.2	Advanced DBMS	04	20	80	100	4
HCT 1.3	Data Structures and Algorithms	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 1.1	Software Engineering	04	20	80	100	4
SCT 1.2	UML					
Hard core Lab / Project						
HCP 1.1	Practical based on HCT 1.1	04	10	40	50	2
HCP 1.2	Practical based on HCT 1.2	04	10	40	50	2
HCP 1.3	Practical based on HCT 1.3	04	10	40	50	2
HCP 1.4	Project – I	02	10	40	50	2
	Tutorial	02	25	-	25	1
Total		32	145	480	625	25

Part – I Semester-II

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 2.1	Java Programming	04	20	80	100	4
HCT 2.2	Python Programming	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 1.1	Computer Communication Network	04	20	80	100	4
SCT 1.2	Artificial Intelligence	04	20	80	100	4
Open Elective – Theory (Any One)						
OET 2.1	Office Automation	04	20	80	100	4
OET 2.2	SWAYAM Course*	--	--	--	--	4
Hard core Lab / Project						
HCP 2.1	Practical based on HCT 2.1	04	10	40	50	2
HCP 2.2	Practical based on HCT 2.2	04	10	40	50	2
HCP 2.3	Project – II	02	10	40	50	2
Open Elective (Any One)						
OEP 2.1	Practical Based on OET 2.1	04	10	40	50	2
OEP 2.2	Practical / Seminar / Viva based on SWAYAM course OET2.2					
Others	Tutorial	02	25	-	25	1
Total		32	145	480	625	25

* : The credits will be transferred as per university policy and UGC guidelines after submitting the completion certificate / mark list from the SWAYAM.

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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Computer Science

(Syllabus to be implemented w.e.f. June 2021)

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

M. Sc. II year (Computer Science)

Syllabus (Semester – III and IV)

(Choice Based Credit System)

With Effect from June 2021

M.Sc. (Computer Science) Part – II Semester-III

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core - Theory						
HCT 3.1	Digital Image Processing	04	20	80	100	4
HCT 3.2	Open Source Technologies (PHP, MySql)	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 3.1	Network Security					
SCT 3.2	Cloud Computing	04	20	80	100	4
SCT 3.3	Mobile Computing					
Open Elective – Theory (Any One)						
OET 3.1	Fundamental of Web Designing	04	20	80	100	4
OET 3.2	SWAYAM Course*					
Hard core Lab / Project						
HCP 3.1	Practical based on HCT 3.1	04	10	40	50	2
HCP 3.2	Practical based on HCT 3.2	04	10	40	50	2
HCP 3.3	Project – III	02	10	40	50	2
Open Elective (Any One)						
OEP 3.1	Practical Based on OET 3.1	04	10	40	50	2
OEP 3.2	Practical / Seminar / Viva based on SWAYAM course OET 3.2					
Others	Tutorial	02	25	-	25	1
Total of Sem. III		32	145	480	625	25
Add on Skill Course : Website Design using WordPress		Theory : 50 marks, Practical : 50 marks				4

Part – II Semester-IV

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 4.1	•Net Technology	04	20	80	100	4
HCT 4.2	Machine Learning	04	20	80	100	4
HCT 4.3	Data Warehouse and Mining	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 4.1	Soft Computing	04	20	80	100	4
SCT 4.2	Block chain Technology					
Hard core Lab / Project						
HCP 4.1	Practical based on HCT 4.1	04	10	40	50	2
HCP 4.2	Practical based on HCT 4.2	04	10	40	50	2
HCP 4.3	Practical based on HCT 4.3	04	10	40	50	2
HCP 4.4	Project – IV	02	10	40	50	2
Others	Tutorial	02	25	-	25	1
Total of Sem. IV		32	145	480	625	25

*: The credits will be transferred as per university policy and UGC guidelines after submitting the completion certificate / mark list from the SWAYAM.

Course Code: HCP 4.1,

Course Title: Practical based on HCT-4.1

Minimum 20 Practical Assignments based on HCT 4.1.

Course Code: HCP 4.2,

Course Title: Practical based on HCT-4.2

Minimum 20 Practical Assignments based on HCT 4.2.

Course Code: HCP 4.3,

Course Title: Practical based on HCT-4.3

Minimum 20 Practical Assignments based on HCT 4.3.

Course Code: HCP 4.4,

Course Title: Project IV

Real time and live project followed by Presentation/Viva-Voce.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Entire Computer Science

Name of the Course: B. Sc. (E.C.S.) Part- III (Sem. V & VI)

(Syllabus to be implemented from w.e.f. June 2021)

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
Faculty of Science and Technology
Choice Based Credit System (CBCS) (w.e.f. 2021-22) Revised Structure for B.Sc. (ECS)-III

Subject/ CoreCourse	Name and Type of the Paper		No. ofPapers /Practical	Hrs./Week			Total Marks perPaper	UA	CA	Credits
	Type	Name		L	T	P				
Class:	B.Sc.(EntireComputer Science)- IIISemester–V									
AbilityEnhancementCourse	(AECC)	English (BusinessEnglish)	Paper IIPart A	4	--	--	50	40	10	2.0
Core	DSE1 A	Data CommunicationandNetworking	Paper IX	4	--	--	100	80	20	4.0
	DSE2 A	Theory of ComputerScience	PaperX	4	--	--	100	80	20	4.0
	DSE3 A	VisualProgramming	PaperXI	4	--	--	100	80	20	4.0
	DSE4 A	AdvancedJava	PaperXII	4	--	--	100	80	20	4.0
SkillEnhancementCourse	SEC3	Advanced PythonProgramming	Paper XIII	4	--	--	100	80	20	4.0
TotalTheorySemester-V				24			550	440	110	22
Class:	B.Sc.(EntireComputerScience)-IIISemester –VI									
AbilityEnhancementCourse	(AECC)	English (BusinessEnglish)	Paper IIPartB	4	--	--	50	40	10	2.0
Core	DSE1 B	SystemSecurity	Paper XIV	4	--	--	100	80	20	4.0
	DSE2 B	CompilerConstruction	PaperXV	4	--	--	100	80	20	4.0
	DSE3 B	InternetProgramming usingASP.Net	Paper XVI	4	--	--	100	80	20	4.0
	DSE4 B	AngularJS	Paper XVII	4	--	--	100	80	20	4.0
Skill Enhancement Course	SEC4	Mobile ApplicationDevelopment	Paper XVIII	4	--	--	100	80	20	4.0
TotalTheorySemester-VI				24			550	440	110	22
Practical'son		DSE2 AandDSE 2 B		--	--	5	100	80	20	4.0
		DSE3 AandDSE 3 B		--	---	5	100	80	20	4.0
		DSE4 AandDSE 4 B		--	--	5	100	80	20	4.0
		Project work		--	--	5	100	80	20	4.0
Total(practical's)					20		400	320	80	16
Grand Total				48	--	20	1500	1200	300	60

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Bachelor of Computer Applications

Name of the Course: B. C. A. Part- III (Sem. V & VI)

(Syllabus to be implemented from w.e.f. June 2021)

PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR
Choice Based Credit System (CBCS), (w. e. f. June-2021)

Syllabus for B. C. A. – Part III (Science)

Name and Type of the Paper		Title of Paper	Hrs/Wee		Total Marks per paper	UA	CA	Credits
Type	Name		L	P				
B. C. A. – III Semester V								
English (Business English)	English (Business English)		4	-	50	40	10	2.0
DSE 1 A	Paper IX	Core Java	4	-	100	80	20	4.0
DSE 2 A	Paper X	Visual Programming	4	-	100	80	20	4.0
DSE 3 A	Paper XI	Computer Graphics	4	-	100	80	20	4.0
DSE 4 A	Paper XII	Recent Trends in IT	4	-	100	80	20	4.0
SEC 3	Paper XIII	Linux and Shell Programming	4	-	100	80	20	4.0
	Total (Theory)		24	-	550	440	110	22.0
B. C. A. – III Semester VI								
English (Business English)	English (Business English)		4	-	50	40	10	2.0
DSE 1 B	Paper XIV	Advanced Java	4	-	100	80	20	4.0
DSE 2 B	Paper XV	Dot Net Technology	4	-	100	80	20	4.0
DSE 3 B	Paper XVI	Data Warehouse and Data Mining	4	-	100	80	20	4.0
DSE 4 B	Paper XVII	Cryptography and Network Security	4	-	100	80	20	4.0
SEC 4	Paper XVIII	Advanced Python	4	-	100	80	20	4.0
	Total (Theory)		24	-	550	440	110	22.0
Practical								
DSE 1A &1B	Practical IV	Practical On Core Java and Advance Java	-	5	100	80	20	4.0
DSE 2A &2B	Practical V	Practical on Visual Programming and .Net Technology	-	5	100	80	20	4.0
DSE 3A &3B	Practical VI	Practical on Computer Graphics And DM & DW	-	5	100	80	20	4.0
	Practical VII	Project	-	5	100	80	20	4.0
	Total (Practicals)		-	20	400	320	80	16.0
Grand Total			48	20	1500	1200	300	60

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: For All Faculties
Environmental Studies
(Non-Credit)

CHOICE BASED CREDIT SYSTEM

Syllabus: ENVIRONMENTAL STUDIES

(Syllabus to be implemented w.e.f. June 2020)

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

All UG for Fourth Semester Compulsory Paper

Environmental Studies

(CBCS - Syllabus) - 2020

1) **Title of the Paper:** Environmental Studies

2) **Pattern:** Semester and Credit system

3) **Total Contact Hours:** 45 hours

Structure for Environmental Studies

Class & Semester	Code	Name and type of the paper		L/P	Credits	Total Marks	UA	CA
		Type	Name					
		For All UG Semester IV (Second year)						
All UG Second Year (4th Semester)	EVS	Ability Enhancement Course (AECC) and Non Credit	Environmental Studies	50	NC	50	40	10

Compulsory: *Unit Test / Assignment/ Seminar/ Nature Visits / Field Work / Field Tour/ Industrial visits of 1-2 days and submission of report is compulsory under internals marks (CA)

1. The credit earned by student with this course shall not be considered for calculation of SGPA/CGPA

2. This course is not considered as a passing head for counting passing heads for ATKT

3. Student must pass this subject for award of the degree

Evaluation Scheme:

Theory paper has 50 marks out of which 40 marks will be for Term End examination and 10 marks for College Internal Assessment. The candidate has to appear for internal evaluation of 10 marks and external evaluation (University Examination) of 40 marks.

A) College Internal Evaluation:

In case of theory paper, internal examination has to conduct by department / college.

Marks for internal assessment shall be given based on Unit Test / Assignment/ Seminar/ Nature Visits / Field Work / Field Tour/ Industrial visits of 1-2 days and submission of report is compulsory under internals marks (CA).

B) External Evaluation (End of Term University Examination):

I) Nature of Theory question paper:

1) Theory paper is of 40 marks.

2) Theory paper will be of 2 hours duration

3) There shall be 05 questions each carrying 08 marks.

4) Students have to attempt all the questions.

Syllabus As Per UGC Guidelines

UGC Letter – File No. 13-01/2000 (EA/ENV/COS-01 Dated 14th May, 2019)

Environment Studies (AECC)

Theory Lectures - (45)

Unit 1 : Introduction to environmental studies (2 lectures)

- Multidisciplinary nature of environmental studies;
- Scope and importance; Concept of sustainability and sustainable development

Unit 2 : Ecosystems (6 lectures)

- What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems :
  a) Forest ecosystem
  b) Grassland ecosystem
  c) Desert ecosystem
  d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

Unit 3 : Natural Resources : Renewable and Non-renewable Resources (8 lectures)

- Land resources and land use change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).
- Energy resources : Renewable and non- renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

Unit 4 : Biodiversity and Conservation (8 lectures)

- Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity : Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

Unit 5 : EnvironmentalPollution (8 lectures)

- Environmental pollution : types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management : Control measures of urban and industrial waste.
- Pollution case studies.

Unit 6 : Environmental Policies & Practices (7 lectures)

- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- Environment Laws: Environment Protection Act; Air (Prevention, & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
- Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

Unit 7 : Human Communities and the Environment (6 lectures)

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management : floods, earthquake, cyclones and landslides.
- Environmental movements : Chipko, Silent valley, Bishnois of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

Unit 8 : Field work (Equal to 3 lectures)

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems-pond, river, dam, pond, ocean / marine etc.

Suggested Readings:
1. Environmental Studies E - Text Book (Marathi and English Medium) Solapur University Solapur (2017).
2. Carson, R. 2002. *Silent Spring*. Houghton Mifflin Harcourt.
3. Gadgil, M., & Guha, R. 1993. *This Fissured Land: An Ecological History of India.* Univ. of California Press.
4. Gleeson, B. and Low, N. (eds.) 1999. *Global Ethics and Environment*, London, Routledge.
5. Gleick, P. H. 1993. *Water in Crisis*. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
6. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. *Principles of Conservation Biology*. Sunderland: Sinauer Associates, 2006.
7. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. *Science*, 339: 36-37.
8. McCully, P. 1996. *Rivers no more: the environmental effects of dams* (pp. 29-64). Zed Books.
9. McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.

10. Odum, E.P., Odum, H.T. & Andrews, J. 1971. *Fundamentals of Ecology.* Philadelphia: Saunders.

11. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.

12. Rao, M.N. & Datta, A.K. 1987. *Waste Water Treatment.* Oxford and IBH Publishing Co. Pvt. Ltd.

13. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. *Environment.* 8th edition. John Wiley & Sons.

14. Rosencranz, A., Divan, S., & Noble, M. L. 2001. *Environmental law and policy in India. Tripathi 1992.*

15. Sengupta, R. 2003. *Ecology and economics:* An approach to sustainable development. OUP.

16. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. *Ecology, Environmental Science and Conservation.* S. Chand Publishing, New Delhi.

17. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. *Conservation Biology: Voices from the Tropics.* John Wiley & Sons.

18. Thapar, V. 1998. *Land of the Tiger: A Natural History of the Indian Subcontinent.*

19. Warren, C. E. 1971. *Biology and Water Pollution Control.* WB Saunders.

20. Wilson, E. O. 2006. *The Creation: An appeal to save life on earth.* New York: Norton.

21. World Commission on Environment and Development. 1987. *Our Common Future.* Oxford University Press.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
M.Sc. (CS)-I Sem-II Practical Examination
BATCH-I Attendance Sheet Date: 09/06/2023 Time: 1:30 to 3:30 PM
Subject: HCP 2.3: Project-II

Sr.No	Seat_No	Name of Student	Sign.
901		Kagade Dnyaneshwar vitthal	AB
902		Ubale Prathamesh Vitthal	AB
903		Joshi Akanksha Hanumant	A.Joshi
904		Banakar Sanika Kisan	SKBankar
905		Shingare Shubham Sudhir	
906		Gujare Priyanka Dattatray	Puj
907		Patil Aarti Dnyaneshwar	Aarti
908		Shaikh Shahajan Farid	Shaikh
909		Adsul Sahil Ashok	Gadsul
910		Mhetre Priyanka jagannath	Pmhetre
911		Ingale Asmita Jagadish	Angale
912		Yenape Varsha mahadev	yenapem
913		Salunkhe Ashutosh Raosaheb	AB
914		Madane Varsha Balu	AB
915		Phanase Tejas kailas	Phanase
916		Jadhav Shreya Amol	Jadhav
917		Zanje vanita Shimant	AB
918		Kolekar Sachin Shivaji	AB
919		Ghogare Meghraj Rajaram	AB
920		Mohare Amit Tanaji	ATmohare
921		Awatade Snehal Suresh	Awatade
922		Sathe Pratik Sunil	AB .

Examiners: 1. Mr. Shahane S.P.

2. Mr. Bagwan J.I.

3. Mr. Kshirsagar B.J.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
M.Sc. (CS)-I Sem-II Practical Examination
BATCH-I Attendance Sheet Date: 10/06/2023 Time: 1:30 to 3:30 PM
Subject: HCP 4.4: Project-IV

Sr.No	Seat_No	Name of Student	Sign.
1001		Koratkar Rutika Ramchandra	
1002		Salunkhe Rohan Suresh	
1003		Yadav Rohan Shrimant	
1004		Karat Monika Bharat	
1005		Vedpathak Ramesh Ravindra	
1006		Shethe Pratik atul	
1007		Tamboli Dilnawaj Rajak	AB
1008		Paramar Kajal Dipak	AB
1009		Ghadage Aniketa Hanumant	
1010		Bhagat Viraj Satish	
1011		Phate bhagyajit Dadaso	
1012		Gaikwad Rutik Vinod	
1013		Pansare swapanil Dattatray	
1014		Munguskar Shambhuraje Rajaram	
1015		Nale Mangesh Dipak	
1016		Makwane Pooja ganpat	
1017		Mhetre Umesh Malhari	
1018		Madane Snehal Kakasaheb	
1019		Shinde Akash Shivsharan	
1020		Darade Rutuja Dilipumar	
1021		Vitkar Ambadas Ramesh	
1022		Joshi Vishakha Pandurang	
1023		Tik Shejal Ashok	
1024		Jadhav Pratiksha Pratap	
1025		Raskar Kanchan Ganpat	

Examiners: 1. Mr. Patil S.V.

2. Mr. Dambal D.A.

3. Dr. Pisal T.B.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
M.Sc. (CS)-I Sem-IV Practical Examination
BATCH-II Attendance Sheet Date: 10/06/2023 Time: 1:30 to 3:30 PM
Subject: HCP 4.4: Project-IV

Sr.No	Seat_No	Name of Student	Sign.
1026		Sontakke Rushikesh Appa	
1027		Girame Asmita Ranjankumar	
1028		Sathe pravin Vitthal	
1029		Walkunde Shubhangi Shivaji	
1030		Deshmukh vaibhavi Suresh	AB.
1031		Kodalkar Kajal Balu	
1032		Dhavale Swapnil Jabuvant	AB
1033		Parade Ashwini Tukaram	
1034		Phule Sudhir Rajendra	AB
1035		Gawali Ranjit Bhairu	
1036		Katakar Shrutika Vetalrao	
1037		Bhakare Priyanka Sunil	AB
1038		Sawant Swapnali Bharat	
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1043		Bhalerao Sharayu Sanjay	
1044		Karande Ganesh Namdev	
1045		Patil Vaibhav Nandkumar	AB
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1048		Deshmukh Vishwajit Mohanrao	
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2. Mr. Dambal D.A.

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Greenfinger's College of Computer and Technology, Shankarnagar-Akluj

Environmental Studies Project Work - 2022- 23

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2	Galande Prathamesh Navnath	गलांडे प्र.न.
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4	Deshmukh Darshan Samit	Duy.
5	Chavan Avishkar Ashok	Amult.
6	Adat Bharati Machindara	Bharti.B.
7	Bankar Komal Uddhav	Komal.B.
8	Bhosale Sakshi Baburao	Sakshi.B.
9	Deshmukh Gauri Santosh	@Deshmukh.
10	Deshmukh Gayatri Santosh	देशमुख.
11	Gurav Avishkar Umesh	A.V-Gaurav.
12	Jadhav Parth Harishchandra	Jadhav P.H.
13	Jadhav Shivam Narayan	Shivam.
14	Jagtap Prathmesh Satish	Prth.
15	Kadam Saurabh Sanjay	Kadam. S.S.
16	Gaikwad Amruta Vitthal	Gaikwad. A.V
17	Gaikwad Pranali Anil	Gaikwad.P.A
18	Gaikwad Tanuja Subhash	T.Sb
19	Godase Arti Satish	Arti
20	Gujar Ankita Kumar	Ankita.G.
21	Keche Avinash Appasaheb	AA Keche
22	Kharat Anurag Ramesh	Anurag
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25	Kshirsagar Santosh Bharat	S.B.K.
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28	Jadhav Shruti Rajendra	Shruti.J
29	Jamdar Disha Ganesh	Disha
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31	Kumbhar Soham Nandkumar	Soham K.
32	Kurudkar Vishwaraj Bandopant	Vishwa
33	Madane Dhiraj Babasaheb	madane D. B.
34	Magar Dnyanraj Nagnath	D.N.A
35	Magar Tejas Uttam	Tejas
36	Khade Vishakha Anil	V. Khade
37	Kumbhar Gayatri Dnyaneshwar	Gayatri.K
38	Lokhande Vidya Laxman	Vidya.L
39	Magar Amruta Sanjay	A magar
40	Magar Rutuja Dattatray	R.D.M
41	Mane Saurabh Rambhau	Mane S. R.
42	Markad Siddhanath Hanumant	SM.
43	Momin Juned Nadeem	J.N. Momin
44	More Tushar Santosh	TM
45	Mundphane Tushar Pandurang	T.P.M
46	Nagane Sima Vishnu	Sima
47	Mhasawade Anjali Sunil	A.mhasawade
48	Mane Deshmukh Rutuja Ramdas	RR. Mane
49	Mane Ankita Vijay	Mane A V.
50	Magar Sakshi Annaso	S.Magar

51	Nagtilak Rohan Pravin	
52	Nanware Pratik Subhash	
53	Parade Prajwal Hanumant	
54	Patil Prashant Tanaji	
55	Rajgude Someshwar Subhash	
56	Naikude Sakshi Deepak	
57	Namdas Rutuja Tulshiram	
58	Patil Dhanashree Shivaji	
59	Patil Preeti Vitthal	
60	Pawar Kirtimalini Shahaji	
61	Rokade Vaibhav Navnath	
62	Sabale Mauli Premkumar	
63	Salave Sahil Rajendra	
64	Sawant Rutik Dilip	
65	Shaikh Ashraf Altaf	
66	Phaltankar Rutuja Nagesh	
67	Phapal Poonam Mahadev	
68	Phule Varsha Ganendra	
69	Raut Shruti Shrikant	
70	Revande Shital Balu	
71	Shinde Pratik Hanumant	
72	Shinde Rushikesh Bhagwan	
73	Shinde Saurabh Santosh	
74	Sonavane Aditya Balu	
75	Tamboli Samir Amin	
76	Vora Shalwi Milan	
77	Shaikh Samina Chand	

78	Shaikh Simran Chand	*(signature)*
79	Shinde Nandini Yuvraj	*(signature)* Shinde N.Y.
80	Shinde Sapana Pandurang	S. P. shinde.

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104	2019032500213712	Nalwade Rohit Mohan	— Ab —
105	2020032500102997	Nimbalkar Aaditya Vikas	Au
106	2020032500103006	Chavan Sagar Sanjay	SChavan.
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117	2020032500131544	Nandodkar Narayan Shivaji	A
118	2020032500131521	Londhe Akash Chankeshwar	Aduul :
119	2020032500131915	Kalange Aniket Nitin	Ange
120	2020032500133044	Jadhav Rutuja Uttam	Rut
121	2020032500133036	Jagadale Rushikesh Rajendra	Bagadale
122	2020032500134241	Shinde Rushikesh Shivaji	R.shinde
123	2020032500137386	Pandhare Vinod Vikas	
124	2020032500137394	Mane Deshmukh Shivraj Satish	
125	2020032500137405	Shinde Ajay Anantrao	
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127	2020032500137912	Shaikh Shahejafar Nisar	Sloich
128	2020032500137935	Kale Ankita Sanjay	Acale
129	2020032500137951	Kokare Preetam Sandeep	Put
130	2020032500137966	Kamble Rohit Madhukar	R.M.Kamble.
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132	2020032500137982	Patole Aditya Mahadev	Znuic
133	2020032500137997	Bhosale Vaishnavi Lalasaheb	Vaishnac
134	2020032500138857	Phule Rohan Vijay	Ephule
135	2020032500138865	Sathe Abhishek Dashrath	Sathy
136	2020032500138907	Hande Dhanshree Tukaram	Hande
137	2020032500138915	Sakhare Pritam Jagannath	Smt
138	2020032500138923	Palakhe Bhavin Pradip	
139	2020032500138931	Nanavare Kumar Satyawan	Kumas
140	2020032500138946	Ingawaledeshmukh Omkar Survakant	Auf
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204	2020032500140945	Athawale Akanksha Mahadev	Amulani.
205	2020032500140895	Mane Shubhangi Haridas	Akanksha
206	2020032500140906	Survase Shivani Satish	Gmane
207	2020032500141384	Shinde Harshal Marulti	S.S.Oy
208	2020032500142573	Kumbhar Samruddhi Machindra	adoshoel.
209	2020032500142557	Kodlinge Monali Mahavir	S.Kushar
210	2020032500142581	Patil Sangram Santosh	
211	2020032500142534	Rede Harshal Ramchandra	SSP.
212	2020032500142542	Lokhande Utkarsh Umesh	Aurel
213	2020032500142596	Swami Nisarg Basweshwar	cult
214	2020032500145134	Mujawar Aprina Badshaha	
215	2020032500145111	Kodlinge Rajlaxmi Kuber	ABMujawar
216	2020032500145126	Magar Sakshi Bapurav	Kr
217	2020032500145142	Babar Arati Dilip	
218	2020032500145157	Kate Tejas Vilas	el.ptBabar
219	2020032500145165	Vyavahare Revati Dileep	gale
220	2020032500145173	Potekar Vikram Rahul	Redre
221	2020032500145196	Deshmukh Vaibhavi Suresh	VP
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223	2020032500147663	Patel Nidhi Kishor	APSonawale
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225	2020032500148241	Misal Navanath Dattatray	Rutuja
226	2020032500148361	Tamboli Shabnur Aypoddin	-Ab-
227	2020032500148651	Magar Abhijit Laxman	Tamboli -
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229	2020032500150673	Magar Viraj Dnyaneshwar	Bhosal
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231	2020032500152946	Shinde Mayuri Rajkumar	Ksupnt
232	2020032500152962	Sawant Harshda Sunil	m.Shinde
233	2020032500016273	More Suraj Dnyaneshwar	
234	2020032500173962	Honmane Prashant Siddheshwar	- Ab -
235	2020032500090112	Shinde Kamini Kiran	Honman
236	2020032500090247	Thombare Gauri Kailasnath	Rhinde
237	2020032500090174	Gurav Swapnali Rajendra	Gaur
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241	2020032500090135	Mulani Ahamad Rahimtulla	Smile

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302	2020032500090151	Nashikkar Sharayu Santosh	
303	2020032500090166	Pawar Nikita Vijay	
304	2020032500090201	Mane Namrata Pandurang	
305	2020032500090321	Kshirsagar Amarsinh Chandrakant	
306	2020032500090336	Patil Mangesh Diapk	
307	2020032500090344	Shinde Prajakta Nagesh	
308	2020032500090216	Chopade Vaishnavi Bibhishan	
309	2020032500090224	Tamboli Juned Javed	
310	2020032500090232	Dupade Saurabh Madhukar	
311	2020032500090255	Bhosale Priti Dadaso	
312	2020032500090271	Bansode Pragati Siddhu	
313	2020032500090286	Ghogare Sonal Rajendra	
314	2020032500090294	Shinde Siddhesh Ananda	
315	2020032500090313	Hol Komal Dhanaji	
316	2020032500090352	Thite Sanket Shivaji	
317	2020032500090367	Gaikwad Yash Santosh	
318	2020032500090375	Kamble Ganesh Prakash	
319	2020032500090383	Shaikh Sahil Kadar	
320	2020032500090391	Suryavanshi Akash Prakash	
321	2020032500090723	Survase Tushar Santosh	
322	2020032500090731	Shaikh Mustafa Daut	
323	2020032500090754	Girme Divya Narayan	
324	2020032500090642	Dorwat Vishal Ashok	
325	2020032500090657	Gaikwad Amol Sharad	
326	2020032500090665	Patole Rushikesh Babasaheb	
327	2020032500090673	Bobade Suvarna Nivrutti	
328	2020032500090681	Pise Gauri Dnyaneshwar	
329	2020032500090696	Mithare Ganesh Tukaram	
330	2020032500090715	Shaikh Shahidahamad Faruk	
331	2020032500090777	Pawar Sandesh Sanjay	
332	2020032500090785	Mahadik Prachali Lalasaheb	
333	2020032500090793	Ghadge Abheejit Ashok	
334	2020032500090812	Survase Abhijeet Hanumanat	
335	2020032500090827	Magar Mangesh Suryakant	
336	2020032500090835	Kale Jayasinh Jagannath	
337	2020032500090851	Mulla Mujjalmin Najir	
338	2020032500090866	Chavan Anuja Ankush	
339	2020032500090874	Kale Shivtej Dattatray	
340	2020032500090882	Jadhav Sneha Sharad	
341	2020032500099753	Chavan Divya Sanjay	

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2) Mr. Waghmode G.C

Greenfinger's College of Computer and Technology, Shankarnagar-Akluj

Environmental Studies Project Work - 2022- 23

Class - B.C.A.-II

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3	Bhagat Rupesh Nandkumar	
4	Bhise Somnath Maruti	
5	Bhitade Tushar Navnath	
6	Ghadage Komal Laxman	
7	Jadhav Aastha Santosh	
8	Kale Anuradha Balasaheb	
9	Waghmode Shubhangi Shivaji	
10	Katkar Akanksha Nivrutti	
11	Dangat Govind Tatya	
12	Shinde Abhishek Hari	
13	Shaikh Rehan Akbar	
14	Pawal Prashant Sugriv	
15	Shaikh Aman Amit	
16	Navgan Khushi Sanjay	
17	Pawar Kalpana Sunil	
18	Sawant Aishwarya Sadashiv	
19	Pansare Rutuja Ganesh	
20	Yadav Gauri Ravindra	
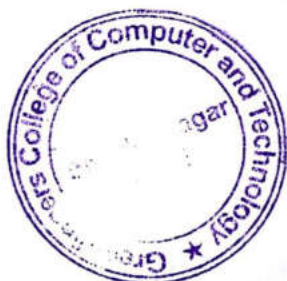
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Computer and Technology,
Shankarnagar-Akluj

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
BCA-III Practical Examination March/April-2023
Batch-IV
Subject: Project   Practical-VII

Date:08/06/2023   Time: 02:00PM to 5.00 PM

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11	2020032500090430	BEG ASLAM SALIM	A.S.Dcg
12	2020032500090460	DHAINJE AADESH AJINATH	Dhainje
13	2020032500090490	MORE ROHIT RAJENDRA	
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15	2020032500090630	TALEKAR TEJASHRI NAMDEV	
16	2020032500090500	RANPISE ARJUN RAMCHANDRA	Ab
17	2020032500090530	NANAVARE KISHOR SUKHADEV	
18	2020032500090590	DIXIT RENUKA GIRISH	RG.Dixit
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Name of the Examiner	Signature
1. Prof. Pawar K.B. (External)	
2. Prof. Kshirsagar B.J.(Internal)	

Criterion 1 – Curricular Aspects

1.3 Curriculum Enrichment:

1.3.2: Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY

A

PROJECT REPORT ON

"Student Attendance System"

Submitted By

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

IN PARTIAL FULFILMENT OF THE REQUIREMENT OF

MASTER IN SCIENCE[M.Sc.] COMPUTER SCIENCE (Semester-IV) 2022-23

SUBMITTED BY

Miss. Raskar Kanchan Ganpat

Miss. Tik Shejal Ashok

UNDER THE GUIDANCE OF

Prof. Salunkhe S. S sir

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

DEPARTMENT OF COMPUTER SCIENCE

(2022-2023)

Certificate

This is to certify that the project report on **"Student Attendance System "** in partial of the requirement for the academic year 2022- 2023 of **MASTER IN SCIENCE (MSc. Computer Science- IV)** to the Punyashlok Ahilyadevi Holkar Solapur University, Solapur.

Submitted By

Miss. Raskar Kanchan Ganpat

Miss. Tik Shejal Ashok

10/06/202

Date:

Head of Department

Head Dept. of M.S. (C.S.)
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Computer and Technology,
Shankarnagar Akluj

Name of the Guide

Prof. Salunkhe S.S sir

Examiner

2

2

Smt. Ratnaprabhadevi Mohite-Patil
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Afflliated to S.N.D.T. Women's University, Mumbai

NAAC Re-accredited at 'A' Grade with CGPA 3.02

Founder : Sahakar Maharshi Shankarrao Narayanrao Mohite-Patil
President : Shri. Sangramsinh Jaysinh Mohite-Patil B.Com.

Chairman
Ku. Swaruparani Jaysinh Mohite-Patil
B.H.Sc.M.A.(Councelling Psychology)

Principal

Ref. No.

Date - 30.06.2023

CERTIFICATE

This is to certify that Miss. Raskar Kanchan Ganpat & Miss. Tik Shejal Ashok, Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the class M.Sc. (CS) –II.   They developed software for our institution /organization. During the project work, they were sincere, hardworking to learn, and show good potential. We wish them & all the best for the future.

Place: Akluj

Date: 30.06.2023

Principal

(Dr. Rahul N. Surve)
PRINCIPAL
Smt. Ratnaprabhadevi Mohite-Patil
College of Home Science for Women
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3

Acknowledgment

There have been many hands that have been contributed towards the successful completion of this project. We take this opportunity to express our gratitude to all of them. On the completion my project "**Student attendance system**". I would like to express my sir to attitude to my project guide, Mr. Salunkhe S. S Sir. For providing me the opportunity to work under him guidance in him college to complete the work.

This project is a part of my studies & academic circular activity.

So, I thankful to all friends who have encouraged & kindly helped us while working.

on this project. I also very thankful to the other teacher & non-teaching staff members for their great co-operate during the project work.

Miss. Tik Shejal Ashok

Miss. Raskar Kanchan Ganpat

Abstract

The "Student Attendance System" under taken as a project is based on relevant technologies.

The main aim of project is to develop software for attendance system.

This project has been developed to carry out the processes easily and quickly, which is not possible with the manuals systems, which are overcome by this software.

The project was developed using .net and SQL server. This website project contains an admin and user side. The admin side manages all the management like adding student and their complains issuing leaves, admin can add new staff members and new class and so on.

The admin has an important role in the attendance of this system.

INDEX

1. Introduction

The project titled Student attendance system is attendance management software for monitoring and controlling transactions in a college. The project "Student Attendance System" is developed in web base, which mainly focuses on basic operations in a college like adding new member, new staff, and updating information, issuing students leaves, adding staff ,adding class etc.

A student attendance system project is software that stores information regarding adding student and adding staff and information electronically to meet needs of college. It allows them to keep track of all of the students admitted in the college at all times. The administrator and the student, teacher was also allowed to book for they needed. The attendance system's major goal is to keep track of information such as students and staff information. It manages the data, such as student and staff basic info, as well as the admin. Then, to provide security for this information, only the admin can have access the overall database of the system.

2. Requirement analysis.

2.1 Technology and Tools

Front end:

HTML

CSS

server:

ASP .net development server

Database Design:

SQL server management studio 19

Query Language: SQL

2.2 Software Requirements

Operating System: Windows 10

Web server: ASP .net development server

Database: SQL server management studio 19

Scripting Language: .net

3.Scope of the system

The application to be developed for library manage named "Student Attendance System".

Intuition will achieve the following scope:

- An increase of the marked and an increase in profitability.
- Cost effectiveness in the use of all resources.
- To handle more member.
- An error reduction in the handling process.
- An increase in flexibility and speed of activities.
- To have more timely information.
- An improvement in management planning and control.

4. Proposed system & objectives

Proposed System

The proposed system work is following:

- Student login with username and password and view reports.
- Staff can make attendance of student and generate report after login to system.
- admin can add standard ,student, staff, examine complain, generate reports etc.
- Designing a database application that will store all students and staff stored information to make some desired decision.
- Guarantee security of the system for the admin.

Objectives:

- Built and manage College attendance in support of academic programs.
- Provide timely access to requested material.
- Simplify search /discovery of attendance resources.
- Build Digital attendance infrastructure.
- Build the information like complains and leaves .
- Increase attendance outreach and marketing efforts.
- Undertake systematic review of reference services designed both to both adapt to changes in facilities and technology and to improve quality of service delivered.

5. Existing System

1. Difficulty in reports generating: Either no report generating in a current system or they generated with great difficulty reports take time to generate in the current system.

2. Manual operator control: Manual operator control is there and leads to a lot of chaos and error.

3. Inability of sharing the data: Data cannot be shared in the existing system. This means that no two persons that no persons can use the same data in existing system. Also, the two department in an organization cannot interact with each other without the actual movement of data.

4. No support in decision-making: Existing system does not support in managerial decision-making.

5. No support in strategic competitive advantage: Existing system does not support in strategic competitive advantages.

6. Feasibility study

The existing system is clearly understood the next step is to conduct the feasibility study, which is a high-level version of the entire System Analysis and Design process. The objective is to determine whether the proposed system is feasible.

The three testes of feasibility have been carried out:

- Technical Feasibility
- Economical Feasibility
- Operational Feasibility

1. **Technical Feasibility:**
   In technical feasibility study, one has to test whether the proposed system can be developed using existing technology or not. It is planned to implement the proposed system using ASP.net web server. It is evident that the necessary hardware and software are available for the development and implementation of the proposed system. Hence the solution is technically feasible.

2. **Economical Feasibility:**
   As part of this, the costs and benefits associated with the proposed system are to be compared and the project is economically feasible only if benefits outweigh costs.

3. **Operational Feasibility:**
   This test of feasibility checks if the system works with least difficulties when it is developed and installed. The technical staff has sufficient knowledge of the tools being used and the users need just to know how to order product in online system.

7. Feature of System

- It has user-friendly application interface.
- Student attendance system is customizable and user configurable.
- Staff as well as student record is maintained.
- Keeps record of staff's and students.
- Customized Report designing
- It contains better storage capacity.
- Accuracy in work.
- Easy & fast retrieval of information.
- Well-designed reports.
- Decrease the load of the person involve in existing system.
- Access of any information individually.
- Work become very speedy.
- Easy to update information

8.   System Modules

Student attendance System has three modules:

- Admin Module
- Student Module
- staff Module

For Admin Module Features:

- Admin Dashboard
- Can manage student
- Can manage staff
- standard managements
- Admin can issue a new staff
- generate new standard, class, new staff
- View student's details
- View teacher's details
- generate complain report

For Student Module Features:

- Student login with username and password and view attendance and leave reports
- Student can view the complain report of her/his.
- Update personal profile
- Change their password and,
- apply for leave and view leave report

For staff Module Features:

- Staff can make attendance of student and generate reports after login to system.
- Teacher can view the dashboard
- Update personal profile
- Change their password and,
- add students
- student report
- add attendance
- attendance report

9. Context level DFD

Level 0:

Level 1:
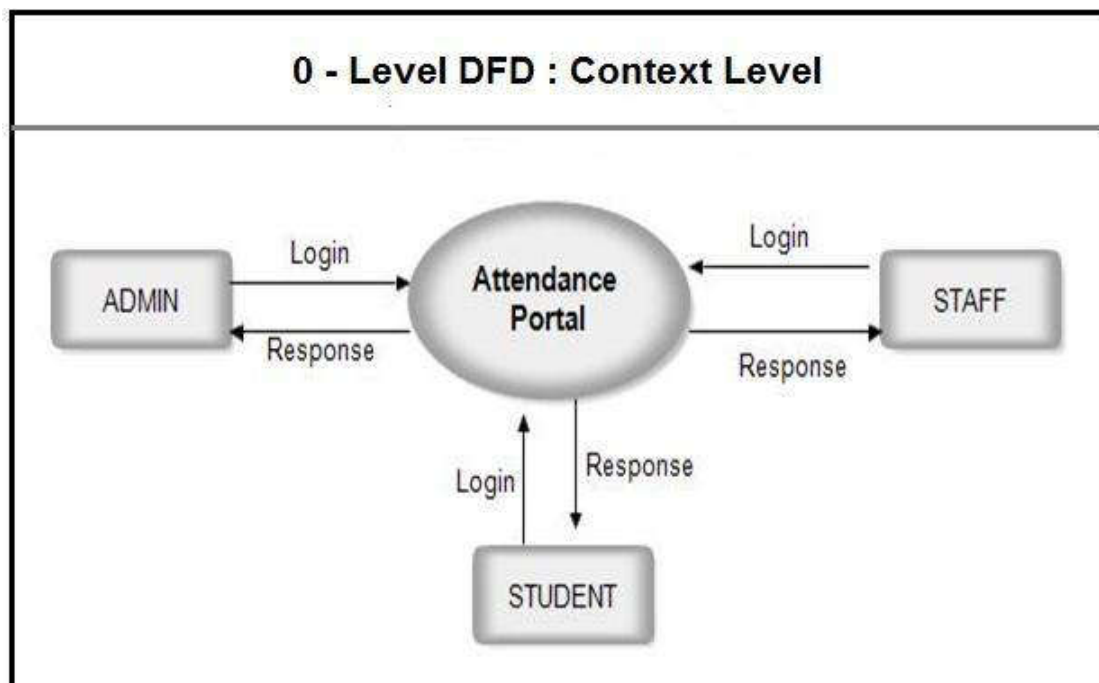
student DFD

STUDENT - Data Flow Diagram
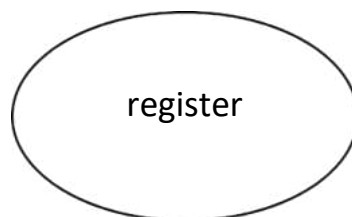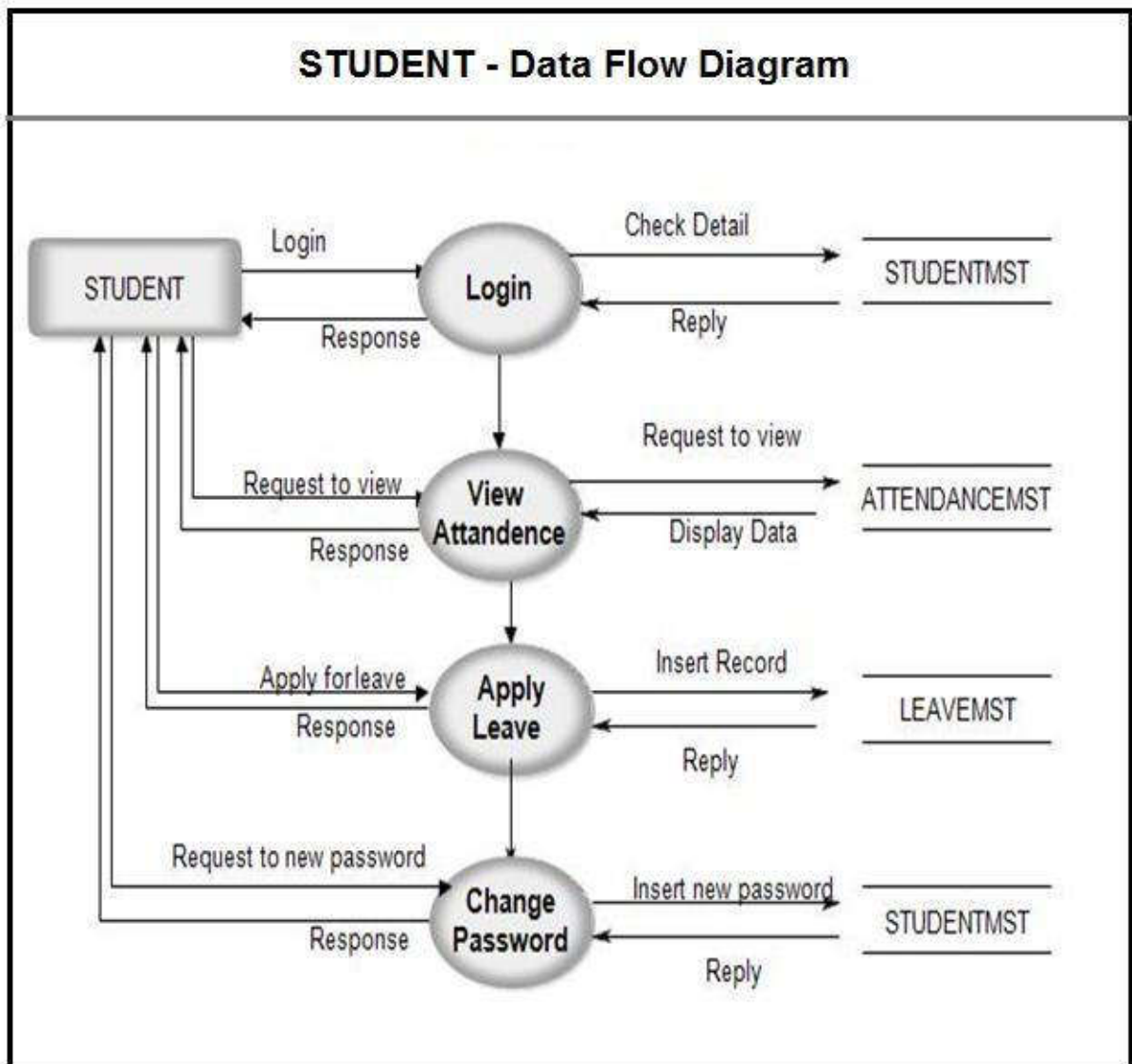
level1: staff DFD

STAFF - Data Flow Diagram

Level 1: admin DFD

ADMIN - Data Flow Diagram
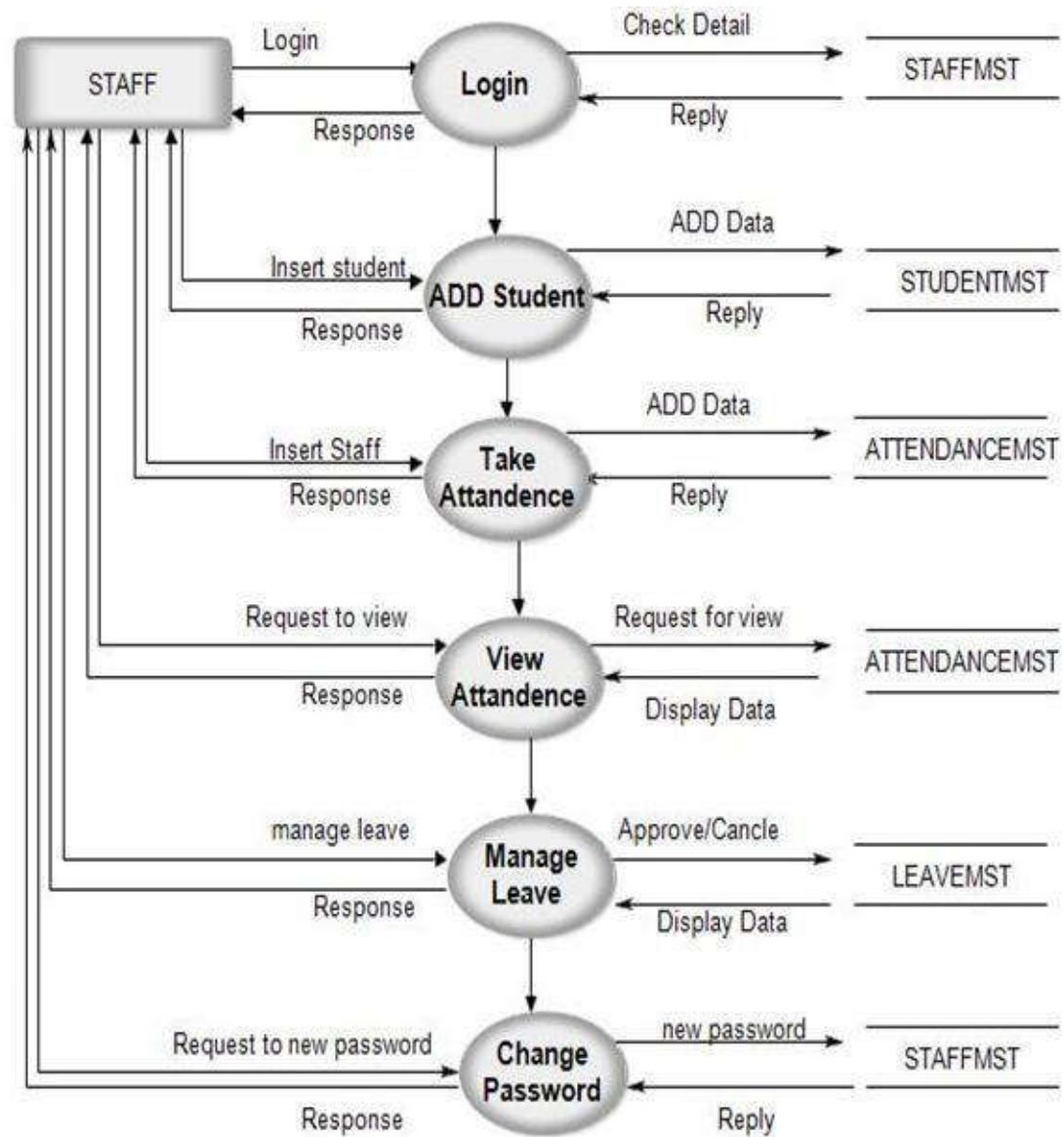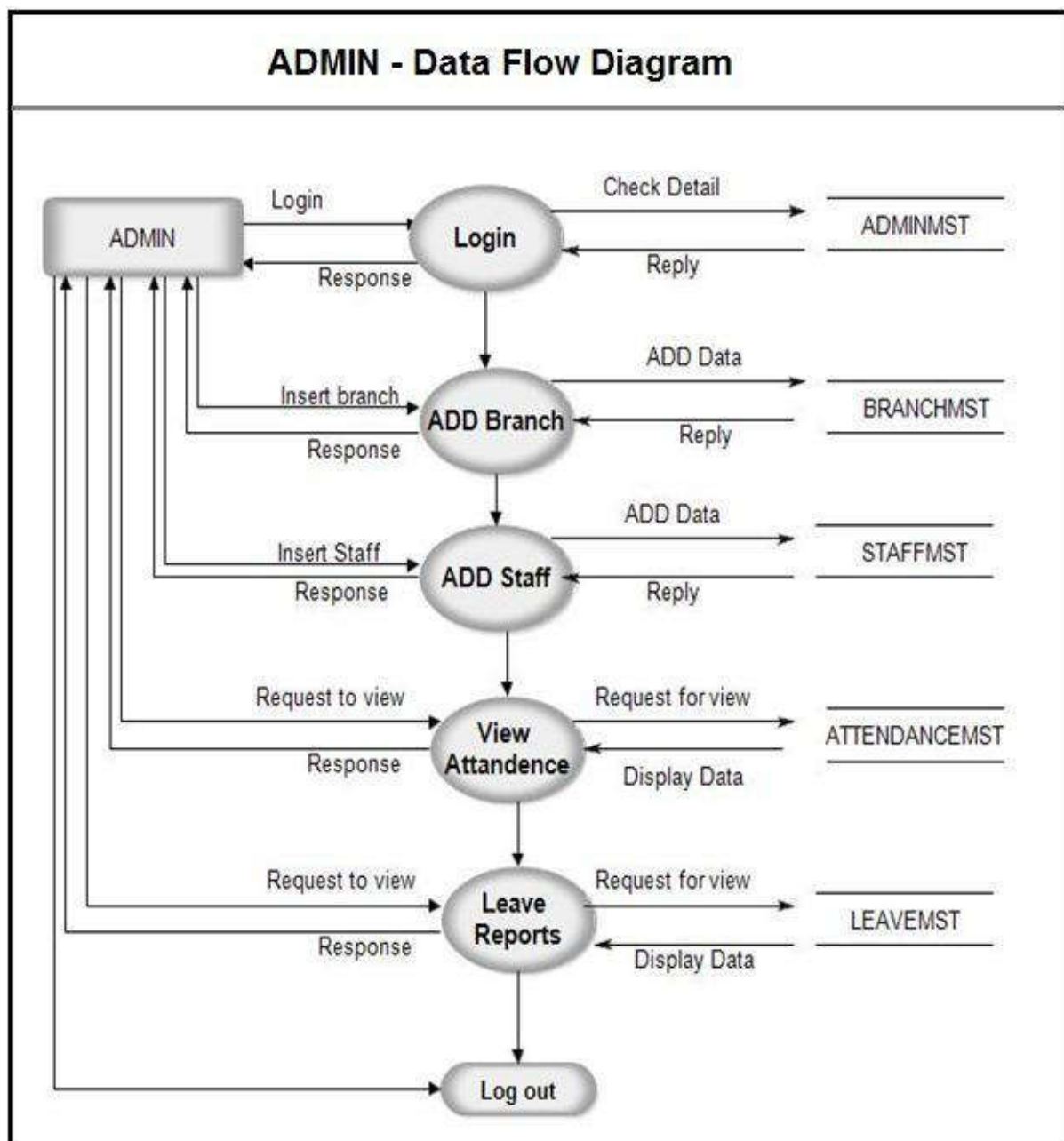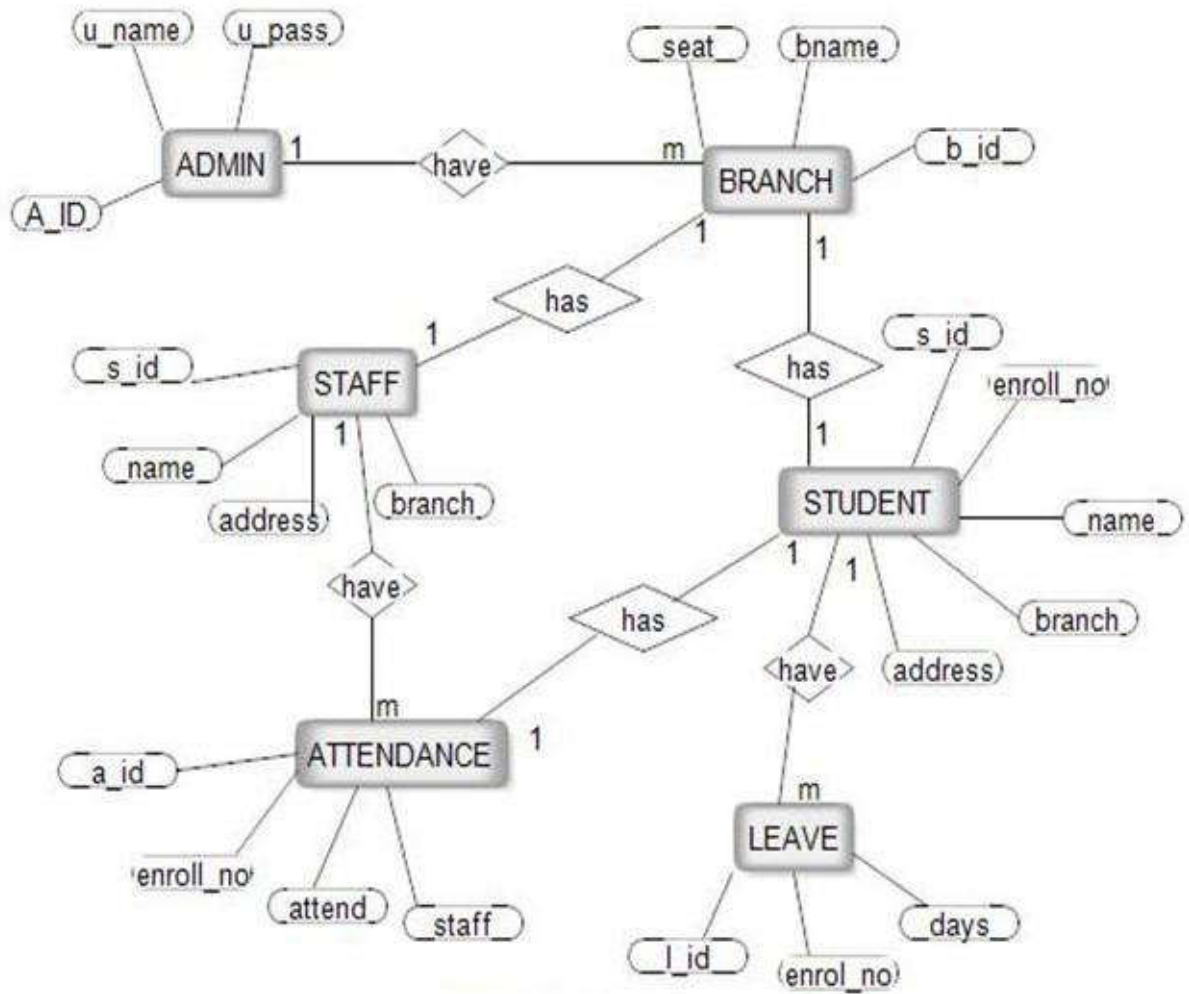
10. E-R Diagram

E- R Diagram
Student Attendance Management System

11. Data Dictionary

Tables used:

Table for student: StudentMst

Field name	Datatype
NAME	nvarchar
STDNAME	nvarchar
DIVNAME	nvarchar
EMAIL	nvarchar
MOBILE	nvarchar
DOB	nvarchar
IMG	nvarchar
ADD	nvarchar
CITY	nvarchar
PIN	nvarchar
UNAME	nvarchar
PASS	nvarchar

Table for staff: Staffmst

Field name	Datatype
NAME	varchar
STDNAME	varchar
EMAIL	varchar
MOBILE	varchar
IMAGE	varchar
QUALIFICATION	varchar
ADD	varchar
CITY	varchar
PINCODE	varchar
UNAME	Varchar
PASS	Varchar
GENDER	Varchar

Table for standard: STDMST

Field name	Datatype
STD	int

STDNAME	varchar

Table for Feedback: FeedBackMST

Field name	Datatype
FID	int
Email	Varchar
mob	Varchar
feed	Varchar

Table for Leave: LeaveMst

Field name	Datatype
LID	Int
rollno	Varchar
name	Varchar
stdname	Varchar
message	Varchar
nodays	Int
replay	Varchar

Table for Division : DIVMST

Field name	Datatype
DID	Int
DIVname	Varchar
STDname	Varchar
seat	Int

Table for complain: ComplainMST

Field name	Datatype

CID	Int
Rollno	Varchar
name	Varchar
subject	Varchar
message	Varchar
replay	Varchar

Table for Attendnce: AttendanceMST

Field name	Datatype
AID	Int
Rollno	Varchar
name	Varchar
date	Varchar
status	Varchar
staffname	Varchar

12. Input & Output screen shots

a. home page
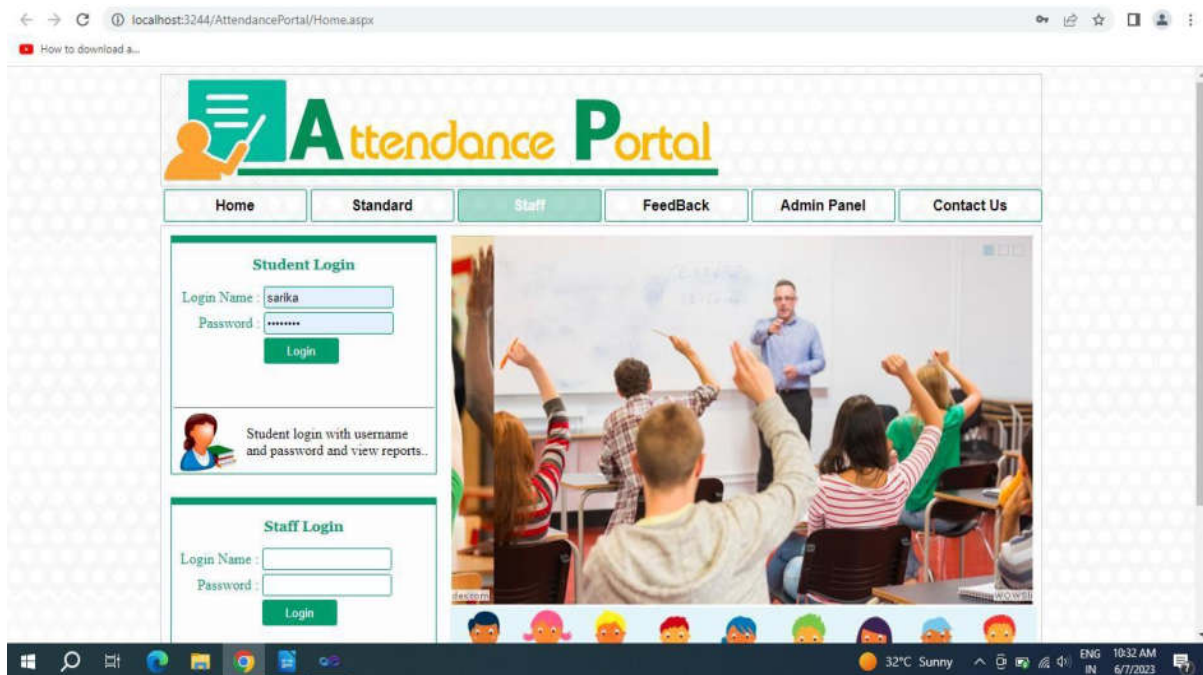
b. student login
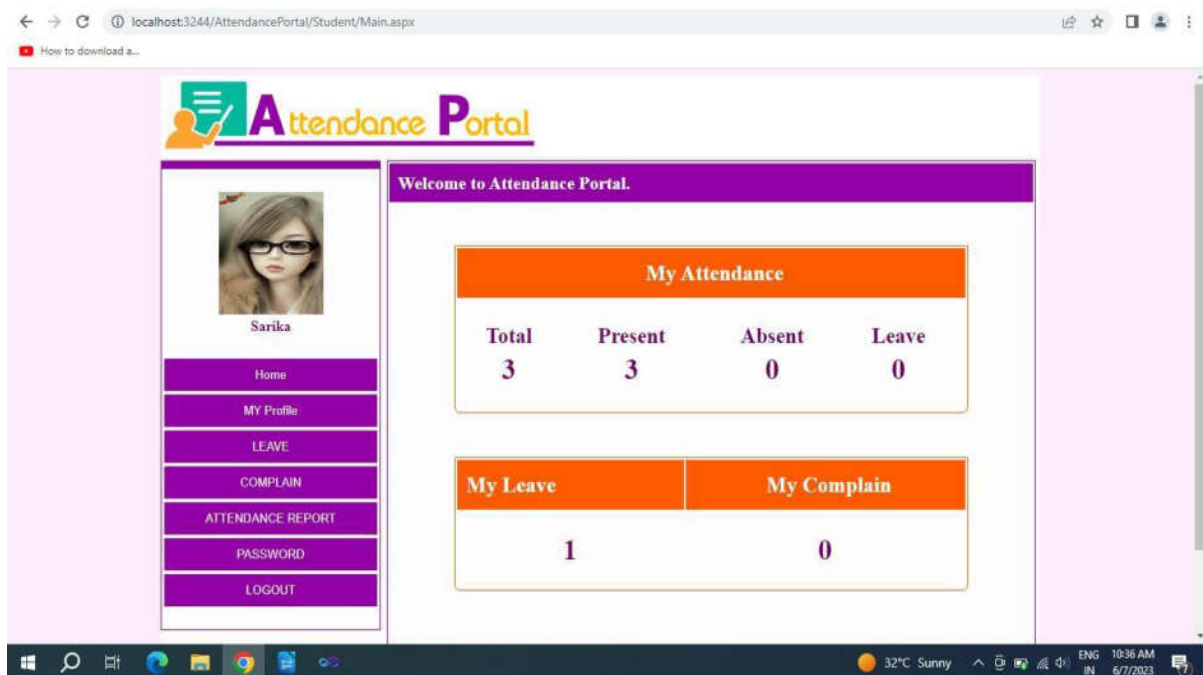
c. staff login

d. standard page

e. staff report

f. feedback form

admin panel

admin menu

g. add division

add staff

h. staff report

i. complain report

leave report

student report

feedback report

13. Conclusion

Our project is only a humble venture to satisfy the needs in a student attendance system. Several user-friendly coding has also adopted. This package shall prove to be powerful package in satisfying all the requirements of the organization. The objective of software planning is to provide a frame work that enables the manager to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

14. Bibliography

Book

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Website

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- *www.visualstudio.com*
- *www.C#tutorial.com*
- *www.webprogramming.com*

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY , AKLUJ

A

PROJECT ON

"LIBRARY MANAGEMENT SYSTEM"

SUBMITTED TO

PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY ,   SOLAPUR

IN PARTIAL FULFILLMENT OF THE

REQUIREMENT OF

BACHELOR OF COMPUTER SCIENCE BSc(ECS)

SUBMITTED BY

Ms.Tamboli Shabnur Aypoddin

Ms.Bhosale Vaishnavi Lalasaheb

UNDER THE GUIDANCE OF

PROF. WAGHMODE SIR

ACADEMIC YEAR - 2022-2023

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

AFFILIATED TO PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

CERTIFICATE

This is to certify that the project on **"LIBRARY MANAGEMENT SYSTEM"** in partial fulfillment of the requirement for the Academic Year 2022-23 Of Bachelor of Computer Science B.Sc. (ECS-III) To Punyshlok Ahilyadevi Holkar Solapur University, Solapur. They have carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.

Submitted By

TAMBOLI SHABNUR AYPODDIN

BHOSALE VAISHNAVI LALASAHEB

Place : Akluj

Date : 08/06/2023

_____
[Project Guide]

_____
[Internal/External Examiner]

_____
[Head of Department]
B.Sc. (ECS)

Greenfingers College of Computer and Technology, Akluj

SHIVRATNA INSTITUTE OF MANAGEMENT STUDIES

(Old - Rajasinh Mohite - Patil Institute of Management Studies)
YASHWANTNAGAR (SHANKARNAGAR-AKLUJ) Pin Code 413 118 Tal.Malshiras Dist.Solapur (M.S.)
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2. जा.क्र.शिसंसं/ शिशि/कॉवि/५०९.3 दि.२७ जुलै २००१
3.SOL/BCUD/AFFI/910/3289 Date - 01 Sept. 2009

Founder :   Late. Shankarrao Narayanrao Mohite-Patil
Founder President : Hon.Mr.Rajasinh Shankarrao Mohite-Patil
President :   Hon.Mr.Dhairyasheel Rajasinh Mohite-Patil

Ref. No. : SIMS/   /2023-24   Date :

CERTIFICATE

This is to certify that **Miss. Bhosale Vaishnavi Lalasaheb** of **B.Sc [ECS] - III** year student of **Greenfingers College of Computer and Technology, Shankarnagar- Akluj** has done project work on **Library Management System** under the guidance of **Mr. Waghmode G.C.**

She has shown a keen interest in learning and doing his work during the project. We also found her conduct to be satisfactory.

We wish her all the best in her future professional endeavors.

Place: Akluj
Date: 04/06/2023

(Dr.A.C. Kumbhar)
Principal
Shivratna Institute of Management
Studies(B.B.A), Shankarnagar-Akluj

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ACKNOWLEDGEMENT

This Project report was completed as a result of support from many people, although not all of them can be mentioned.

We wish to express our sincere gratitude to God for his protection, providence, guidance and above all, for sustaining us.

We are greatly indebted to our good supervisor **Mr. kshirsagar sir.** for his useful and necessary observation, suggestions, contribution and corrections. We would not have been able to achieve anything in this research without your supervision. May God enrich you greatly in every area of life.

Finally, we wish to express our appreciation to our parents for their love and support.

Student's Name

Ms.Tamboli Shabnur Aypoddin

Ms.Bhosale Vaishnavi Lalasaheb

Introduction

A library management system is a software application that helps in the efficient management and organization of library resources, such as books, journals, magazines, and other materials. It automates various tasks involved in library operations, including cataloging, circulation, acquisitions, member management, and reporting.

The main objective of a library management system project is to provide a user-friendly and robust platform that facilitates the smooth functioning of a library. It enables librarians to efficiently handle the tasks related to book management, member registrations, borrowing and returning of books, tracking overdue items, generating reports, and more.

Key Features :

1. Member Management: The system maintains a database of library members, including their personal details, contact information, and borrowing history. It allows librarians to issue library cards, manage membership registrations, and update member records.
2. Search and Discovery: The system provides a search interface to help users find books based on various criteria, such as title, author, subject, or ISBN. It may also include advanced search options and suggestions to enhance the discovery process.

When developing a library management system project, it is essential to consider the needs of the library, its size, and the expected user base. The project may involve database design, user interface development, integration with external systems (such as online catalogs or databases), security measures, and testing for quality assurance.

Overall, a well-designed library management system project can streamline library operations, enhance user experience, and improve the overall efficiency of the library.

Abstract

The library management system project aims to develop a comprehensive software application that automates and streamlines the management of library resources. The system provides librarians and library staff with an efficient platform to handle various tasks, including cataloging, circulation, member management, reporting, and more.

The project focuses on creating a user-friendly interface that allows librarians to maintain a centralized database of books, journals, magazines, and other materials. Cataloging features enable the easy entry of book details, such as title, author, publication information, and subject categories. The system also incorporates search functionalities to help users quickly locate resources based on specific criteria.

The circulation module facilitates the borrowing and returning of books, enabling librarians to manage due dates, renewals, and reservations. Notifications and reminders are implemented to keep members informed about upcoming due dates, overdue items, and reservation pickups. Member management functionalities handle registration, maintain member records, and track borrowing history.

The library management system project includes reporting and analytics capabilities to generate various statistics and insights. Librarians can access reports on circulation patterns, inventory status, overdue items, and member activity, aiding in decision-making and resource allocation.

Furthermore, the system offers administrative features to configure settings, manage user roles, and ensure data security. Integration with external systems, such as online catalogs or databases, may be incorporated to expand the system's capabilities and provide a seamless user experience.

Through the implementation of this library management system, libraries can optimize their operations, improve efficiency, and enhance user satisfaction. The project aims to provide a reliable and scalable solution that can be customized to suit the specific needs and requirements of different libraries.

Requirements

SYSTEM REQUIREMENTS

❖ Hardware Platform

❖ Hard Disk :- Minimum 500MB.

❖ RAM :- Minimum 1024 MB.

<u>SOFTWARE PLATFORM</u>

Windows 2008 & Above

<u>Tools :</u>
- **IDE-Visual Studio Code**
- **Database-Sqlite3**
- **Programing Language :-Python (Tkinter)**

AIM of this project

The aim of the library management system project is to develop a software application that effectively manages and organizes library resources, streamlines library operations, and enhances the overall efficiency of the library.

.

Administrative Modules

The Library Management System project typically includes several administrative modules to facilitate efficient management and operations. Here are some common administrative modules found in such projects:

Admin Module

It provides a comprehensive overview of various aspects and allows administrators to access and manage different modules efficiently.

1- Login
2- Entering book details and its availability
3-Book Management

Purpose of Library Management System

The purpose of a library management system project is to develop a software application that effectively manages and organizes library resources, streamlines library operations, and enhances the overall efficiency of the library. The project aims to achieve several key purposes, including:

Efficient Resource Management: The library management system aims to automate and streamline the processes of cataloging, organizing, and tracking library resources. It enables librarians to maintain a centralized and up-to-date database of books, journals, and other materials. By automating resource management tasks, the system ensures accurate inventory records, reduces manual paperwork, and saves time for librarians.

Streamlined Circulation Processes: The project focuses on simplifying the borrowing and returning of books, making the circulation process more efficient. The system automates processes such as issuing library cards, checking out materials, managing due dates, and

handling renewals and reservations. By streamlining circulation management, the system reduces administrative burden, improves turnaround time for users, and enhances the overall borrowing experience.

Member Management: The library management system project aims to provide functionalities for managing library members effectively. It enables librarians to register new members, maintain member records, and track borrowing history. The system ensures accurate member data, facilitates personalized services, and enables effective communication between the library and its users.

Benefits of Library Management System

Implementing a library management system offers several benefits for libraries and their users. Some of the key benefits include:

Efficient Resource Management: A library management system helps in efficient cataloging, organizing, and tracking of library resources. It enables librarians to easily update and maintain the database of books, journals, and other materials. With automated processes for adding new resources and updating existing ones, librarians can efficiently manage the collection and ensure accurate inventory records.

Streamlined Circulation Processes: The system simplifies the borrowing and returning of books, reducing manual paperwork and administrative tasks. It automates processes such as issuing library cards, checking out materials, managing due dates, and handling renewals and reservations. This streamlines circulation management, saves time for both librarians and users, and enhances the overall borrowing experience

Future Look

The future look of library management system projects will likely involve the incorporation of emerging technologies and evolving trends in library management. Here are some aspects that could shape the future of library management systems:

Integration of Artificial Intelligence (AI): AI technologies, such as machine learning and natural language processing, can enhance the search capabilities of library management systems. AI algorithms can analyze user behavior, preferences, and historical data to provide personalized recommendations and suggestions for resources. AI-powered chatbots can also assist users in real-time, answering queries and providing guidance.

Source Code

Main.py

```python
# Importing all necessary modules
import sqlite3

from tkinter import *
import tkinter.ttk as ttk
import tkinter.messagebox as mb
import tkinter.simpledialog as sd

# Connecting to Database
connector = sqlite3.connect('library.db')
cursor = connector.cursor()

connector.execute(
'CREATE TABLE IF NOT EXISTS Library (BK_NAME TEXT, BK_ID TEXT PRIMARY KEY NOT

 NULL, AUTHOR_NAME TEXT, BK_STATUS TEXT, CARD_ID TEXT)'
)

# Functions
def issuer_card():
        Cid = sd.askstring('Issuer Card ID', 'What is the Issuer\'s Card ID?\t\t\t')

        if not Cid:
                mb.showerror('Issuer ID cannot be zero!', 'Can\'t keep Issuer ID empty, it must have a
value')
        else:
                return Cid


def display_records():
        global connector, cursor
        global tree

        tree.delete(*tree.get_children())

        curr = connector.execute('SELECT * FROM Library')
        data = curr.fetchall()

        for records in data:
                tree.insert('', END, values=records)


def clear_fields():
        global bk_status, bk_id, bk_name, author_name, card_id

        bk_status.set('Available')
        for i in ['bk_id', 'bk_name', 'author_name', 'card_id']:
                exec(f'{i}.set('')')
                bk_id_entry.config(state='normal')
        try:
```

```python
        tree.selection_remove(tree.selection()[0])
        except:
                pass


def clear_and_display():
        clear_fields()
        display_records()


def add_record():
        global connector
        global bk_name, bk_id, author_name, bk_status

        if bk_status.get() == 'Issued':
                card_id.set(issuer_card())
        else:
                card_id.set('N/A')

        surety = mb.askyesno('Are you sure?',
                'Are you sure this is the data you want to enter?\nPlease note that Book ID cannot be
changed in the future')

        if surety:
                try:
                        connector.execute(

                        'INSERT INTO Library (BK_NAME, BK_ID, AUTHOR_NAME,
BK_STATUS, CARD_ID) VALUES (?, ?, ?, ?, ?)',
                                        (bk_name.get(), bk_id.get(), author_name.get(), bk_status.get(),
card_id.get())))
                        connector.commit()

                        clear_and_display()

                        mb.showinfo('Record added', 'The new record was successfully added to your
database')
                except sqlite3.IntegrityError:
                        mb.showerror('Book ID already in use!',
                                        'The Book ID you are trying to enter is already in the database, please
alter that book\'s record or check any discrepancies on your side')


def view_record():
        global bk_name, bk_id, bk_status, author_name, card_id
        global tree

        if not tree.focus():
                mb.showerror('Select a row!', 'To view a record, you must select it in the table. Please do
 so before continuing.')
                return

        current_item_selected = tree.focus()
```

```python
        values_in_selected_item = tree.item(current_item_selected)

        selection = values_in_selected_item['values']

        bk_name.set(selection[0])  ;  bk_id.set(selection[1]) ; bk_status.set(selection[3])
        author_name.set(selection[2])
        try:
                card_id.set(selection[4])
        except:
                card_id.set('')


def update_record():
        def update():

                global bk_status, bk_name, bk_id, author_name, card_id
                global connector, tree

                if bk_status.get() == 'Issued':
                        card_id.set(issuer_card())
                else:
                        card_id.set('N/A')

                cursor.execute('UPDATE Library SET BK_NAME=?, BK_STATUS=?,
AUTHOR_NAME=?, CARD_ID=? WHERE BK_ID=?',

                                (bk_name.get(), bk_status.get(), author_name.get(), card_id.get(), bk_id.get()))
                connector.commit()

                clear_and_display()

                edit.destroy()
                bk_id_entry.config(state='normal')
                clear.config(state='normal')

        view_record()

        bk_id_entry.config(state='disable')
        clear.config(state='disable')

        edit = Button(left_frame, text='Update Record', font=btn_font, bg=btn_hlb_bg, width=20,
command=update)
        edit.place(x=50, y=375)


def remove_record():
        if not tree.selection():
                mb.showerror('Error!', 'Please select an item from the database')
                return

        current_item = tree.focus()
        values = tree.item(current_item)
        selection = values["values"]
```

```python
        cursor.execute('DELETE FROM Library WHERE BK_ID=?', (selection[1], ))

        connector.commit()

        tree.delete(current_item)

        mb.showinfo('Done', 'The record you wanted deleted was successfully deleted.')

        clear_and_display()


def delete_inventory():

        if mb.askyesno('Are you sure?', 'Are you sure you want to delete the entire inventory?\n\nThis
command cannot be reversed'):
                tree.delete(*tree.get_children())

                cursor.execute('DELETE FROM Library')
                connector.commit()
        else:
                return


def change_availability():
        global card_id, tree, connector

        if not tree.selection():
                mb.showerror('Error!', 'Please select a book from the database')
                return

        current_item = tree.focus()
        values = tree.item(current_item)
        BK_id = values['values'][1]
        BK_status = values["values"][3]

        if BK_status == 'Issued':
                surety = mb.askyesno('Is return confirmed?', 'Has the book been returned to you?')
                if surety:
                        cursor.execute('UPDATE Library SET bk_status=?, card_id=? WHERE

bk_id=?', ('Available', 'N/A', BK_id))
                        connector.commit()
                else: mb.showinfo(
                        'Cannot be returned', 'The book status cannot be set to Available unless it has
been returned')
        else:
                cursor.execute('UPDATE Library SET bk_status=?, card_id=? where bk_id=?', ('Issued',
issuer_card(), BK_id))
                connector.commit()

        clear_and_display()
```

```python
# Variables
lf_bg = 'LightSkyBlue'  # Left Frame Background Color


rtf_bg = 'DeepSkyBlue'  # Right Top Frame Background Color
rbf_bg = 'DodgerBlue'  # Right Bottom Frame Background Color
btn_hlb_bg = 'SteelBlue'  # Background color for Head Labels and Buttons

lbl_font = ('Georgia', 13)  # Font for all labels
entry_font = ('Times New Roman', 12)  # Font for all Entry widgets

btn_font = ('Gill Sans MT', 13)

# Initializing the main GUI window
root = Tk()

root.title('PythonGeeks Library Management System')

root.geometry('1010x530')

root.resizable(0, 0)

Label(root, text='LIBRARY MANAGEMENT SYSTEM', font=("Noto Sans CJK TC", 15, 'bold'),

bg=btn_hlb_bg, fg='White').pack(side=TOP, fill=X)

# StringVars
bk_status = StringVar()
bk_name = StringVar()
bk_id = StringVar()
author_name = StringVar()
card_id = StringVar()

# Frames
left_frame = Frame(root, bg=lf_bg)
left_frame.place(x=0, y=30, relwidth=0.3, relheight=0.96)

RT_frame = Frame(root, bg=rtf_bg)
RT_frame.place(relx=0.3, y=30, relheight=0.2, relwidth=0.7)

RB_frame = Frame(root)

RB_frame.place(relx=0.3, rely=0.24, relheight=0.785, relwidth=0.7)

# Left Frame
Label(left_frame, text='Book Name', bg=lf_bg, font=lbl_font).place(x=98, y=25)

Entry(left_frame, width=25, font=entry_font, text=bk_name).place(x=45, y=55)

Label(left_frame, text='Book ID', bg=lf_bg, font=lbl_font).place(x=110, y=105)

bk_id_entry = Entry(left_frame, width=25, font=entry_font, text=bk_id)

bk_id_entry.place(x=45, y=135)
```

```python
Label(left_frame, text='Author Name', bg=lf_bg, font=lbl_font).place(x=90, y=185)

Entry(left_frame, width=25, font=entry_font, text=author_name).place(x=45, y=215)

Label(left_frame, text='Status of the Book', bg=lf_bg, font=lbl_font).place(x=75, y=265)

dd = OptionMenu(left_frame, bk_status, *['Available', 'Issued'])

dd.configure(font=entry_font, width=12)


dd.place(x=75, y=300)

submit = Button(left_frame, text='Add new record', font=btn_font, bg=btn_hlb_bg, width=20,
command=add_record)
submit.place(x=50, y=375)

clear = Button(left_frame, text='Clear fields', font=btn_font, bg=btn_hlb_bg, width=20,
command=clear_fields)
clear.place(x=50, y=435)

# Right Top Frame
Button(RT_frame, text='Delete book record', font=btn_font, bg=btn_hlb_bg, width=17,

command=remove_record).place(x=8, y=30)
Button(RT_frame, text='Delete full inventory', font=btn_font, bg=btn_hlb_bg, width=17,
command=delete_inventory).place(x=178, y=30)
Button(RT_frame, text='Update book details', font=btn_font, bg=btn_hlb_bg, width=17,

    command=update_record).place(x=348, y=30)

Button(RT_frame, text='Change Book Availability', font=btn_font, bg=btn_hlb_bg, width=19,
    command=change_availability).place(x=518, y=30)

# Right Bottom Frame
Label(RB_frame, text='BOOK INVENTORY', bg=rbf_bg, font=("Noto Sans CJK TC", 15,

'bold')).pack(side=TOP, fill=X)

tree = ttk.Treeview(RB_frame, selectmode=BROWSE, columns=('Book Name', 'Book ID', 'Author',

 'Status', 'Issuer Card ID'))

XScrollbar = Scrollbar(tree, orient=HORIZONTAL, command=tree.xview)

YScrollbar = Scrollbar(tree, orient=VERTICAL, command=tree.yview)

XScrollbar.pack(side=BOTTOM, fill=X)

YScrollbar.pack(side=RIGHT, fill=Y)

tree.config(xscrollcommand=XScrollbar.set, yscrollcommand=YScrollbar.set)
```

```python
tree.heading('Book Name', text='Book Name', anchor=CENTER)

tree.heading('Book ID', text='Book ID', anchor=CENTER)

tree.heading('Author', text='Author', anchor=CENTER)

tree.heading('Status', text='Status of the Book', anchor=CENTER)

tree.heading('Issuer Card ID', text='Card ID of the Issuer', anchor=CENTER)

tree.column('#0', width=0, stretch=NO)

tree.column('#1', width=225, stretch=NO)

tree.column('#2', width=70, stretch=NO)

tree.column('#3', width=150, stretch=NO)

tree.column('#4', width=105, stretch=NO)

tree.column('#5', width=132, stretch=NO)

tree.place(y=30, x=0, relheight=0.9, relwidth=1)

clear_and_display()


# Finalizing the window
root.update()

root.mainloop()
```

Snapshots

LIBRARY MANAGEMENT SYSTEM

Book Name

Dyanyog

Book ID

ST1

Author Name

Swami Vivekanand

Status of the Book

Available

Update Record

Clear fields

Delete book record	Delete full inventory	Update book details	Change Book Availability

BOOK INVENTORY

Book Name	Book ID	Author	Status of the Book	Card ID of the Issuer
Rajyog	ST1	Swami Vivekanand	Available	N/A

LIBRARY MANAGEMENT SYSTEM

Book Name

Book ID

Author Name

Status of the Book

Available

Update Record

Clear fields

Delete book record	Delete full inventory	Update book details	Change Book Availability

BOOK INVENTORY

Book Name	Book ID	Author	Status of the Book	Card ID of the Issuer
Dyanyog	ST1	Swami Vivekanand	Available	N/A

Issuer Card ID — □ ✕

What is the Issuer's Card ID?

ST!

OK   Cancel
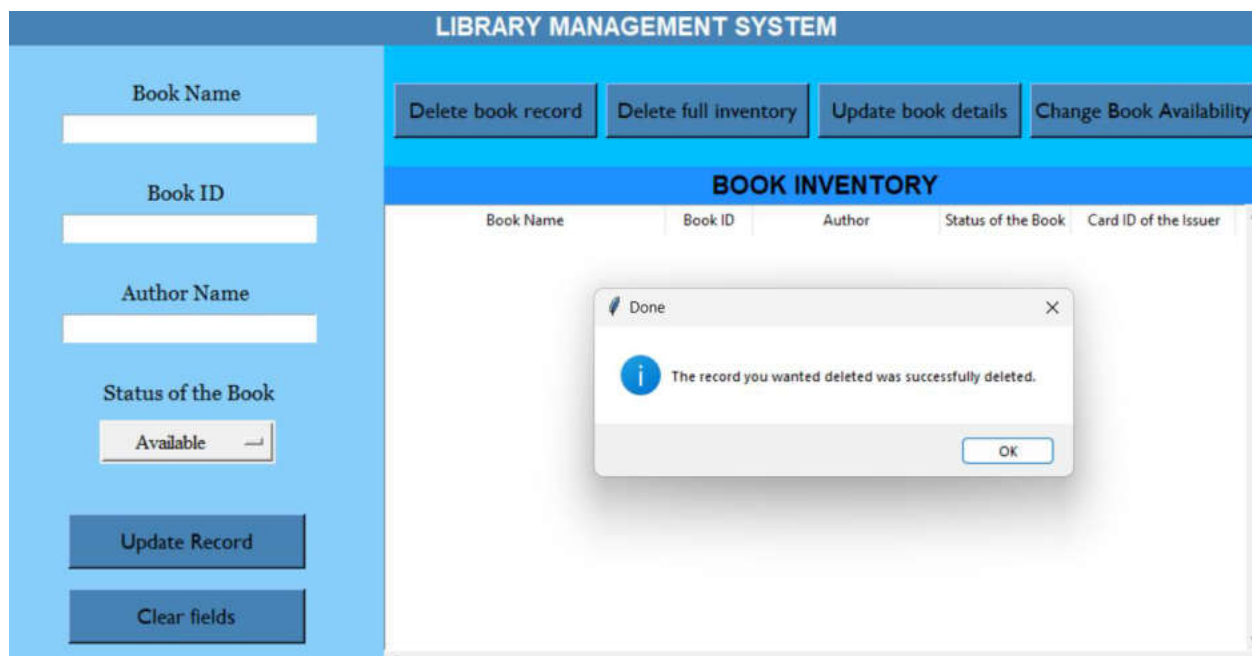
Conclusion

In conclusion, the library management system project aims to develop a comprehensive software application that automates and streamlines library operations, improving resource management, circulation processes, member services, and overall efficiency. The project focuses on creating a user-friendly interface, facilitating efficient cataloging and search functionalities, and implementing features such as notifications, reporting, and analytics. The system aims to enhance resource accessibility, streamline circulation processes, and provide personalized services to library members. It also emphasizes data security, customization, and scalability to meet the specific needs of different libraries. By achieving these objectives, the library management system project contributes to an optimized library experience for both librarians and users, ensuring efficient operations, enhanced resource utilization, and improved user satisfaction.

Main entities and output of First Level DFD (1st Level DFD):

- Processing Library records and generate report of all Library
- Processing Book records and generate report of all Book
- Processing Issue Book records and generate report of all Issue Book
- Processing Authors records and generate report of all Authors
- Processing Publisher records and generate report of all Publisher
- Processing Employee records and generate report of all Employee
- Processing Student records and generate report of all Student

First Level DFD - Library Management System
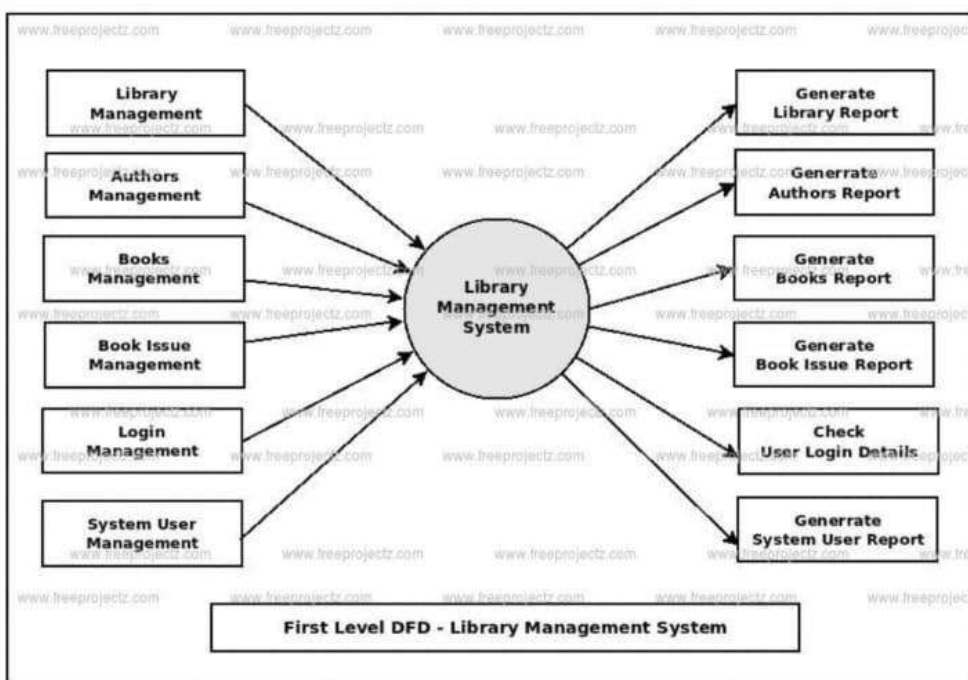
Second Level Data Flow Diagram(2nd Level DFD) Of Library Management System :

DFD Level 2 then goes one step deeper into parts of Level 1 of Library Management. It may require more functionalities of Library Management to reach the necessary level of detail about the Library Management functioning. First Level DFD (1st Level) of Library Management System shows how the system is divided into sub-systems (processes). The 2nd Level DFD contains more details of Student, Employee, Publisher, Authors, Issue Book, Book, Library.

Low level functionalities of Library Management System

- Admin logins to the system and manage all the functionalities of Library Management System
- Admin can add, edit, delete and view the records of Library, Issue Book, Publisher, Student
- Admin can manage all the details of Book, Authors, Employee
- Admin can also generate reports of Library, Book, Issue Book, Authors, Publisher, Employee
- Admin can search the details of Book, Publisher, Employee
- Admin can apply different level of filters on report of Library, Authors, Publisher

Book, Authors, Publisher, Employee

- Admin can search the details of Book, Publisher, Employee
- Admin can apply different level of filters on report of Library, Authors, Publisher
- Admin can tracks the detailed information of Book, Issue Book, Authors, , Publisher

Second Level DFD - Library Management System
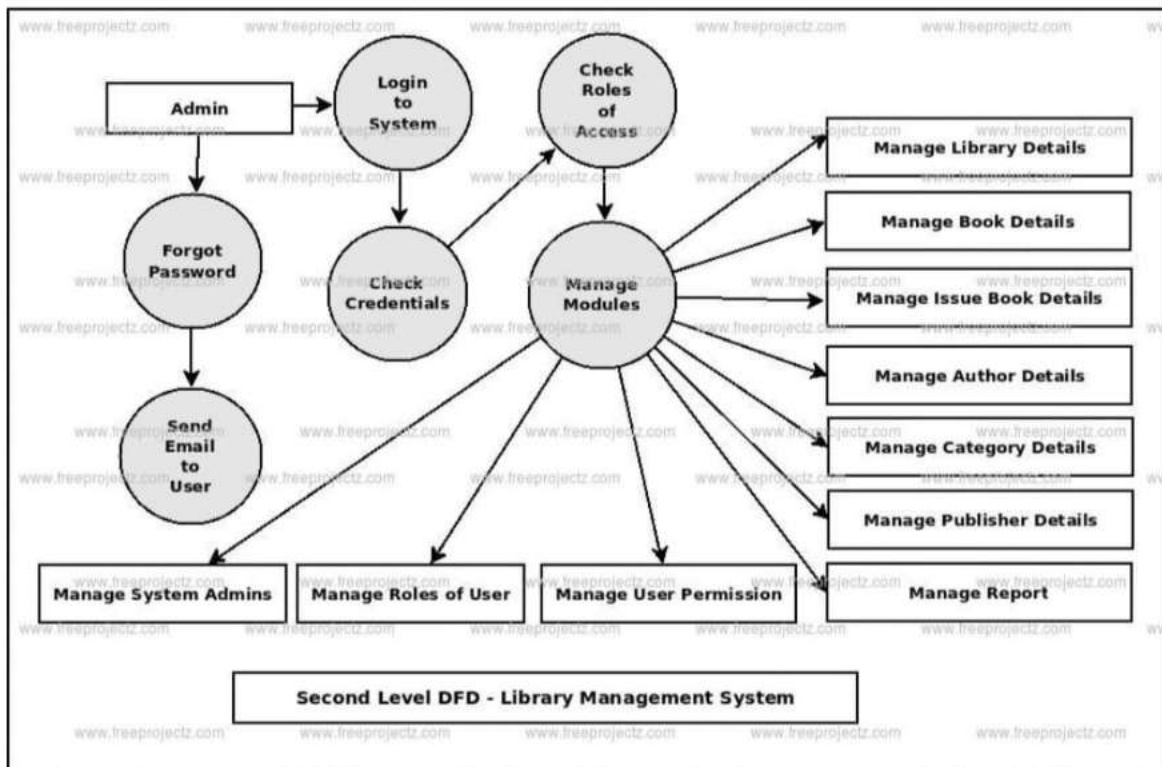
High Level Entities and proccess flow of Library Management System:

- Managing all the Library
- Managing all the Book
- Managing all the Issue Book
- Managing all the Authors
- Managing all the Publisher
- Managing all the Employee
- Managing all the Student
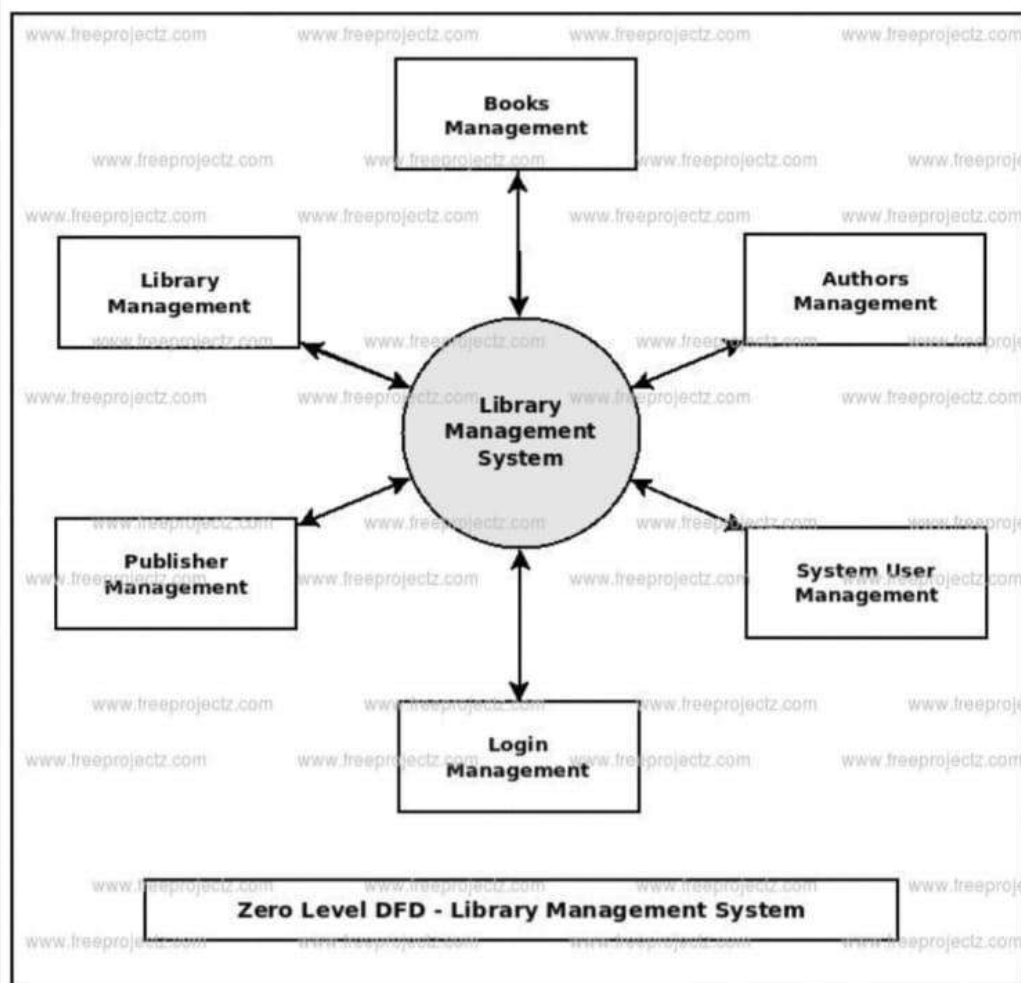
Zero Level DFD - Library Management System

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

A PROJECT REPORT
ON

"BILLING TASK IN MVC"

SUBMITTED TO

PUNYASHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

IN THE PARTIAL FULFILLMENT OF THE
REQUIREMENT OF THE
GRADUATION COURSE OF
BACHELOR OF COMPUTER SCEIENCE B.Sc (ECS)

SUBMITTED BY

RAJLAXMI KUBER KODLINGE
ABHIJEET ASHOK GHADGE

UNDER THE GUIDANCE OF
Prof. SALUNKHE S.S.

ACADEMIC YEAR 2022-23

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

AFFILIATED TO PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

CERTIFICATE

This is to certify that the project on **"BILLING TASK IN MVC"** in partial fulfillment of the requirement for the Academic Year 2022-23 Of Bachelor of Computer Science B.Sc. (ECS-III) To Punyshlok Ahilyadevi Holkar Solapur University, Solapur. They have carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.
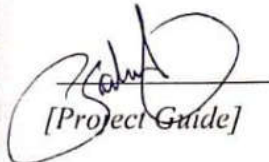
Submitted By

RAJLAXMI KUBER KODLINGE

ABHIJEET ASHOK GHADGE

Place : Akluj

Date : 07-06-2023

[Project Guide]

[Internal/External Examiner]

[Head of Department]

B.Sc. (ECS)

Greenfingers College of Computer and Technology, Akluj

CERTIFICATE

OF APPLICATION

This certificate is awarded to
RAJLAXMI KODLINGE

Miss _ **RAJLAXMI KUBER KODLINGE** Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the class B.Sc. [ICS] - III She has developed software for our organization. During the project work, she was sincere, hardworking to learn, and show good potential. We wish her all the best for the future.

Place Akluj

Name And Singature

शिवशंकर मध्यवर्ती सह. ग्रहक संस्था मर्या.
शंकरनगर-अकलूज

शिवशंकर
बझार

CERTIFICATE

OF APPLICATION

This certificate is awarded to
ABHIJEET GHADAGE

MR._ **ABHIJEET ASHOK GHADAGE** Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the class B Sc. [ECS] - iii he has developed software for our organization. During the project work, he was sincere, hardworking to learn, and show good potential. We wish him all the best for the future.

Place: Akluj

Name And Singature

शिवशंकर मध्यवर्ती ग्रा ग्राहक संस्था मर्या:
शंकरनगर-अकलूज

शिवशंकर
बझार

INDEX

3

INTRODUCTION

Billing System ASP C# and SQL Project

ASP, C# and SQL project on Billing System is a web based project and it has been developed in ASP, C and SQL and we can manage Login Customer Payment Bits Transactions and Transactions History from this project. The main objective to develop Billing System ASP, C# and SQL Project is to overcome the manual errors and make a computerzied system. Visual Studio Project on Billing System is compatible with Visual Studie 2013   Visual Studio 2017 So you can configure it easily on it. We can develop major projects on Billing System in ASP.net and C# according to requirements

you can develop it in SQL and ASP C# We have im plemented advance search feature for searching records on vanous criteria for Customer Login Transactions also admin can perform Create read up- cate and delete (CRUD) operations on Payment Bills, Transactions History In this project all the modules like Login, Bias Customer are tightly coupled and we can track the informations easily if you are looking for Free Billing System Pro

ject in ASP, C# and SQL then you can visit our tree projects

ACKNOWLEDGEMENT

This is a matter of great pleasure to me. In this project report on

BILLING TASK IN MVC

I take this opportunity to extend my sincere thanks' to
 and Head of Computer science Department

Prof.**Mr.Salunkhe S.S** *sir* **Billing task in MVC** Whose kindly help and valuable suggestion b

made this Project possible.

I also thanks' our **GREEN FINGERS COLLEGE OF COMPUTER AND TECNOLOGY** *.And BILLING TASK IN MVC*

for helping we throughout our project.

We are very thankful **MR Salunkhe sir** whose valuable guidance and

suggestion helped us in completing this project.

We extend our special thanks to our principle **MR.Salunkhe** for this support throughout project.

BILLING TASK IN MVC

1) Modules of the Billing System:

These are the main modules of the project

1) Login Module: We can create, read, update and delete Login from this module

2)Customer Module: All the operations related to Customer, is managed by the module

3)Payment Bills Module: It has been developed for managing

4) Transactions Module: It manages the Transactions

2) Reports of the Billing System:

Admin can generate report on Login, Customer on various search criteria

Admin can export the report of Payment, Bits, Transactions in excel format

All the reports of Login, Payment, Bits, Transactions can also be viewed on web interface

Admin will be able to export the report of Login, Customer, Transactions.

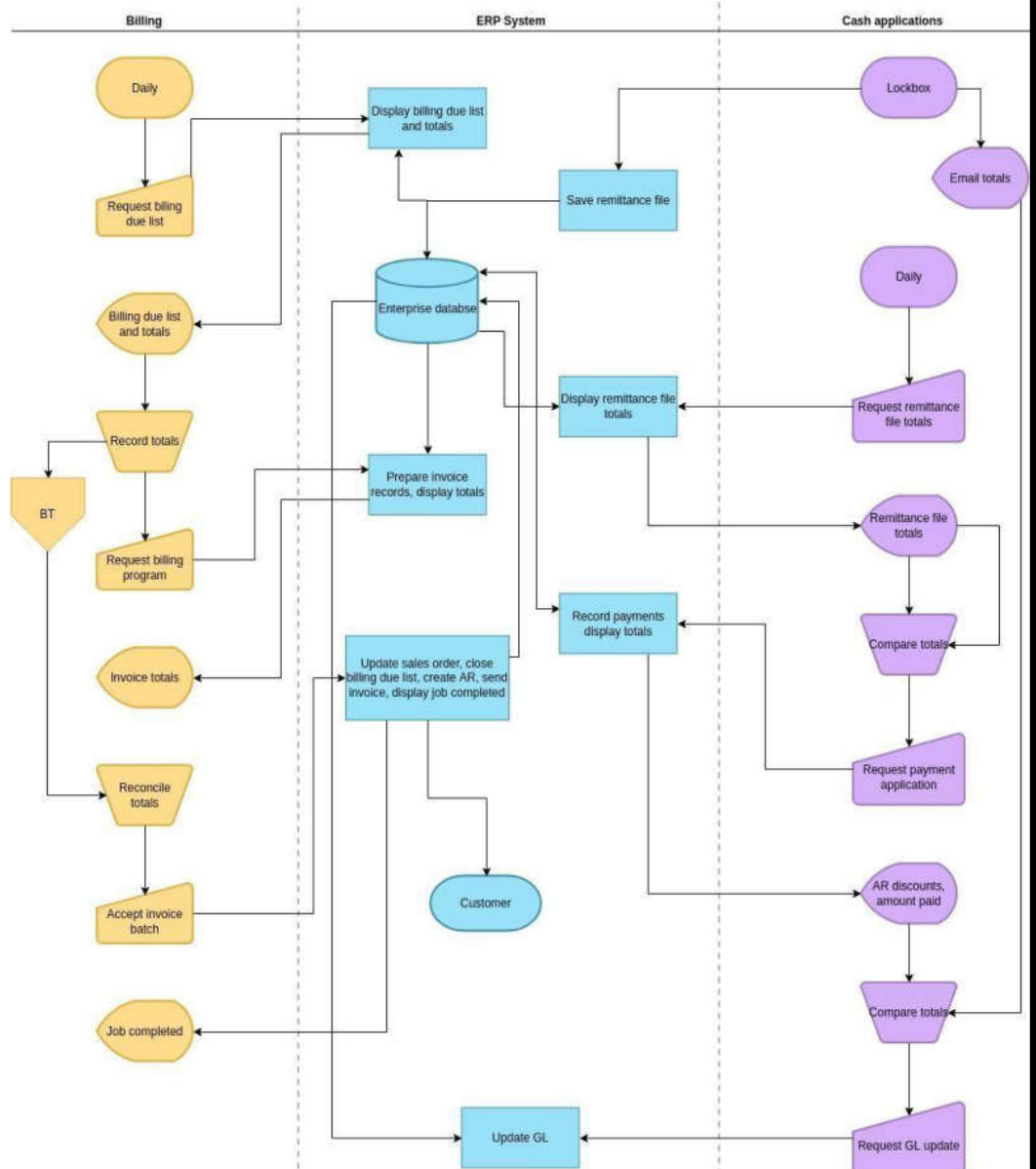**3)Features of Billing System**

Search module has been implemented to search Customer, Login, Transactions, Transactions History

Billing System is an online web based application, from which user can easily manage Login details, Payment details, Bas details from browser

Admin user will be able to track all the information of Login, Customer. Payment ect.......

Admin has rights to edit, add, delete and update the records of Bills, Transactions, Transactions History

Web Interface has been provided for managing Payment. Transactions, Login..

FEATURE OF ASP.NET

ASP.NET and its features?

ASP.NET is a server-side technology that uses compilers to compile the code which leads to faster performance. Also, it reduces the number of lines of code to build large applications. One of the major reasons for using ASP.NET is its wide variety of languages for building an application.
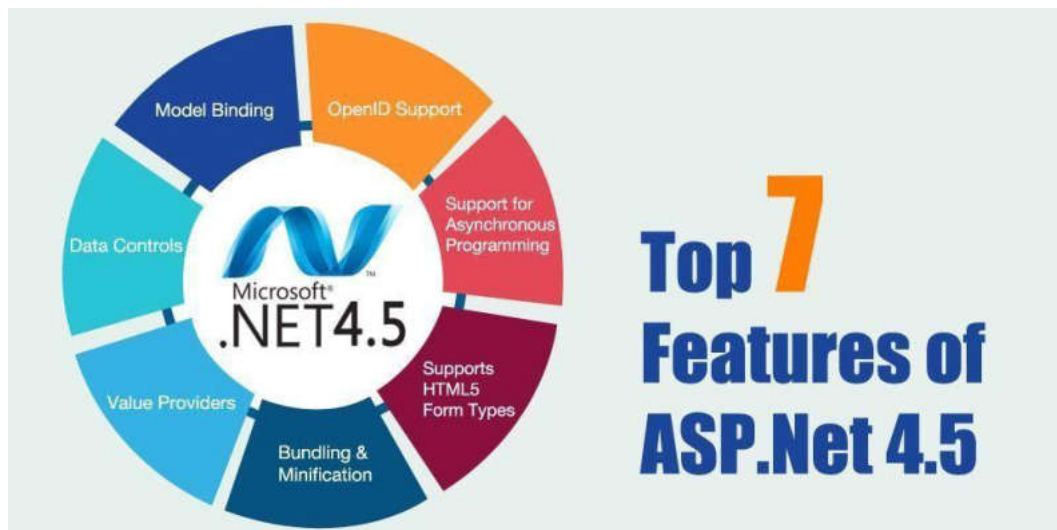
Features of ASP.NET

1) Extremely High Performance. ...

2) Support for Cross-Platform and Container Environments. ...

3) Asynchronous with the use of Async/Await. ...

4) Comprehensive Development Environments. ...

5)Independence from a particular language. ...

6)Support for Web Sockets. ...

7)Filters for Taking Action. ...

8)Globalization and Localization of Markets.

Details of system

MVC (Model-View-Controller) is a pattern in software design commonly used to implement user interfaces, data, and controlling logic. It emphasizes a separation between the software's business logic and display. This "separation of concerns" provides for a better division of labor and improved maintenanc.

The Model-View-Controller (MVC) is an architectural pattern that separates an application into three main logical components: the model, the view, and the controller. Each of these components are built to handle specific development aspects of an application.

```
          ┌──────────────────┐
          │      Model       │
          └──────────────────┘
Updates          ↙              ↖  manipulates
Send input
   ┌──────────────┐      →      ┌──────────────┐
   │     View     │      ←      │  Controller  │
   └──────────────┘             └──────────────┘
```
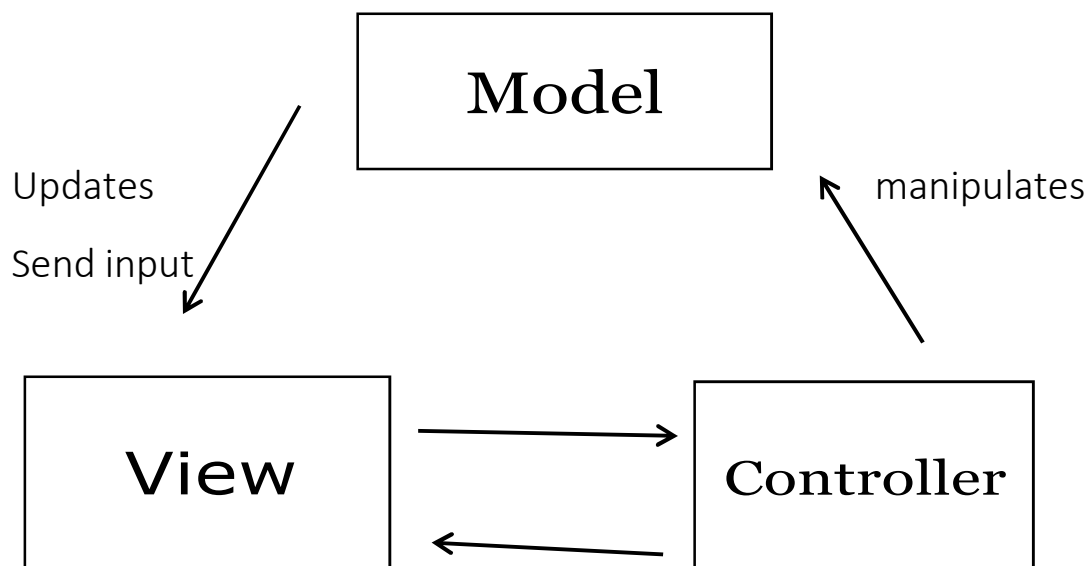
Features of system

Features of Billing System:

    1) Search module has been implemented to search Customer, Login, Transactions, Transactions History

    2) Billing System is an online web based application, from which user can easily manage Login details, Payment details, Bas details from browser

    3) Admin user will be able to track all the information of Login, Customer. Payment ect....

    4) Admin has rights to edit, add, delete and update the records of Bills, Transactions, Transactions History

FEATURES YOUR BILLING SOFTWARE NEEDS TO HAVE

1) Simplicity.
2) Usability.
3) Functionality.
4) Global Compliance.
5) Revenue Recovery.
6) Reporting.
7) Customization.
8) Fraud Protection.

System Of flow Diagram

Billing	ERP System	Cash applications

Daily

Request billing due list

Billing due list and totals

Record totals

BT

Request billing program

Invoice totals

Reconcile totals

Accept invoice batch

Job completed

Display billing due list and totals

Enterprise database

Prepare invoice records, display totals

Update sales order, close billing due list, create AR, send invoice, display job completed

Customer

Update GL

Save remittance file

Display remittance file totals

Record payments display totals

Lockbox

Email totals

Daily

Request remittance file totals

Remittance file totals

Compare totals

Request payment application

AR discounts, amount paid

Compare totals

Request GL update

ERD DIAGRAM

Domain name / App name

Websites/ mobile Application

Manages

C_id

User Name

Password

Mobile Number

Email Address

Country Name

District

Address

Customer

Purchase

A_id

User Name

Password

Admin

Manages

Delivers

Products

Reserve Product in

Shopping Cart

Product id

Product_name

Total price

Billing products

Purchase

To buy

P_availability

P_price

P_catagory

P_name

Product id

Registration or Log in

User_id

User name

Password

Forgot password

Signup

DRD DIAGRAM

Database

User (Vendor)

Invoice Management System

Customer

Add Customer Info

Add Product Info

Reports

Benefits Of System

PURPOSE OF BILLING INVOICE?

Invoices **make a record of all your sales and so are helpful for bookkeeping purposes.** Invoices are invoice documents that provide documentation of your business's financial history. They track all the revenue from your business through sales and can help you gauge your profits and cash flow.

benefits of using invoices

1) Invoice processing is great for legal reasons.

2) hey keep customers happy.

3)Keeping things professional.

4)Showcasing your brand.

5)They keep you organized.

6)It helps you to get paid on time.

7)Things have gotten easier with invoice systems for small businesses.

LIMITATION OF SYSTEM

limitations of billing system?
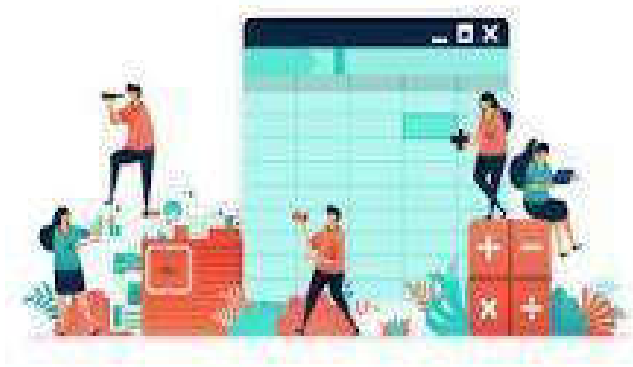
limitation Billing Software

It is not cost-effective for small scale business owners.

Invoices can go into spam folders due to flagging by email servers; that leads to delay of payments.

Reaching offline customers who do not access the internet make

There are some potential downsides to using invoices, but these are mostly caused by poor management and inadequate processes

A badly drafted, vaguely worded document can be wrongly interpreted or easily disputed, delaying payment.

If product sales or the hours of work undertaken are not meticulously noted, an invoice can appear approximate and could be challenged. A good invoice is clear, detailed, and precise.

Invoices being issued late can encourage customers to be equally relaxed about settling the debt. Demands should be raised immediately to impress upon the client the need for swift payment.

Source code

```csharp
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.Mvc;

using Invoice_project.Models;

namespace Invoice_project.Areas.Admin.Controllers

{public class DashboardController : Controller

{BillingDBEntities1 db;

public DashboardController()

{db = new BillingDBEntities1();

// GET: /Admin/Dashboard/public ActionResult Dashboard()

{return View();

}public ActionResult Admin()

{return View();

}public ActionResult Product()

{return View();

}public ActionResult Customer()

{return View();

}public ActionResult Invoices()

{return View();

public JsonResult getallproduct( )

{List<vwproduct> lst = db.vwproducts.ToList();

return Json(lst, JsonRequestBehavior.AllowGet);

}
```

```
public JsonResult getallcustomer()

{List<vwcustomere> lst1 = db.vwcustomeres.ToList();

return Json(lst1, JsonRequestBehavior.AllowGet);

}public string Addcustomer(tblcustomer tb)

{db.tblcustomers.Add(tb);

db.SaveChanges();

return "Customer Added Succesfully";

}public string addproduct(tblproduct tb)

{db.tblproducts.Add(tb);

db.SaveChanges();

return "Product added Succesfully";

}public JsonResult GetProductByid( int id)

{

tblproduct t = db.tblproducts.ToList().FirstOrDefault(e => e.product_id.Equals(id));

return Json(t, JsonRequestBehavior.AllowGet);

}public string AddallDetails(tblinvoice_details td ,tblinvoice_products tprdt,tblinvoice_payments tpym)

{db.tblinvoice_details.Add(td);

db.tblinvoice_products.Add(tprdt);

db.tblinvoice_payments.Add(tpym);

db.SaveChanges();

return "All Details Added Succesfully";

}

}

}
```

```csharp
using System.Reflection;

using System.Runtime.CompilerServices;

using System.Runtime.InteropServices;

// General Information about an assembly is controlled through the following

// set of attributes. Change these attribute values to modify the information

// associated with an assembly.

[assembly: AssemblyTitle("Invoice_project")]

[assembly: AssemblyDescription("")]

[assembly: AssemblyConfiguration("")]

[assembly: AssemblyCompany("")]

[assembly: AssemblyProduct("Invoice_project")]

[assembly: AssemblyCopyright("Copyright © 2023")]

[assembly: AssemblyTrademark("")]

[assembly: AssemblyCulture("")]

// Setting ComVisible to false makes the types in this assembly not visible

// to COM components.  If you need to access a type in this assembly from

// COM, set the ComVisible attribute to true on that type.

[assembly: ComVisible(false)]

// The following GUID is for the ID of the typelib if this project is exposed to COM

[assembly: Guid("15a1fa28-7ff6-440d-bf72-1c1be1a2c8a3")]

// Version information for an assembly consists of the following four values:

//      Major Version

//      Minor Version

//      Build Number

//      Revision

//using  System.Web;

using System.Web.Optimization;


namespace Invoice_project
```

```csharp
{ public class BundleConfig

{ // For more information on bundling, visit http://go.microsoft.com/fwlink/?LinkId=301862

public static void RegisterBundles(BundleCollection bundle

bundles.Add(new ScriptBundle("~/bundles/jquery").Include(

"~/Scripts/jquery-{version}.js", "~/Scripts/bootstrap.min.js", "~/Scripts/jquery-1.10.2.min.js"

bundles.Add(new ScriptBundle("~/bundles/jqueryval").Include(

"~/Scripts/jquery.valida

// Use the development version of Modernizr to develop with and learn from. Then, when you're

// ready for production, use the build tool at http://modernizr.com to pick only the tests you need.

bundles.Add(new ScriptBundle("~/bundles/modernizr").Include(

"~/Scripts/modernizr-*"))

bundles.Add(new ScriptBundle("~/bundles/bootstrap").Include(

"~/Scripts/bootstrap.js",

"~/Scripts/respond.js")); bundles.Add(new

StyleBundle("~/Content/css").Include("~/Content/bootstrap.css",

"~/Content/bootstrap.min.css", "~/Content/site.css"));

}
```

```
using System.Web;

using System.Web.Optimization;namespace Invoice_project

{public class BundleConfig

{// For more information on bundling, visit http://go.microsoft.com/fwlink/?LinkId=301862

public static void RegisterBundles(BundleCollection bundles)

{bundles.Add(new ScriptBundle("~/bundles/jquery").Include(

"~/Scripts/jquery-{version}.js", "~/Scripts/bootstrap.min.js", "~/Scripts/jquery-1.10.2.min.js"))bundles.Add(new
ScriptBundle("~/bundles/jqueryval").Include(

"~/Scripts/jquery.validate*"));

// Use the development version of Modernizr to develop with and learn from. Then, when you're

// ready for production, use the build tool at http://modernizr.com to pick only the tests you need.

bundles.Add(new ScriptBundle("~/bundles/modernizr").Include(

"~/Scripts/modernizr-*"));bundles.Add(new

ScriptBundle("~/bundles/bootstrap").Include( "~/Scripts/bootstrap.js",

"~/Scripts/respond.js"));

bundles.Add(new

StyleBundle("~/Content/css").Include( "~/Content/bootstrap.css",

"~/Content/bootstrap.min.css",

"~/Content/site.css"));

}

}

}using Microsoft.AspNet.Identity;

using Microsoft.Owin;

using Microsoft.Owin.Security.Cookies;

using Owin;


namespace Invoice_project

{

public partial class Startup

{
```

34

// For more information on configuring authentication, please visit http://go.microsoft.com/fwlink/?LinkId=301864

```csharp
public void ConfigureAuth(IAppBuilder app)

{

// Enable the application to use a cookie to store information for the signed in user

app.UseCookieAuthentication(new CookieAuthenticationOptions

{

AuthenticationType = DefaultAuthenticationTypes.ApplicationCookie,

LoginPath = new PathString("/Account/Login")

});

// Use a cookie to temporarily store information about a user logging in with a third party login provider

app.UseExternalSignInCookie(DefaultAuthenticationTypes.ExternalCookie);


// Uncomment the following lines to enable logging in with third party login providers

//app.UseMicrosoftAccountAuthentication(

// clientId: "",

// clientSecret: "");


//app.UseTwitterAuthentication(

// consumerKey: "",

// consumerSecret: "");


//app.UseFacebookAuthentication(

// appId: "",

// appSecret: "");


//app.UseGoogleAuthentication();

}

}

}
```

```csharp
using Microsoft.AspNet.Identity;

using Microsoft.Owin;

using Microsoft.Owin.Security.Cookies;

using Owin;

namespace Invoice_project

{

    public partial class Startup

    {

        // For more information on configuring authentication, please visit http://go.microsoft.com/fwlink/?LinkId=301864

        public void ConfigureAuth(IAppBuilder app)

        {

            // Enable the application to use a cookie to store information for the signed in user

            app.UseCookieAuthentication(new CookieAuthenticationOptions

            {

                AuthenticationType = DefaultAuthenticationTypes.ApplicationCookie,

                LoginPath = new PathString("/Account/Login")

            });

            // Use a cookie to temporarily store information about a user logging in with a third party login provider

            app.UseExternalSignInCookie(DefaultAuthenticationTypes.ExternalCookie);


            // Uncomment the following lines to enable logging in with third party login providers

            //app.UseMicrosoftAccountAuthentication(

            //    clientId: "",

            //    clientSecret: "");


            //app.UseTwitterAuthentication(

            //    consumerKey: "",

            //    consumerSecret: "");
```

```csharp
        //app.UseFacebookAuthentication(

        //   appId: "",

        //   appSecret: "");



        //app.UseGoogleAuthentication();

        }

    }

}using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.Mvc;

using Invoice_project.Models;



namespace Invoice_project.Areas.Admin.Controllers

{

    public class DashboardController : Controller

    {

        BillingDBEntities1 db;

        public DashboardController()

        {

            db = new BillingDBEntities1();

        }

        // GET: /Admin/Dashboard/



        public ActionResult Dashboard()

        {

            return View();

        }
```

```csharp
public ActionResult Admin()

{


    return View();

}

public ActionResult Product()

{

    return View();

}

public ActionResult Customer()

{


    return View();

}

public ActionResult Invoices()

{

    return View();

}


public JsonResult getallproduct( )

{

List<vwproduct> lst = db.vwproducts.ToList();

return Json(lst, JsonRequestBehavior.AllowGet);

}



public JsonResult getallcustomer()

{

List<vwcustomere> lst1 = db.vwcustomeres.ToList();
```

```csharp
            return Json(lst1, JsonRequestBehavior.AllowGet);

        }


        public string Addcustomer(tblcustomer tb)

        {

            db.tblcustomers.Add(tb);

            db.SaveChanges();

            return "Customer Added Succesfully";

        }


        public string addproduct(tblproduct tb)

        {

            db.tblproducts.Add(tb);

            db.SaveChanges();

            return "Product added Succesfully";

        }

        public JsonResult GetProductByid( int id)

        {

tblproduct t = db.tblproducts.ToList().FirstOrDefault(e => e.product_id.Equals(id));

            return Json(t, JsonRequestBehavior.AllowGet);

        }


public string AddallDetails(tblinvoice_details td ,tblinvoice_products tprdt,tblinvoice_payments tpym)

        {

            db.tblinvoice_details.Add(td);

            db.tblinvoice_products.Add(tprdt);

            db.tblinvoice_payments.Add(tpym);

            db.SaveChanges();

            return "All Details Added Succesfully";
```

```
            }
        }
    }Layout = null;
}


<!DOCTYPE html>

<html>
<head>
<meta name="viewport" content="width=device-width" />
<title>Adminlayout</title>
@Scripts.Render("~/bundles/jquery")
@Styles.Render("~/Content/css")
</head>
<body>
<div class="container">
<div class="navbar navbar-inverse">
<ul class="navbar-left">
<li><h1 style="color:white" class="navbar-brand">INVOICE</h1></li>
</ul>
<ul class="navbar-right">
<li><a href="/Login/Logout">logout</a></li>
</ul>
</div>
<div class="col-md-2">
<ul class="list-group">
<li class="list-group-item"><a href="/Admin/Dashboard/Dashboard">Dashboard</a></li>
<li class="list-group-item"><a href="/Admin/Dashboard/Admin">Admin</a></li>
<li class="list-group-item"><a href="/Admin/Dashboard/Product">Product</a></li>
```

```xml
<li class="list-group-item"><a href="/Admin/Dashboard/Customer">Customer</a></li>

<li class="list-group-item"><a href="/Admin/Dashboard/Invoices">Invoices</a></li>

</ul>

</div>xml version="1.0"?>


<configuration>

<configSections>

<sectionGroup name="system.web.webPages.razor" type="System.Web.WebPages.Razor.Configuration.RazorWebSectionGroup,
    System.Web.WebPages.Razor, Version=3.0.0.0, Culture=neutral, PublicKeyToken=31BF3856AD364E35">

<section name="host" type="System.Web.WebPages.Razor.Configuration.HostSection, System.Web.WebPages.Razor,
    Version=3.0.0.0, Culture=neutral, PublicKeyToken=31BF3856AD364E35" requirePermission="false" />

<section name="pages" type="System.Web.WebPages.Razor.Configuration.RazorPagesSection, System.Web.WebPages.Razor,
    Version=3.0.0.0, Culture=neutral, PublicKeyToken=31BF3856AD364E35" requirePermission="false" />

</sectionGroup>

</configSections>


<system.web.webPages.razor>

<host factoryType="System.Web.Mvc.MvcWebRazorHostFactory, System.Web.Mvc, Version=5.0.0.0, Culture=neutral,
    PublicKeyToken=31BF3856AD364E35" />

<pages pageBaseType="System.Web.Mvc.WebViewPage">

<namespaces>

<add namespace="System.Web.Mvc" />

<add namespace="System.Web.Mvc.Ajax" />

<add namespace="System.Web.Mvc.Html" />

<add namespace="System.Web.Routing" />

<add namespace="System.Web.Optimization" />

<add namespace="Invoice_project" />


</namespaces>

</pages>

</system.web.webPages.razor>
```

```xml
<appSettings>

<add key="webpages:Enabled" value="false" />

</appSettings>


<system.webServer>

<handlers>

<remove name="BlockViewHandler"/>

<add name="BlockViewHandler" path="*" verb="*" preCondition="integratedMode" type="System.Web.HttpNotFoundHandler" />

</handlers>

</system.webServer>

</configuration>
```

```csharp
using System.Web.Mvc;


namespace Invoice_project.Areas.Admin

{

public class AdminAreaRegistration : AreaRegistration

{

public override string AreaName

{

get

{

return "Admin";

}

}


public override void RegisterArea(AreaRegistrationContext context)

{

context.MapRoute(

"Admin_default",

"Admin/{controller}/{action}/{id}",
```

```
                new { action = "Index", id = UrlParameter.Optional }

            );

        }

    }

}
```

Screen Design
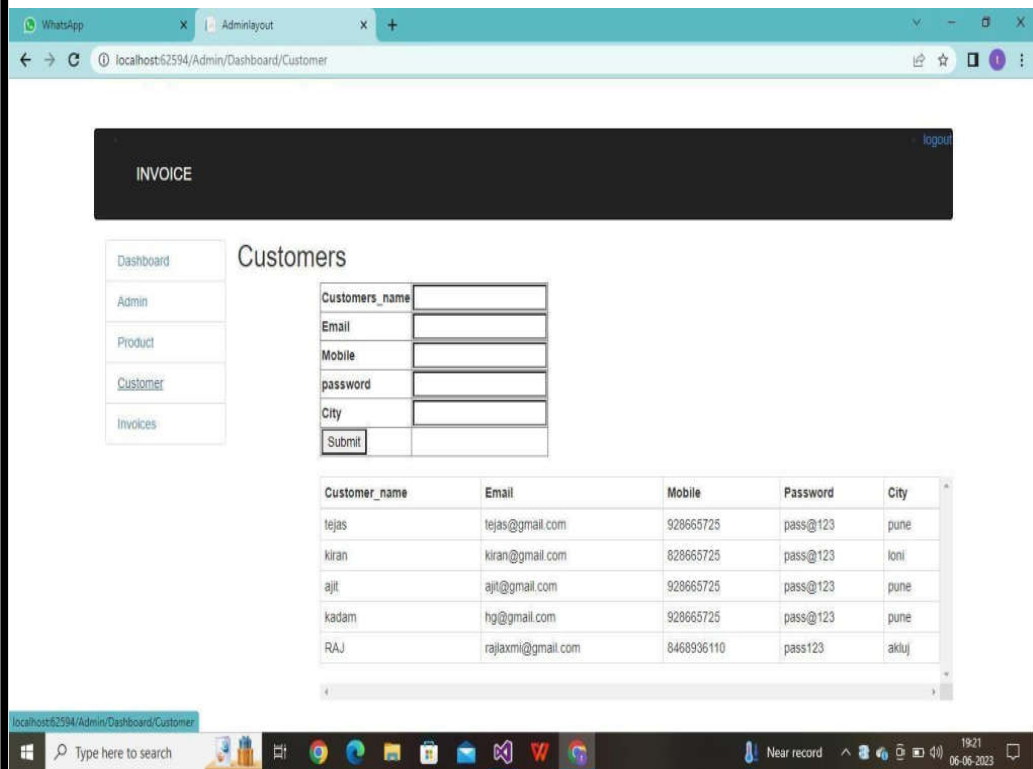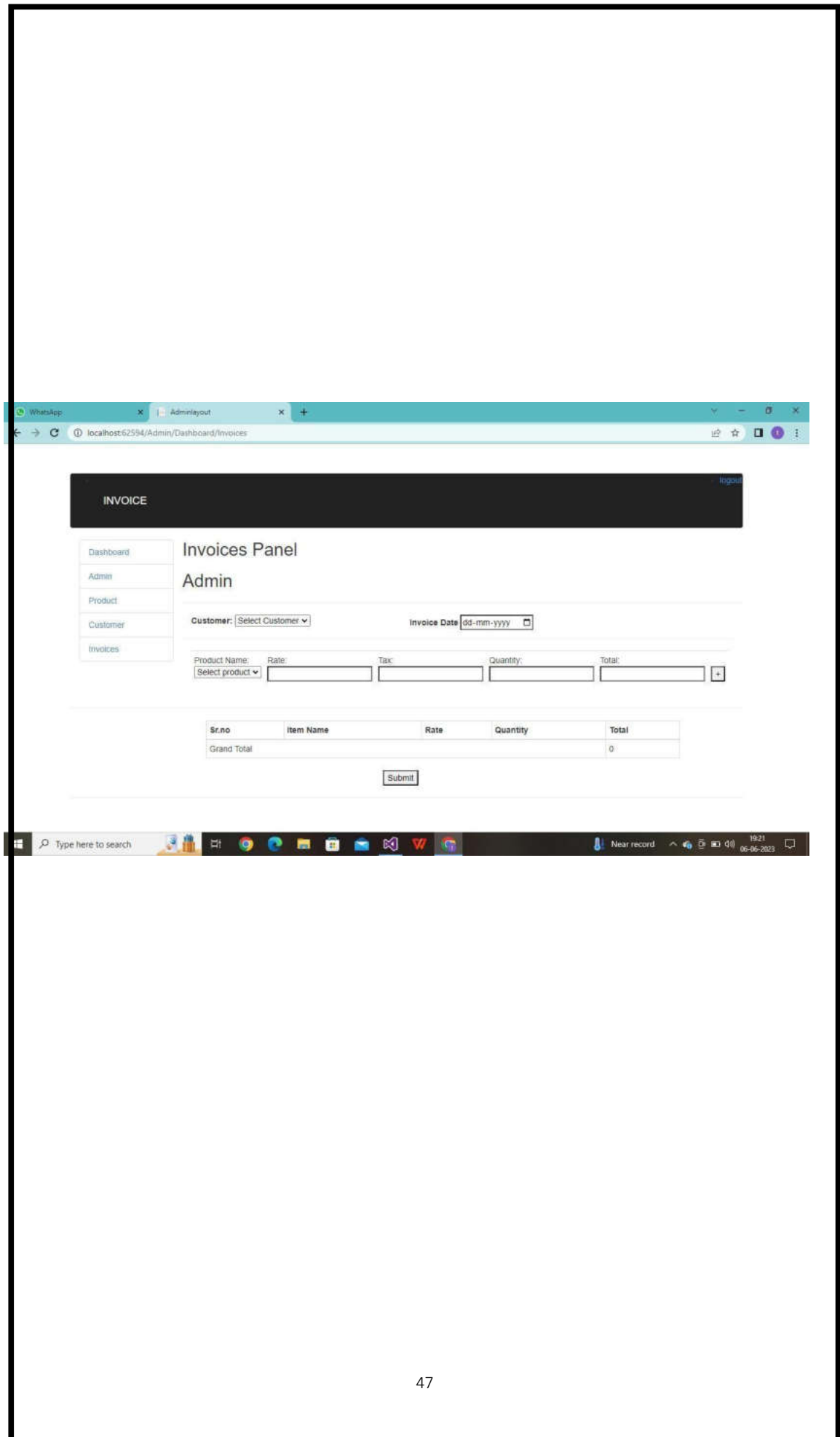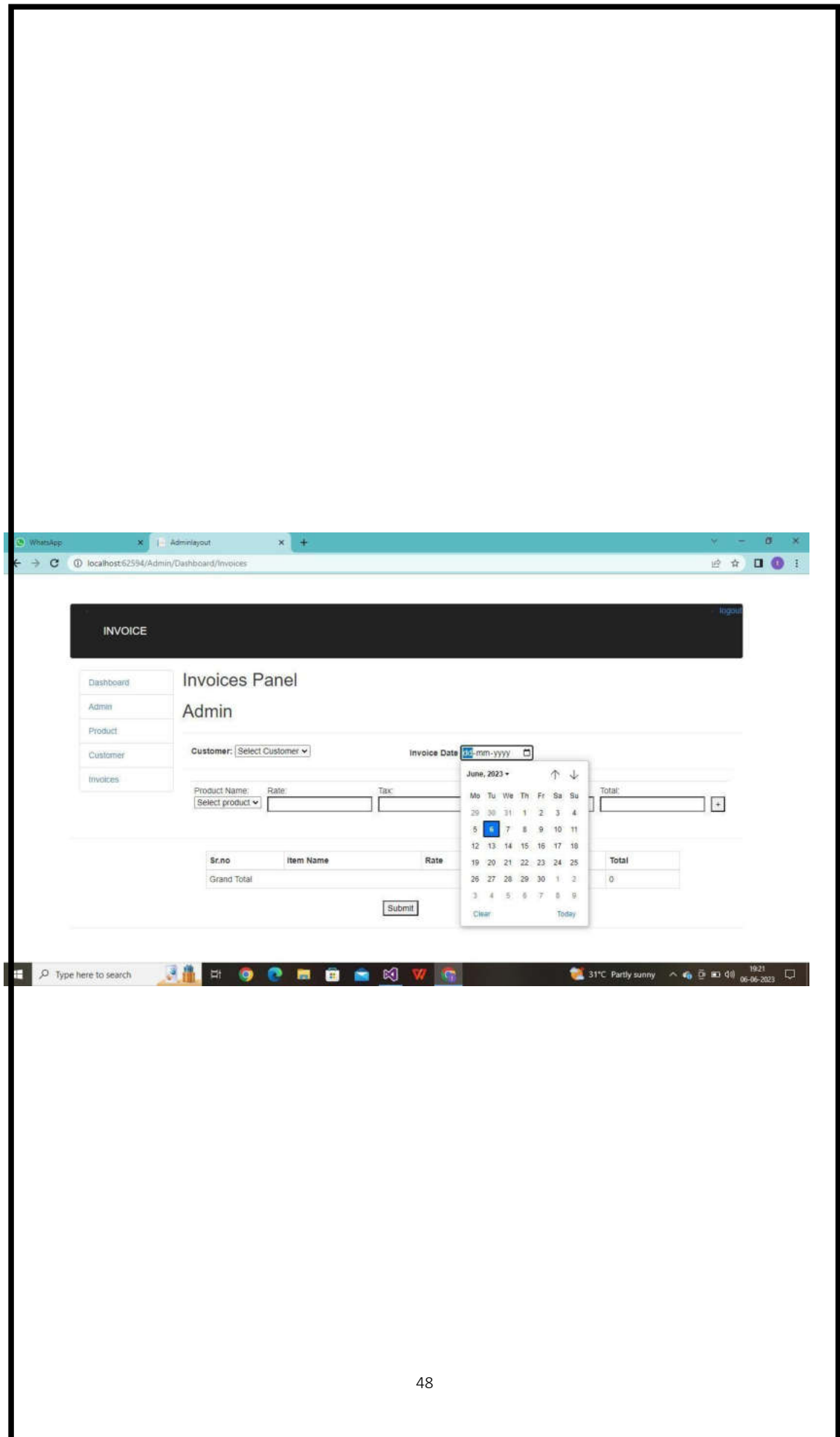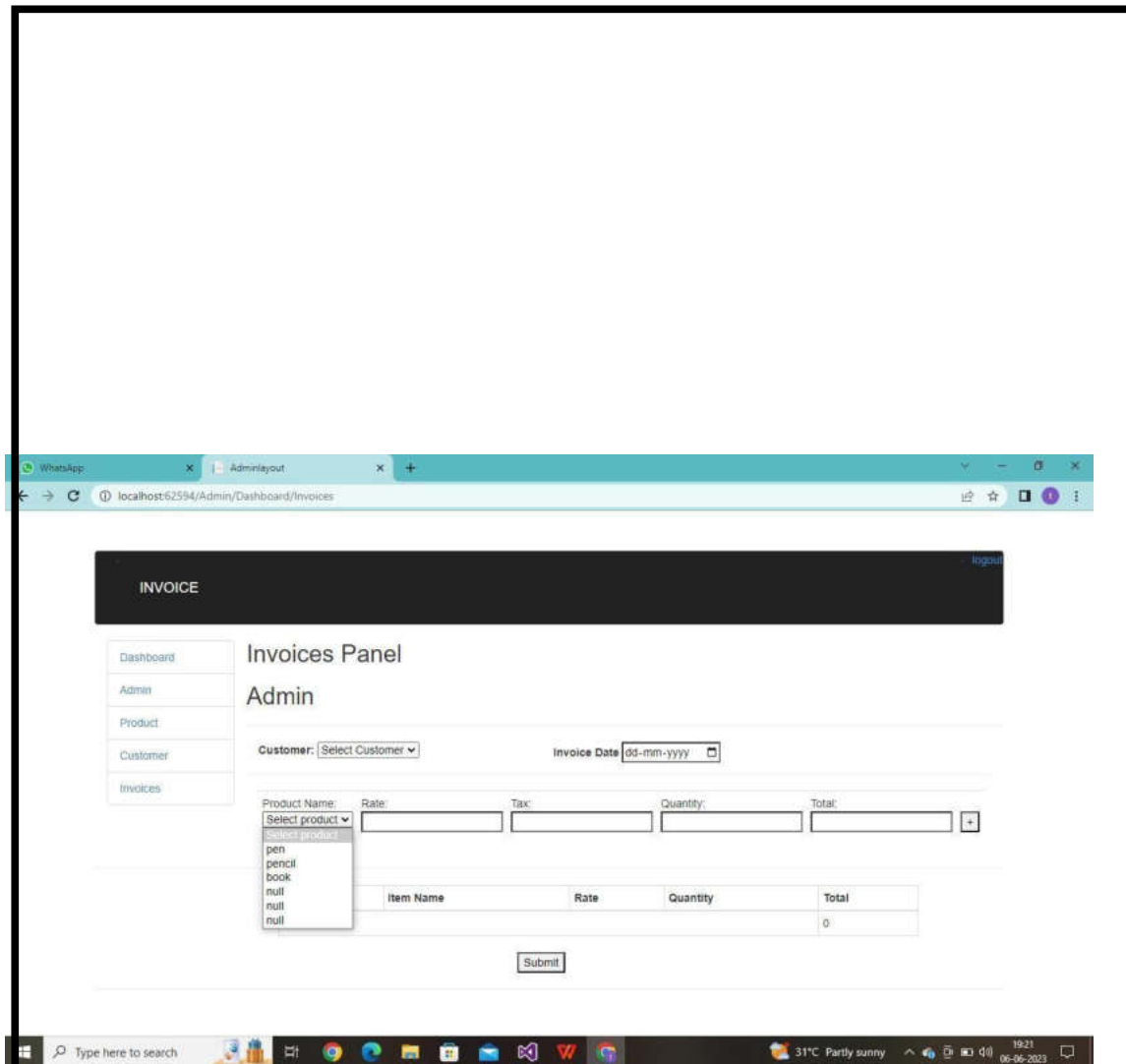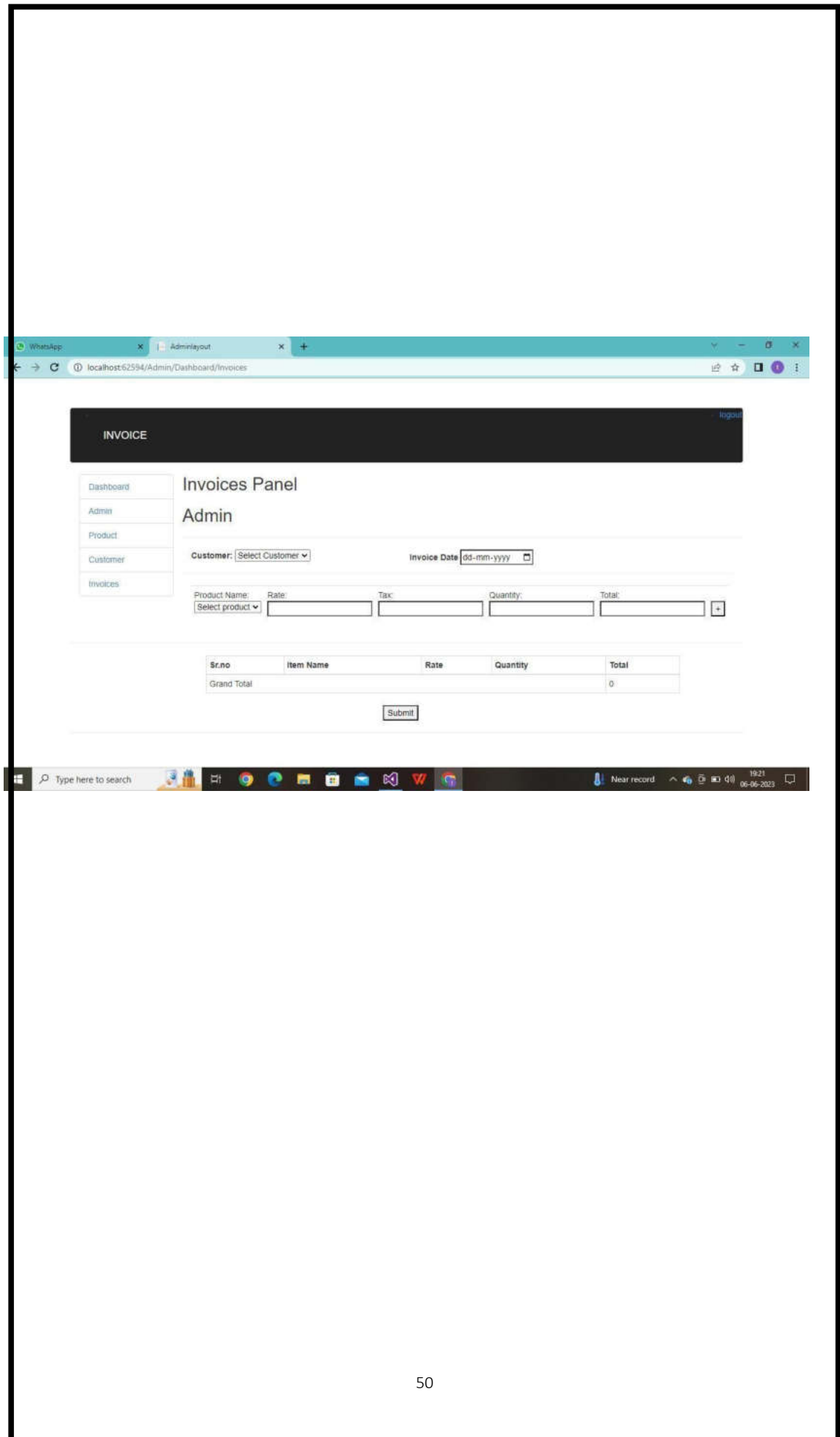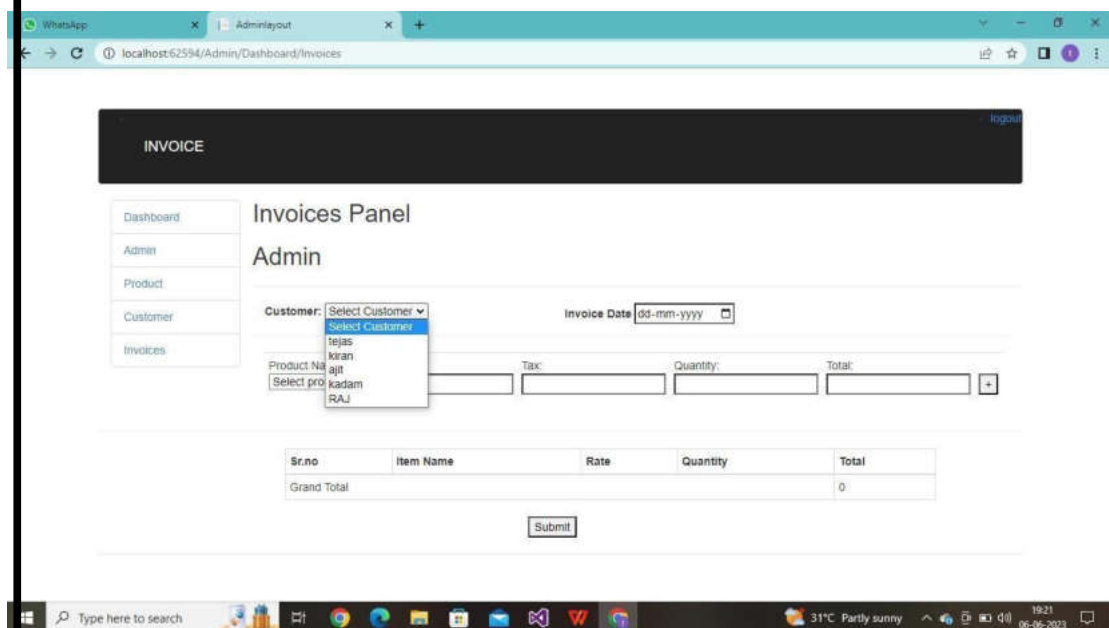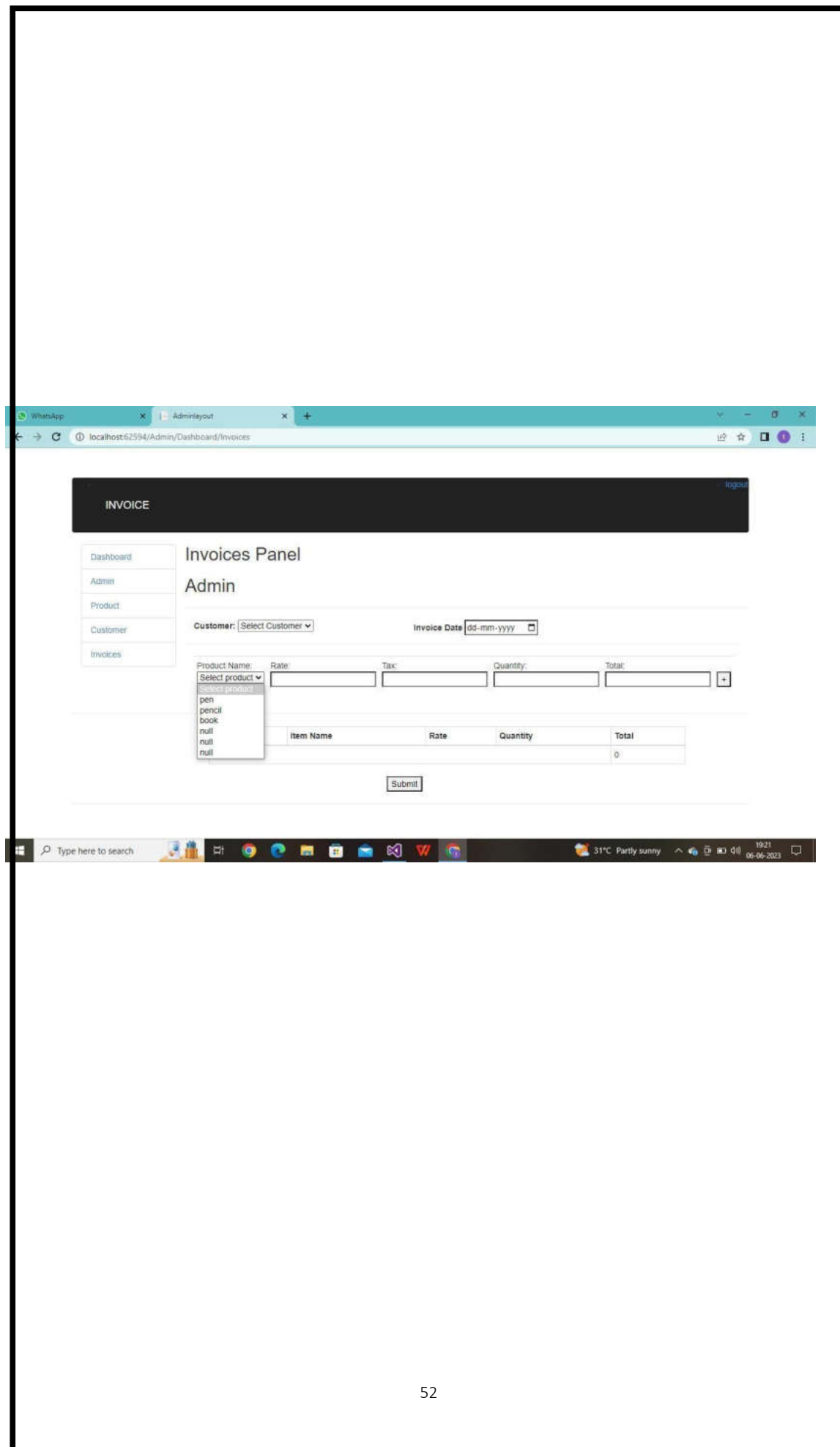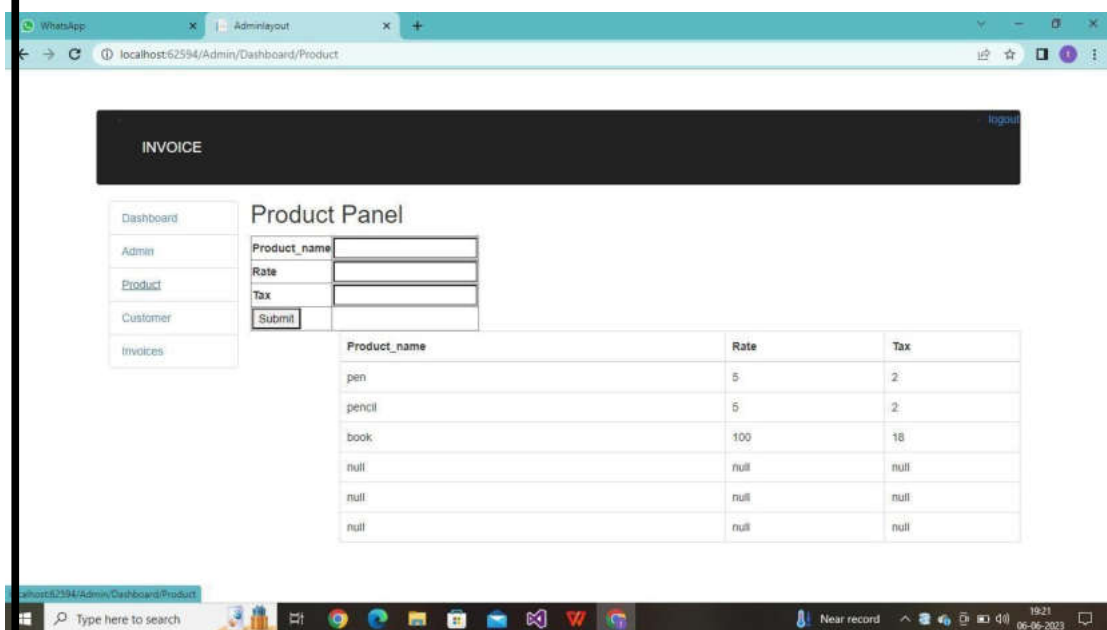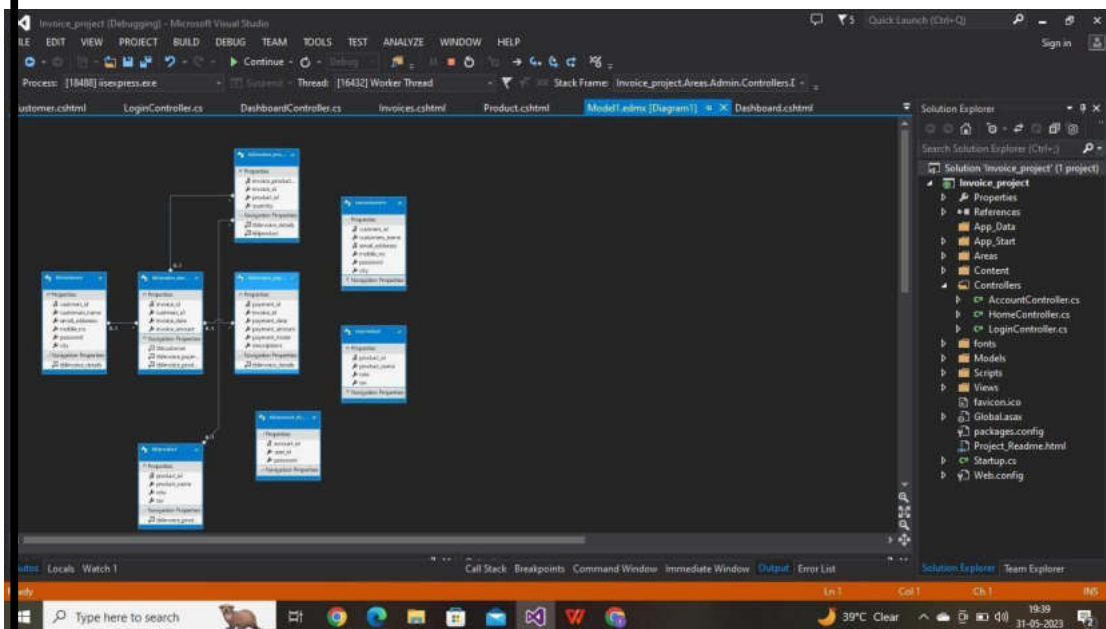
Billing Flow Work in MVC

What is a billing invoice system?

A billing system, meaning the process of invoicing and billing customers by using billing software, includes automating payment collection, issuing invoices automatically along with payment reminders and tracking, and many other tasks that can streamline the invoicing and payment process.

The Request flow is as follows:

-Request is being taken from User to controller. -Controller processes the request from the user and creates a data Model of that particular request. -Data model that is being created is then passed to View that handles the front end or the design

.The other way of passing the data from Controller to View can be by **passing an object of the model class to the View.** Erase the code of View Data and pass the object of model class in return view. Import the binding object of model class at the top of Index View and access the properties by @Model.

How MVC Architecture works. First, **the browser sends a request to the Controller.** Then, the Controller interacts with the Model to send and receive data. The Controller then interacts with the View to render the data.

Operating Environment

Hardware Specification:-

Processor : I5

Clock Speed : 2 GHz

RAM : 256MB

Hard disk Capacity : 80GB

Keyboard : 101 Keys

Mouse : Optical Mouse

Software Specification:-

Front End : html ,ASP.NET MVC

Back end : SQL SERVER, JavaScript,

Operating System : Windows 10

Bibliography

Reference Book:

Asp.net MVC5,programming microsoft

Asp.net MVC ,pro asp ,net MVC

Website:

https://www.tutorialsteacher.com/mvc

https://www.tutorialspoint.com/asp.net_mvc/index.htm

https://www.javatpoint.com/asp-net-mvc

Greenfingers College of Computer and Technology, Akluj.

A

Project Report

On

"Indian Grocery Management System"

Submitted to

Punyashlok Ahilyadevi Holkar
Solapur University, Solapur.

In the partial fulfillment of

Requirement of the graduation course of

"Bachelor of Computer Science B.Sc(ECS)"

Submitted By

Miss. Mane Namrata Pandurang

Miss. Shinde Kamini

UNDER THE GUIDENCE OF

Prof. Kshirsagar B. J

Year 2022-2023

1

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

AFFILIATED TO PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

CERTIFICATE

This is to certify that the project on **"INDIAN GROCERY STORE MANAGEMENT"** in partial fulfillment of the requirement for the Academic Year 2022-23 Of Bachelor of Computer Science B.Sc. (ECS-III) To Punyshlok Ahilyadevi Holkar Solapur University, Solapur. They have carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.

Submitted By

Miss. MANE NAMRATA PANDURANG
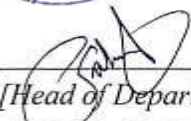
Miss. SHINDE KAMINI SHINDE

Place : Akluj

Date : 08/06/2023

[Project Guide]   [Internal/External Examiner]

[Head of Department]

B.Sc. (ECS)

Greenfingers College of Computer and Technology, Akluj

Indian Grocery Store

☎ 9890640645   ⊙ Yashwant Nagar, Akluj
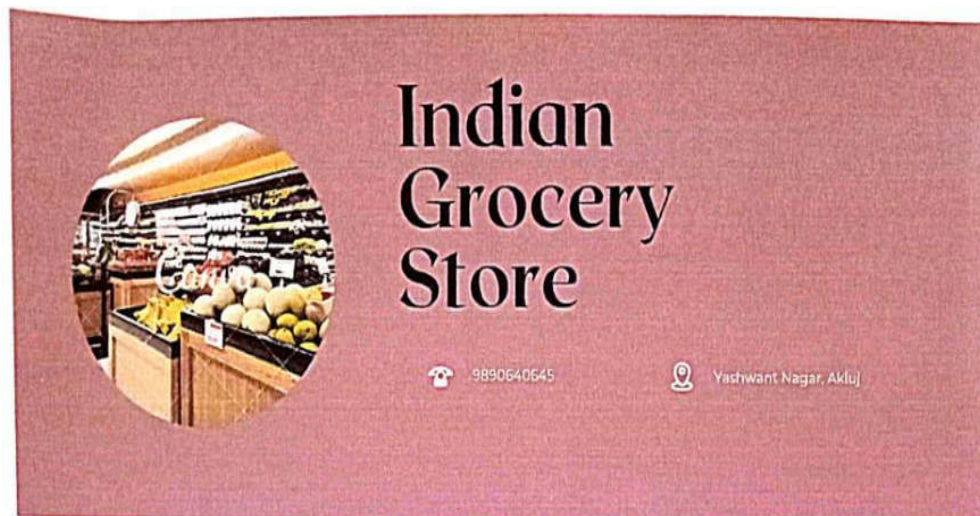
CERTIFICATE

This is to certify that

Miss.___Shinde__Kamini__Kiran_____ Student of
Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been
studying in the class B.Sc. [ECS] III. She has developed software for our
organization. During the project work, she was sincere, hardworking to learn, and
show good potential. We wish her all the best for the future.

Place: Akluj

Date:

Name and Signature

मे. गांधी ट्रेनींग कंपनी

प्रोप्रायटर

Indian Grocery Store

☎ 9890640645   ⊙ Yashwant Nagar, Akluj
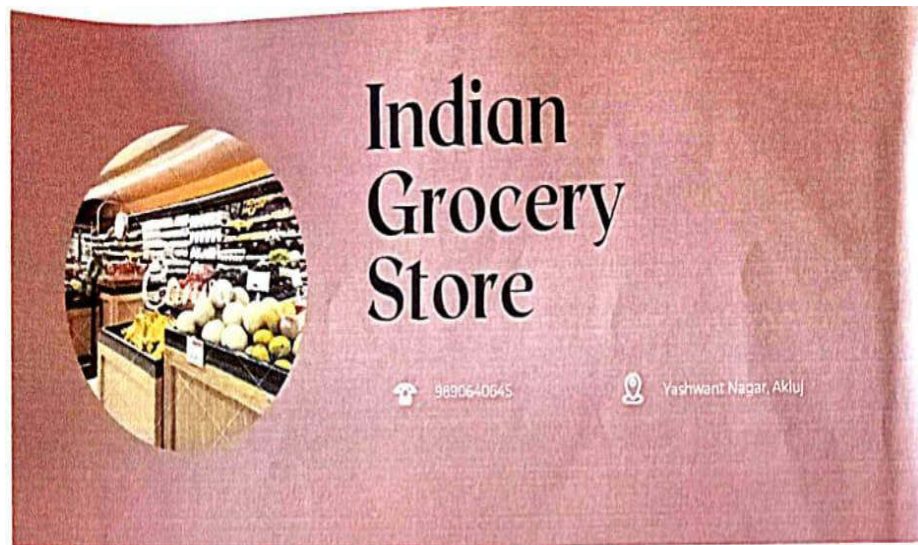
CERTIFICATE

This is to certify that

Miss.___Mane__Namrata___Pandurang_____ Student of
Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been
studying in the class B.Sc. [ECS] III. She has developed software for our
organization. During the project work, she was sincere, hardworking to learn, and
show good potential. We wish her all the best for the future.

Place: Akluj

Date:

Name and Signature

मे. गांधी ट्रेडींग कंपनी

प्रोप्रायटर.

ACKNOWLEDGEMENT

Before starting to project report, we have to thanks to **Dept. of Entire Computer Science** For giving us to change to present ourselves with great potential and for providing us glorious platform towards our future career.

It gives me great pleasure to remain deeply inspected to our Project guide **Prof. Salunkhe S.S and Prof. Kshirsagar B.J.** Under whose guidance.

We completed the project. The faith and confidence shown by him in our boosted our moral and motivated us to perform better in preparing this project.

We are thankful to all staff members for their valuable suggestion in completing this work.

We are also thankful to my all friends who help me directly or indirectly to carry this project successfully.

Thank must finally to our family especially to our parents, who are always with us.

Miss. Mane Namrata Pandurang

Miss. Shinde Kamini Kiran

DECLARATION

The Head of Dept. of Computer Science, **Greenfingers College of Computer & Technology, Akluj.**

Respected Sir,

We understood here by declared that this project is entirely data collected by me, we have not copied anything from any report submitted by **Greenfingers College of Computer and Technology, Akluj** or elsewhere we understood that such coming is liable to be punished in any way the **Green Fingers College of Computer & Technology, Akluj** authorities deem fit.

Thanking you.

Miss. Mane Namrata Pandurang

Miss. Shinde Kamini Shinde

INDEX

Introduction

- **Introduction**

The best Indian Grocery Store in Springfield, Illinois-62704.

India Grocers is a grocery store in the United States that specializes in Indian food. The store is located in Springfield, Illinois-62704. According to the study, it represents more than 95% of all retail spending. According to the analysis, Indian groceries in USA stores thrive on their proven capacity to offer consumers convenient and tailored service, particularly in tier 2+ cities, which account for about 80% of food expenditures in

India.

Abstract

- **Abstract**

Abstract of the Project Grocery Store Management:

The purpose of Grocery Store Management is to automate the existing manual system by the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Objective Of Grocery Store

❖ The main objective of the project on Indian grocery management is to manage the details of customer, product, product type, expire of product.

❖ It manages all the information about customer, stock.

❖ Manage the information of product.

❖ Adding, updating and deleting of records in store.

Scope Of Grocery Store

- ❖ It may help collecting perfect management in details. In very short time the collection will be Obvious, simple and sensible.

- ❖ It Satisfy user requirement.

- ❖ Be easy to understand by the user and operator.

- ❖ Have a good user interface.

- ❖ Be expandable.

- ❖ To utilize resources in an efficient manner by increasing their productivity through automation

Identification Of Need

- **Identification of need:**

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order. there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of time while entering records and retrieving records. One more problem was that it was very difficult to find errors while entering the records. Once the records were entered it was very difficult to update these records.

Requirement

- **Hardware and Software tools**

The system services and goals are established by consultation with system user.

They are then defined in details and serve as a system specification.

System requirement are those on which the system runs.

- **Hardware Requirement**

Desktop/PC	Processor: Intel CORE i-3 or above
	Ram: 4GB or above
	Hard Disk: 100 GB Or Above

- **Software Requirement**

Software Name	**Minimum Version**
Operating System	Windows 10
Python	Python Version 3.10.0
MySQL	MySQL8.0
IDE	Visual Studio Code/ PyCharm

- **Feasibility Study:**

After doing the project Grocery Store Management , study and analyzing all the existing or required functionalities of the system, the next task is to do the feasibility study for the project. All projects are feasible - given unlimited resources and infinite time.

Feasibility study includes consideration of all the possible ways to provide a solution to the given problem. The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements

Economic Feasibility

This is a very important aspect to be considered while developing a project. We decided the technology based on minimum possible cost factor.
- ✓ All hardware and software cost has to be borne by the organization.
- ✓ Over all we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

Technical Feasibility

This included the study of function, performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionality to be provided in the system, as described in the System Requirement Specification (SRS), and checked if everything was possible, using different type of frontend and backend platform

Operational Feasibility

No doubt the proposed system is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory even to a layman. Besides, a proper training has been conducted to let know the essence of the system to the users so that they feel comfortable with new system. As far our study is concerned the clients are comfortable and happy as the system has cut down their loads and doing.
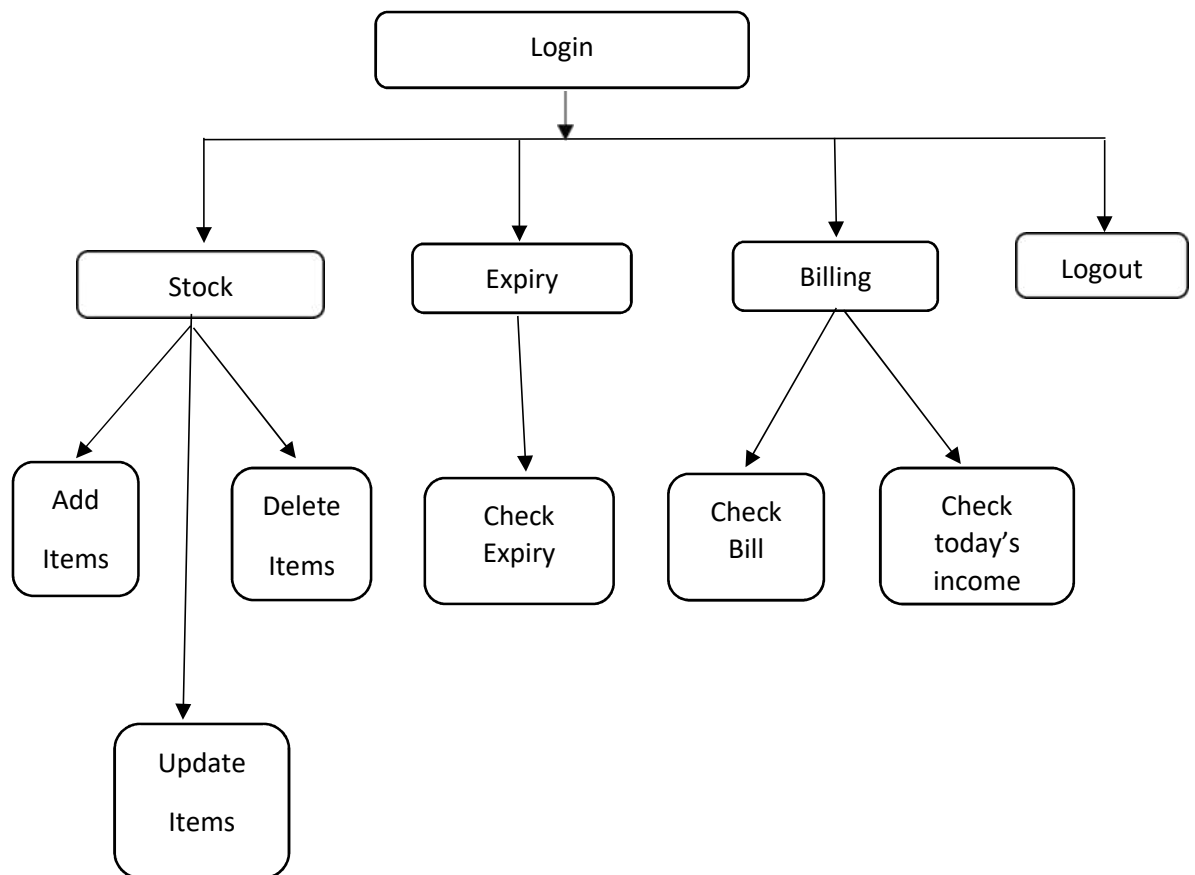
Activity Diagram

Figure1: Activity Diagram
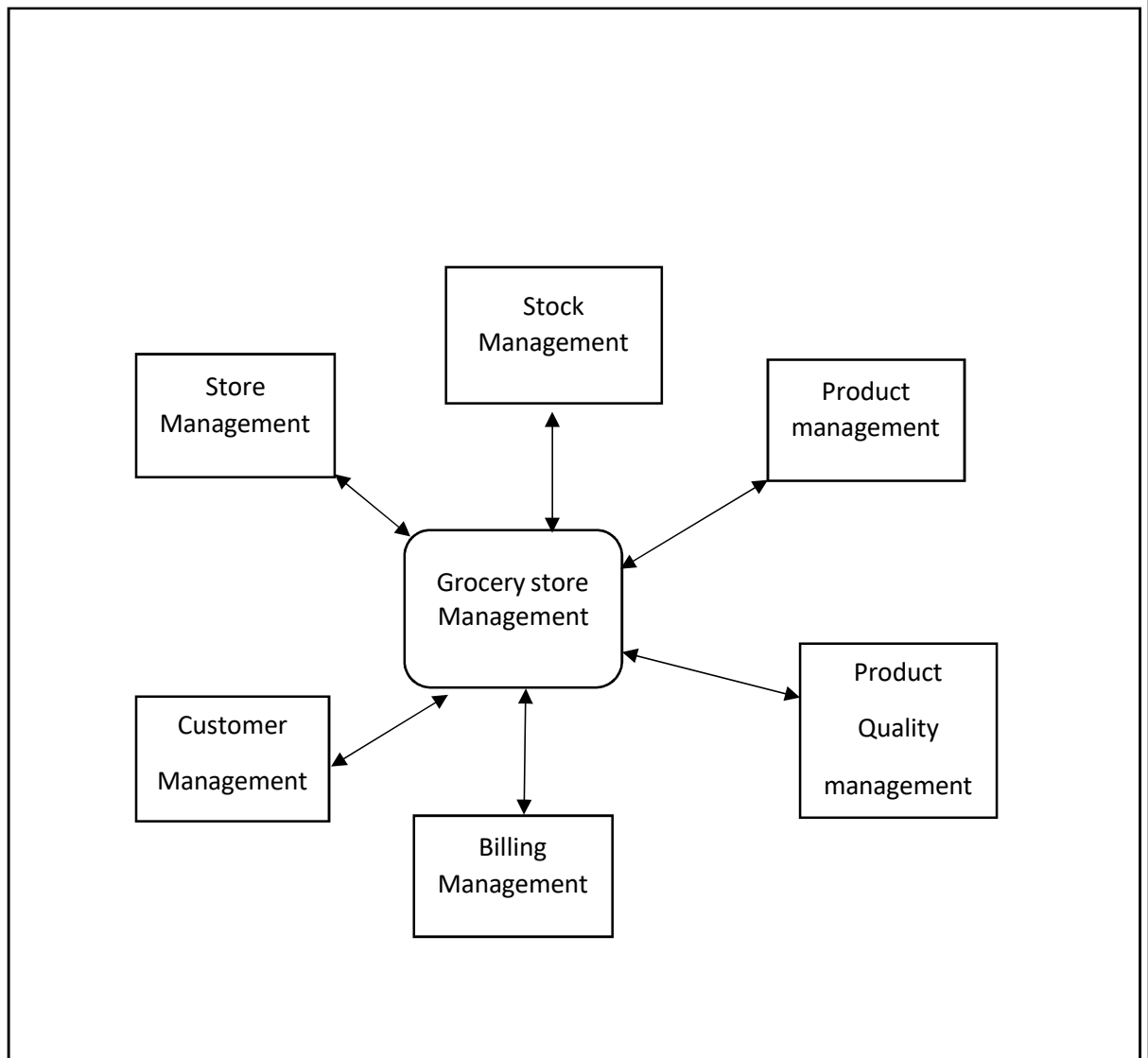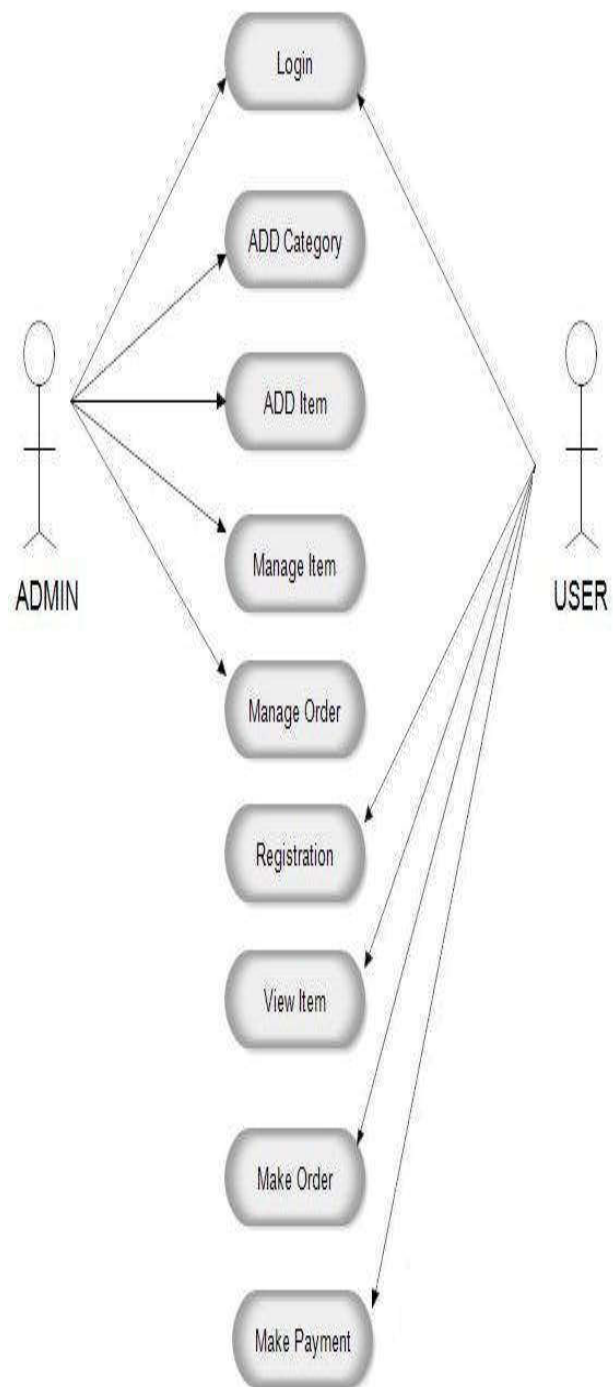
Zero Level DFD-Grocery Store Management

Stock Management

Store Management

Product management

Grocery store Management

Product Quality management

Customer Management

Billing Management

Figure2: Zero Level DFD-Grocery Store Management

25

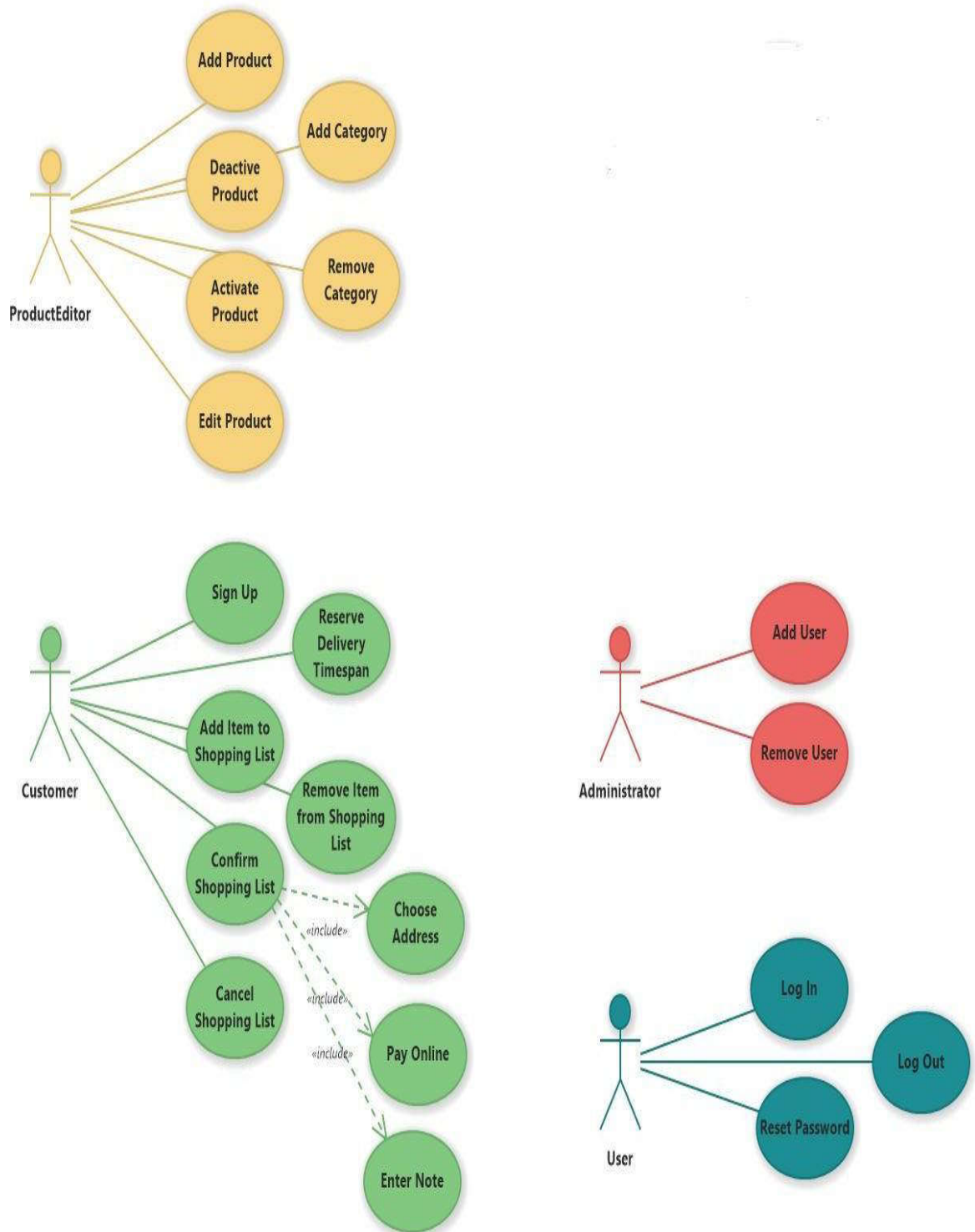# Use Case Diagram

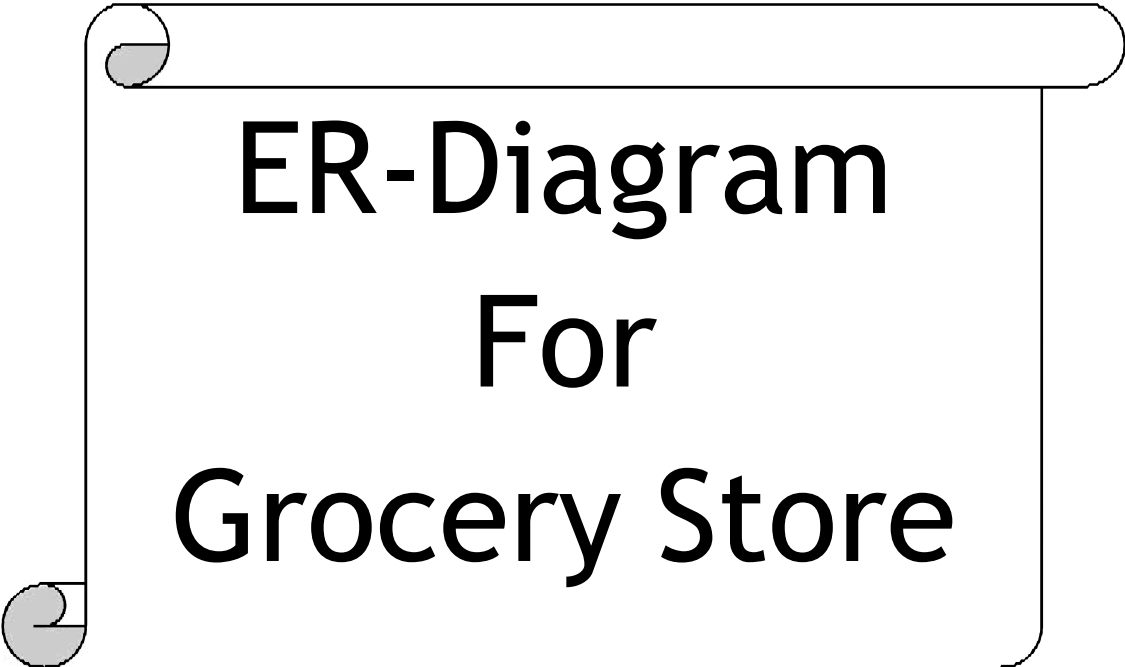Use Case Diagram for Indian Grocery Store

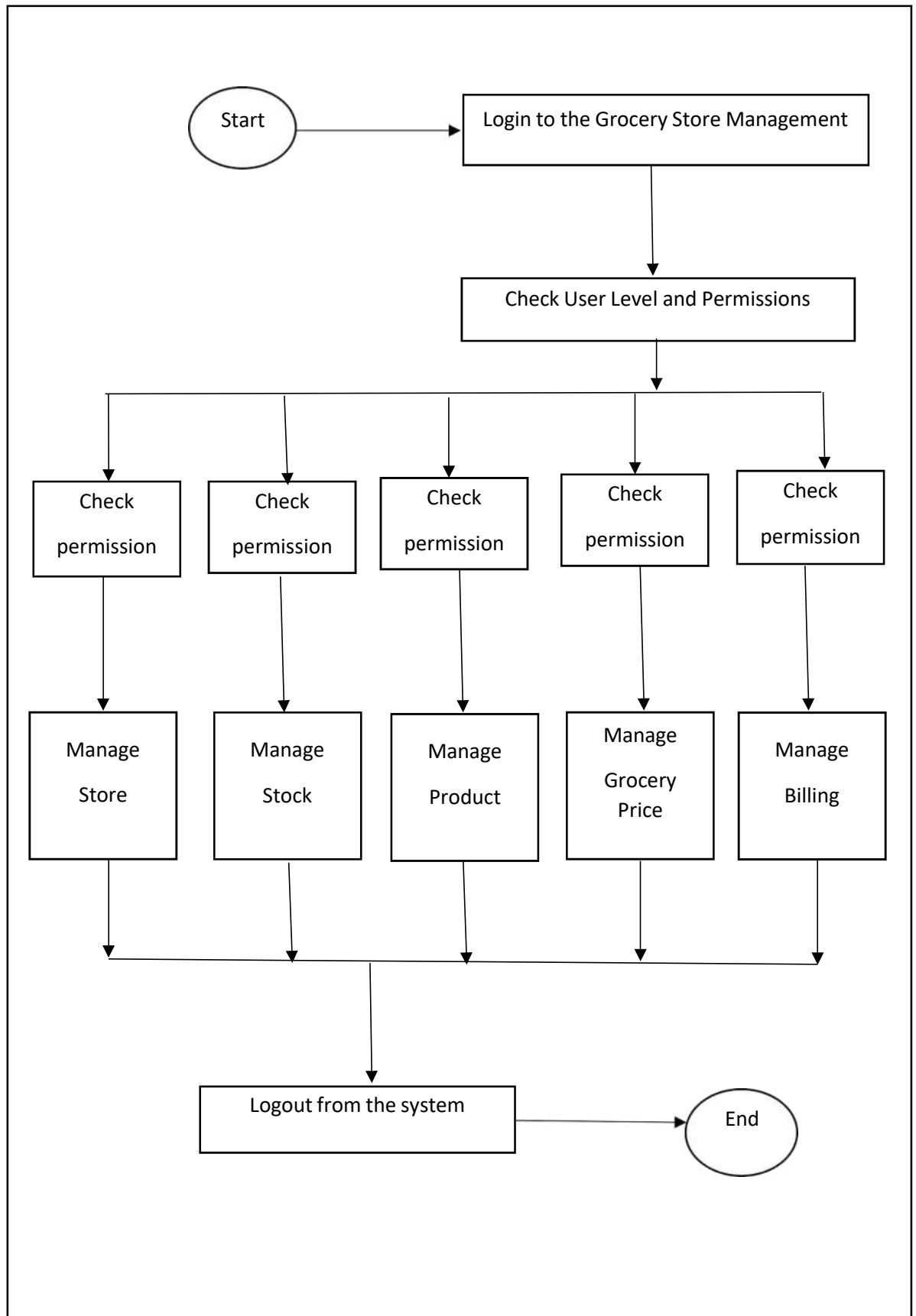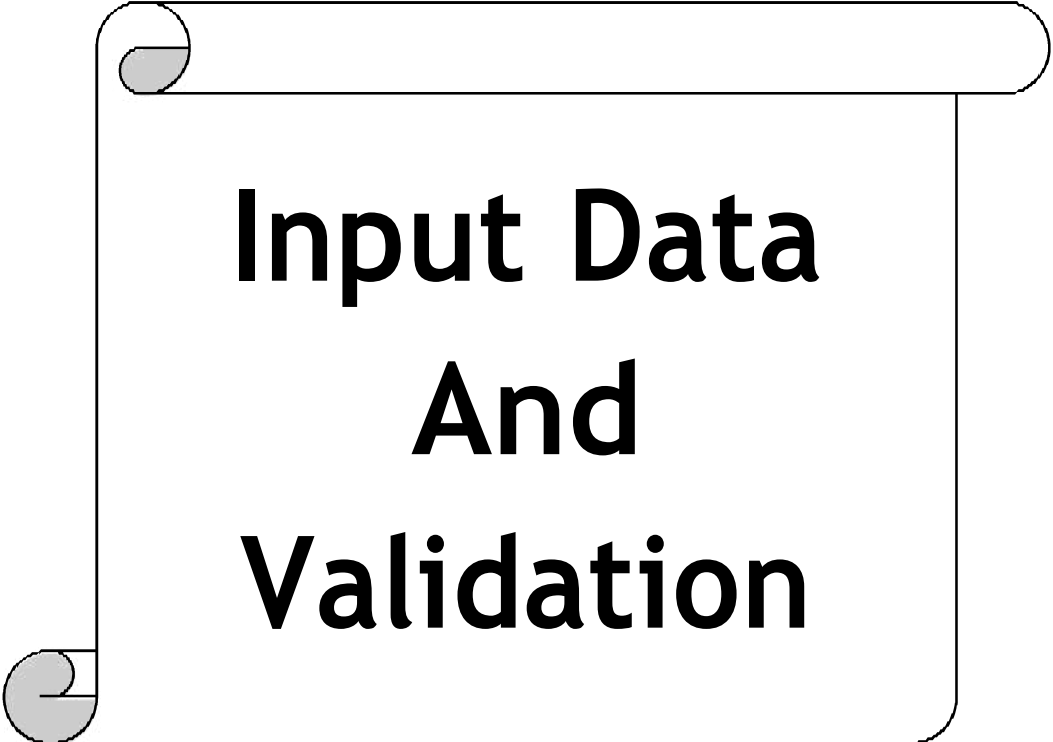*Figure3: Use Case Diagram*

ER-Diagram
For
Grocery Store

Figure4: ER-Diagram for Grocery Store

30

Features of the Project:

- ❖ Product and Component based.

- ❖ Simple status and Resolutions.

- ❖ It Contain better storage capacity.

- ❖ Accuracy in work.

- ❖ Easy and Fast retrieval of information.

- ❖ Well Designed report.

- ❖ Creating and Changing Issues at ease.

- ❖ Access of any information individually.

- ❖ Work become very speedy.

- ❖ Easy to update information.

Input Data
And
Validation

Input Data and Validation of Project on Grocery Store Management :

❖ All the fields such as Customer Product Company, Supplier are validated and does not take invalid values

❖ Each form for Customer, Product Stock cannot accept blank value fields

❖ Avoiding errors in data

❖ Controlling amount of input

❖ Integration of all the modules/forms in the system.

❖ Preparation of the possible test data with all the validation checks.

❖ Preparation of the test cases.

❖ Actual testing done manually. Recording of all the reproduced errors.

❖ Modifications done for the errors found during testing

 ❖ Testing the module with all the possible test data of calculations etc.

Modules Of Grocery Store

❖ Login Module: Used for managing the details

❖ User Module: Used for managing the user of the system

❖ Stock Module: Used for managing the details of stock

❖ Product Management Module: Used for managing the information and details of the product

❖ Product Company Module: Used for managing the product company details

❖ Product Type Module: Used for the managing the product type information
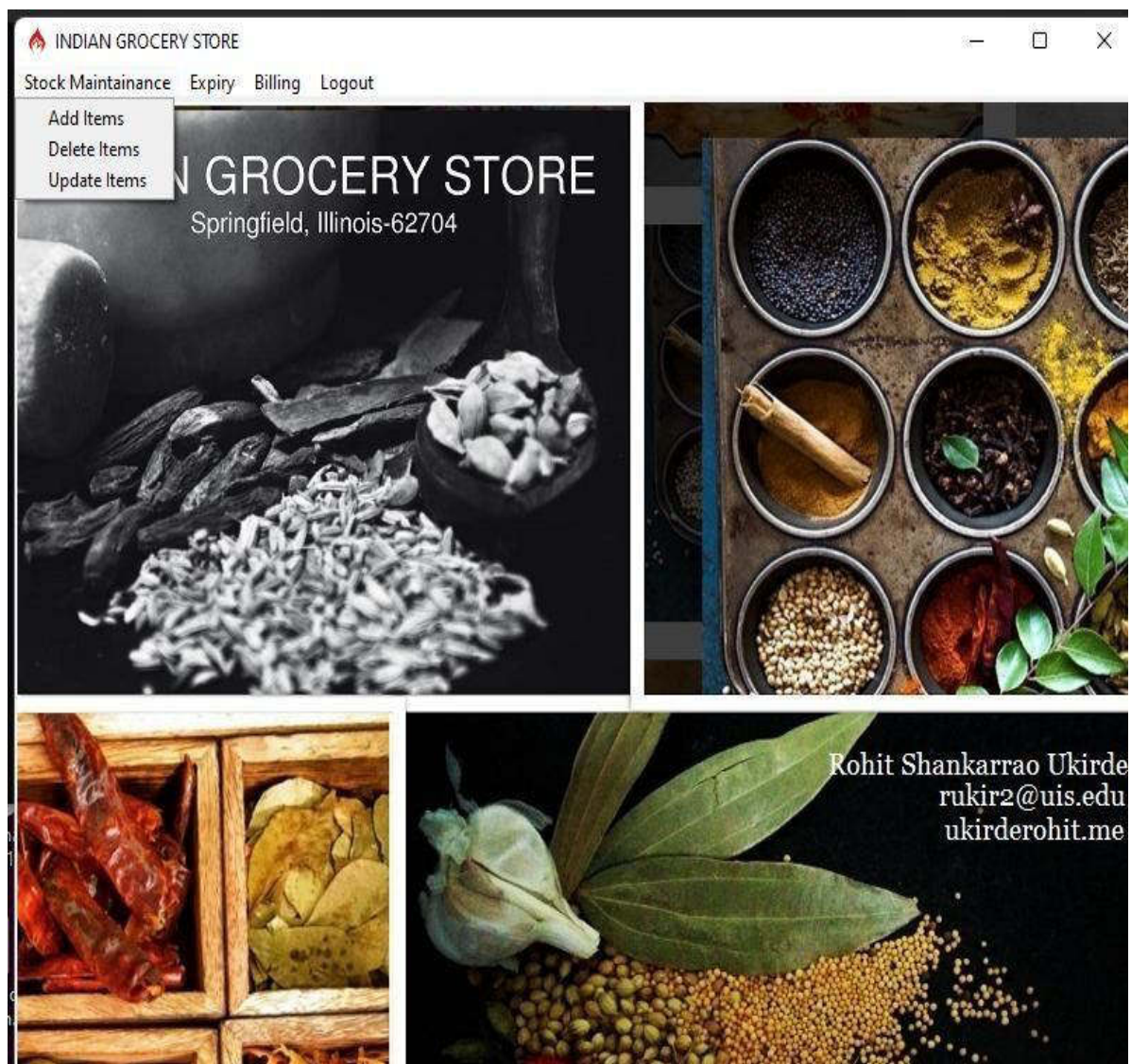
❖ Customer Management: Used for the customer details

Screen Design

Screen: Login Page
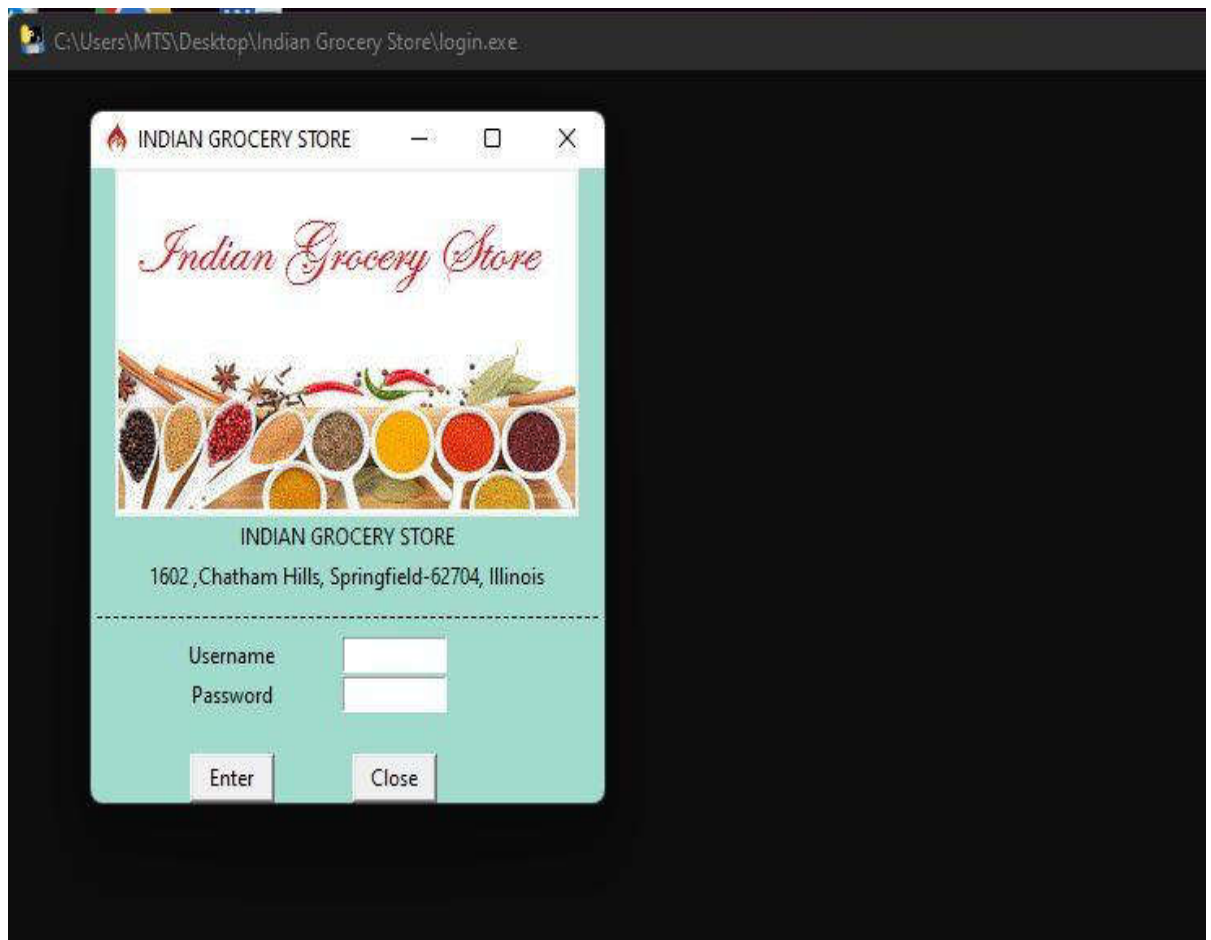
Screen: Front Page

Screen: Add Items

Success!	the Grocery Stock				

Item_No:	10
Item_Name:	Basmati Rice
Item_Type:	Rice
Quantity_Remain:	700
Item_Cost:	80
Expiry_Date:	10-12-2024
Manufactured_By:	India

Submit   **Refresh stock**   **Main Menu**

Item_Name	Item_Type	Quantity_Remain	Item_Cost	Expiry_Date	Manufactured_By
1. Milk	Dairy	91	10	12/12/2017	Prairie
2. brown	Bread	300kg	12.9	08/11/2023	Essential Everyday
3. Chai		98	5.99	12/05/2018	
4. Chocalate	MilkShake	340	1.33	12/12/2016	Somya
5. mohari	Milk Product	205 pak	34	12/12/2023	Hersheys
7. tur	dal	120 pak	80		india
8. turmaric	powder	200 pak	30	20-12-2023	
9. wheat	flour	400	200		amd
10. Basmati Rice	Rice	700	80	10-12-2024	India

Screen: Delete Items

Delete grocery item from Stock — □ X

Enter the Item No to Delete 9 | Delete

Item	Qty Remain	Cost	Expiry Date
1) Milk	91	10	12/12/2017
2) brown	300kg	12.9	08/11/2023
3) Chai	98	5.99	12/05/2018
4) Chocalate	340	1.33	12/12/2016
5) mohari	205 pak	34	12/12/2023
7) tur	120 pak	80	
8) turmaric	200 pak	30	20-12-2023
10) Basmati Rice	700	80	10-12-2024

Main Menu

...current statement uses 1, and there are 2 supplied.

40

Screen: Update Items
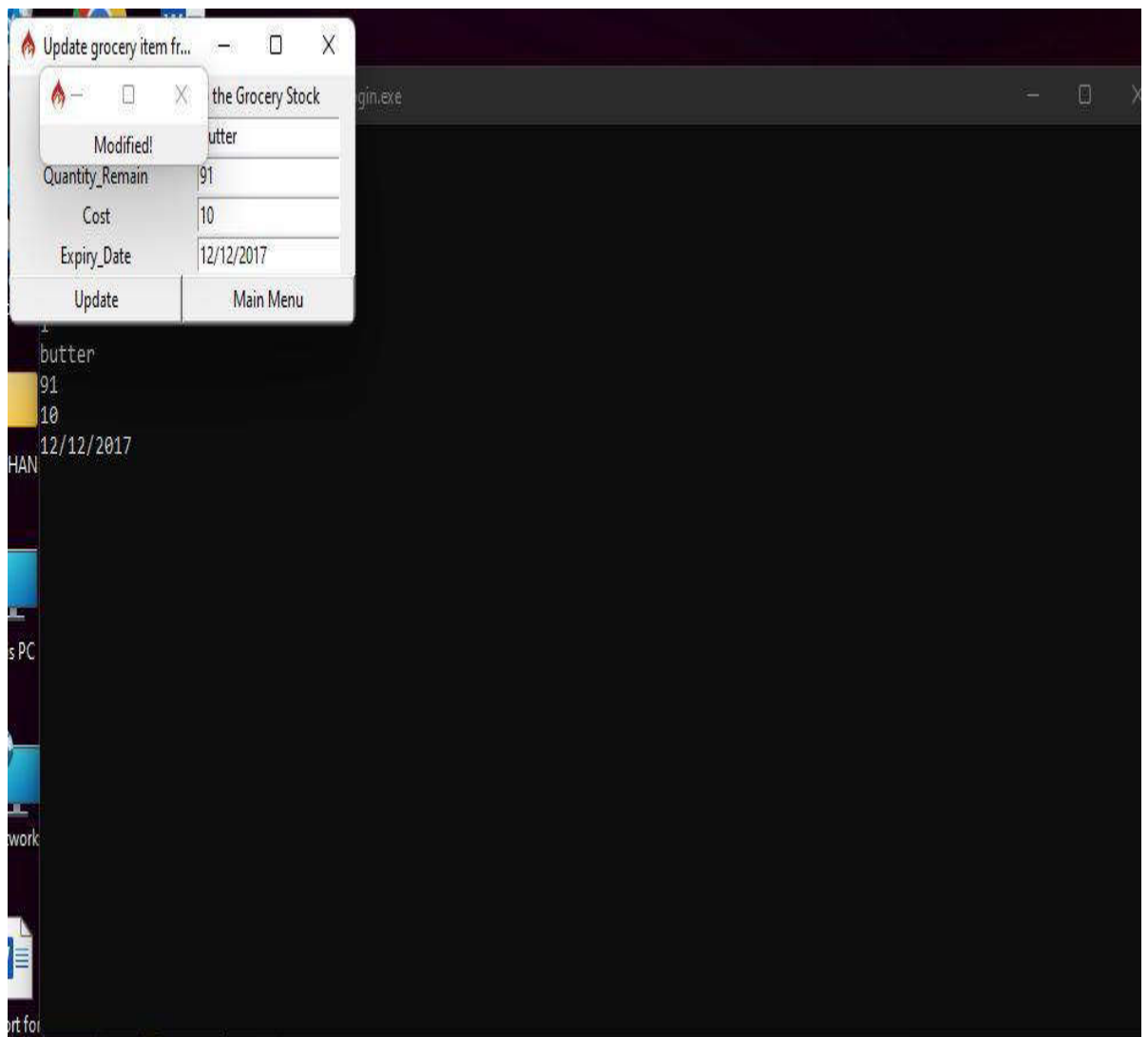
Screen: Check Expiry
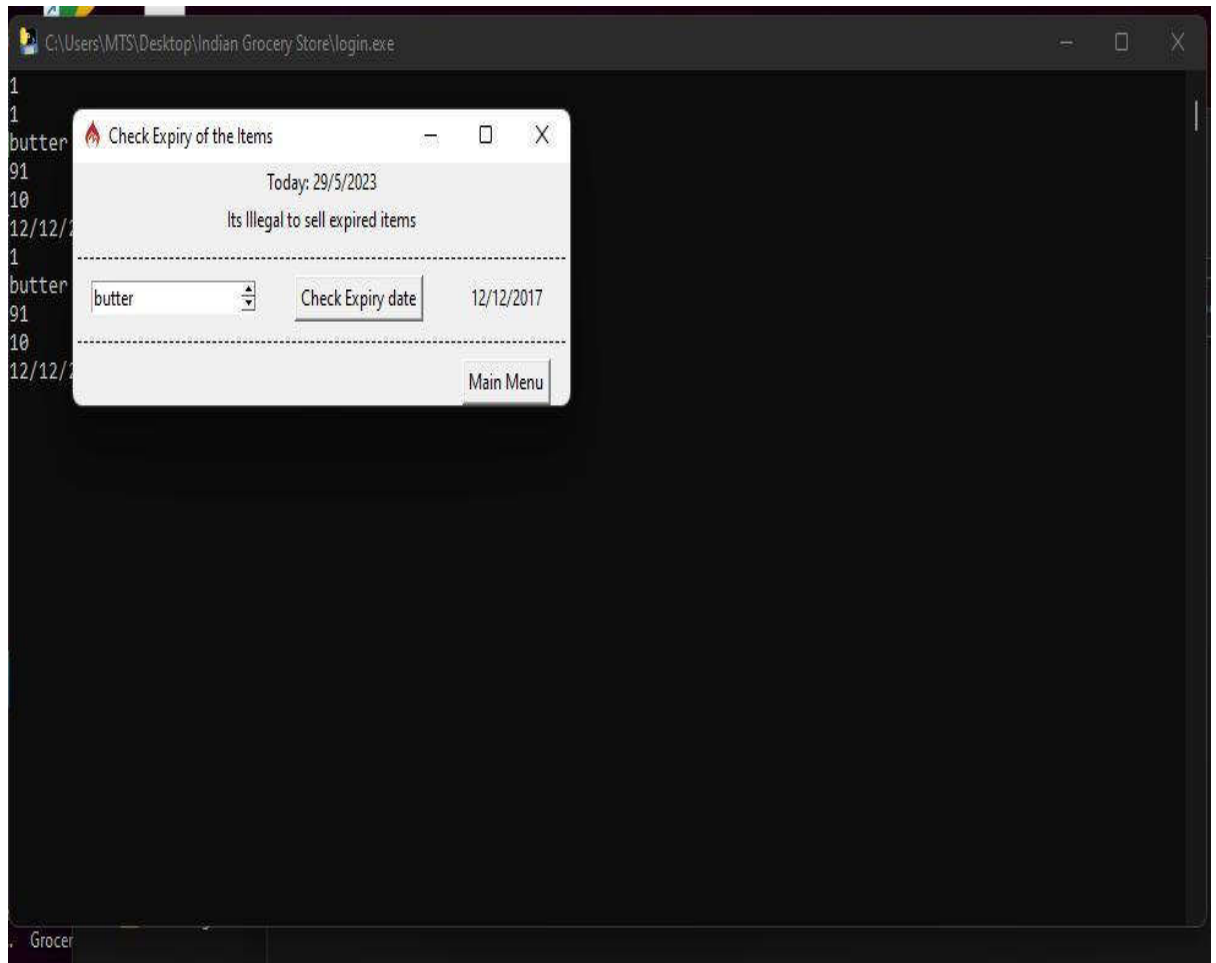
Screen: Billing

Screen: Bill Output
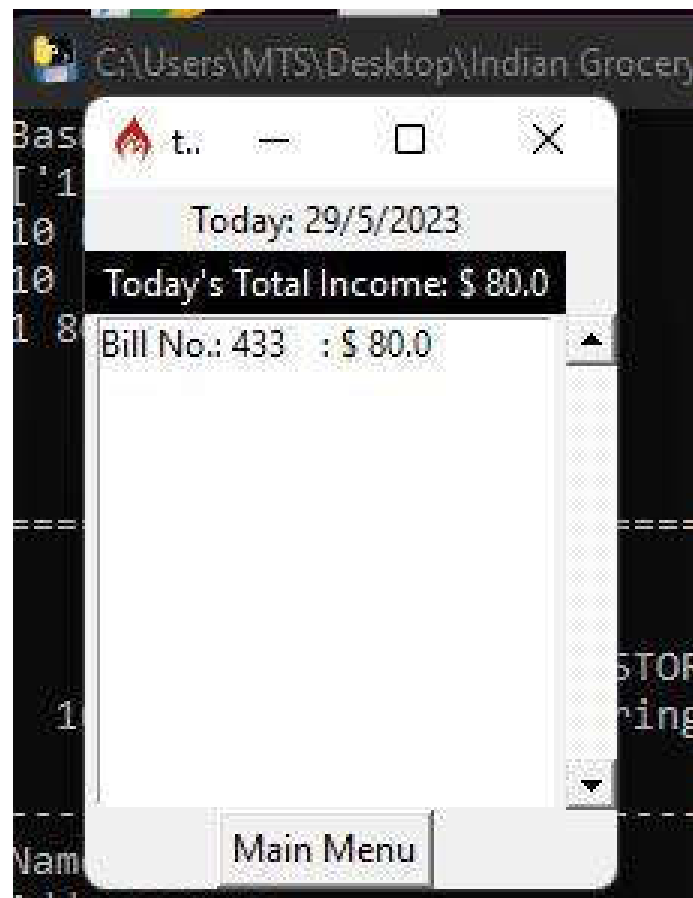


```
C:\Users\MTS\Desktop\Indian Grocery Store\login.exe

Basmati Rice
['1']
10 Basmati Rice 1
10   1   Basmati Rice
1 80.0


======================================================
                              No :433

          INDIAN GROCERY STORE
  1602 ,Chatham Hills, Springfield-62704, Illinois

------------------------------------------------------
Name: kamini
Address: us
------------------------------------------------------
Product                      Qty.        Price
------------------------------------------------------
Basmati Rice                  1          80.0

------------------------------------------------------
Total                                   $ 80.0
------------------------------------------------------

Dealer 's signature:_____
======================================================
```

Screen: Check Today's Income

Benefits of Grocery Store

❖ Indian Groceries are often very affordable, and you can usually find good deals on Indian food products.

❖ In addition, many Indian grocery stores offer loyalty programs and discounts to their customers.

❖ This means that you can save even more money by shopping at an Indian grocery store.

Conclusion:

❖ Retailers may exploit the benefits of Indian grocery stores, such as their knowledge of Indian food and spices and their ability to provide consumers with a unique shopping experience, to entice and retain customers.

❖ On the other hand, by recognizing the limitations, such as limited market penetration and competition from larger supermarkets, merchants may find areas where they may need to improve or adjust their business strategy to remain competitive.

❖ The industry will benefit from consumers and retailers making better judgments by being informed of the benefits and drawbacks of Indian groceries expansion.

Future Work:

❖ The future of digital transformation in grocery will focus on the customer, with a data-driven strategy that provides seamless, personalized experiences for shoppers.

❖ Grocers who want to cash in on this trend will have to focus on providing full-service options over all digital channels with various fulfillment options.

❖ Supermarkets could create a virtual version of the center store, where customers scan items on a wall of barcodes to add to their virtual baskets.

Bibliography:

- ✓ AUTHOR: Yavuz A. Boozer (2018)

- ✓ https://www.google.com

- ✓ https://www.tutorialspoint.com/python/

- ✓ https://www.docs.python.org/3/

Greenfingers College Of Computer and Technology, Akluj

DEPARTMENT OF COMPUTER SCIENCE

(2022-2023)

A

Project Report

On

" Online Bus Booking System "

Submitted By

"Punyashlok Ahilyadevi Holkar Solapur University, Solapur"

IN PARTIAL FULFILMENT OF THE REQUIREMENT OF

"Master In Computer Science [Msc(cs)-II]"

Submited By

Miss. Madane Snehal Kakasaheb

Miss.Jadhav Pratiksha Pratap

UNDER THE GUIDANCE OF

Mr. Salunkhe S.S

GREENFINGERS COLLEGE OF COMPUTER & TECHNOLOGY, AKLUJ.

A PROJECT REPORT ON

"Online Bus Booking System "

The information of the project regarding to syllabus of

"Punyashlok Ahilyadevi Holkar Solapur University, Solapur"

IMPARSTIAL FULLFILLMENT OF REQUIREMENT OF MASTER IN

COMPUTER SCIENCE(Msc(cs)-ll)

SEMESTER(IV) (2022-2023)

*submitted by *

Miss. Madane Snehal Kakasaheb

Miss.Jadhav Pratiksha Pratap

UNDER THE GUIDANCE OF

Mr. Salunkhe S.S

DEPARTMENT OF COMPUTER SCIENCE

Greenfingers College of Computer Science and Technology,

Akluj

DEPARTMENT OF COMPUTER SCIENCE

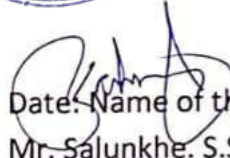### (2022-2023)

CERTIFICATE

This is to certify that the project report on **"Online Bus Booking System "** in partial of the requirement for the academic year 2022-2023 of **MASTER IN SCIENCE (MSc. Computer Science- IV)** to the **Punyashlok Ahilyadevi Holkar Solapur University, Solapur.**
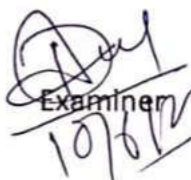
Submitted By

Miss. Madane Snehal Kakasaheb

Miss. Jadhav Pratiksha Pratap

Date: Name of the Guide   Examiner   Head Of Department
Mr. Salunkhe. S.S

Head Dept. of M.Sc. (C.S.)
Greenfingers College of
Computer and Technology,
Shankarnagar-Akluj

CERTIFICATE

This is to certify that **Miss. Madane Snehal Kakasaheb & Jadhav Pratiksha Pratap** students of Greenfingers College of Computer and Technology, Shankarnagar, Akluj has been studying in the class M.Sc (CS) – II. They studied software of our organization. During the project work, they were sincere, hardworking to learn and show good potential. We wish them all the best for the future.

Place : Akluj

Date : 06.06.2023

Name and Signature
रा. प. अकलूज

Acknowledgment

There have been many hands that have been contributed towards the successful completion of this project. We take this opportunity to express our gratitude to all of them. On the completion my project "**Online Bus Booking system**". I would like to express my sir to attitude to my project guide, Mr. Salunkhe S. S Sir. For providing me the opportunity to work under him guidance in him college to complete the work. This project is a part of my studies & academic circular activity. So, I thankful to all friends who have encouraged & kindly helped us while working. on this project. I also very thankful to the other teacher & non-teaching staff members for their great co-operate during the project work.

Miss. Madane Snehal Kakasaheb

Miss. Jadhav Pratiksha Pratap

Abstract

Online bus booking system is a project which provides a portal for bus ticket reservation. This application allows users to book bus tickets from anywhere and anytime. The user can easily book their tickets and cancel tickets. The user can view all the details of the website, bus, and drive. The user can also view the details of the journey and the details of the journey timings. Online Bus Ticket Reservation System is a Web based application that works within a centralized network. This project presents a review on the software program "Online Bus Ticket Reservation System" as should be used in a bus transportation system, a facility which is used to reserve seats, cancellation of reservation and different types of route enquiries used on securing quick reservations.

INDEX

1. INTRODUCTION

Online Bus Booking System cloud based online software. This system would help customers to book a seat for their journey, book bus. This system would also help the owner to manage the coaches, employees, clients, services etc. Bus Reservation System will increase the booking process faster, convenient, and comfortable. Customers can book their desired seats. They can check the availability of posts on a specific date. The customer can check availability, book ticket, or cancel ticket 24X7. The online system is available to use anytime. User doesn't require to visit any office. They just need internet and device to use our system. They can check route, price, class etc. They can pay fare using a credit card, debit card, internet banking, online wallet like Paytm and cash too. Managing buses, employees, and salary would be very comfortable using this system. This is a safe and secure way to expand the business. System decreases the human efforts and increases customer satisfaction.

2. Proposed system & Objective

2.1 Proposed system

MODULES OF ONLINE BUS BOOKING SYSTEM:

There are several modules required to complete this system. Here we are discussing the main modules or core modules of the system.

Admin Profile: Admin is super user of our system. Admin can view all data in the system. Admin must log in to the system then there is authentication

process. Admin view bus details verified the bus details, check the employee data.

Customer Profile:

The customer is the end user of our system. The customer can see bus details, check availability, book the ticket, make an enquiry, and make payment to confirm a seat. At any point of time before boarding of bus customer has all right to cancel tickets.

Employee Profile:

Employees are basically helping hands in bus reservation system. Employees have many profiles like managers, accountant, drivers, field employee etc. The manager would manage the business in such a way that everyone does their job. Manager manages proper work distribution .

Add Buses:

This module would help to add new bus details. Bus details include Bus Number, Model Number, Numbers of seats, Type of bus, the condition of the bus.

Availability:

This module would help to search the bus and find availability of seats.The customer can check bus availability anytime. Desired available seats can be booked by the client using this system.

Enquiry:

Any question can be made using email id or filling website form.Customer care representatives will reach you with solutions. Any

question about bus timing, the system can do seat availability with human interaction.

Cancel:

At any point of time before boarding of bus customer has all right to cancel tickets. The money will be credited to a customer account as per bank policy and timing.

Booking:

If customer finds the desired bus and available seats. The customer can book the seats using this module. The booking process is entirely computerized. Real time seat availability. Once a place has been locked it can't be available for booking.

2.2 OBJECTIVE

The purpose of an online booking system is to allow potential customers to self-book and pay through your website, securely store customer's data, manage your staff and keep your business running long after you've gone home for the day.

An automated online booking system allows a customer to do all the work for you – they are served up a selection of free spaces, they choose a date and time that best suits them, then the key in all relevant information .

The Software Include :-

HubSpot Meetings Tool. Best for Small Businesses. ...

Calendly. Best for Ease of Use. ...

Calendar. Best for Executives. ...

Setmore. Best for Mobile Teams. .

Square Appointments. Best for Integrations. ...

3. Existing System

The existing Bus Booking System is not completely computerized. The customer has to visit any booking branch if he wants to book a ticket. Bus scheduling, ticket booking, bill generation and many other operations are done manually. This may lead to incorrect entries and there is a lot of room for errors as the data is not completely synced. The availability of seats is not centrally maintained and the travel operator is not fully aware of the availability and occupancy of the seats in his buses. This is the major bottle neck.

1. Existing system is totally on book and thus a great amount of manual work has to be done. The amount of manual work increases exponentially with increase in services.

2. Needs a lot of working staff and extra attention on all the records.

3. In existing system, there are various problems like keeping records of items, seats available, prices of per/seat and fixing bill generation on each bill.

4. Finding out details regarding any information is very difficult, as the user has to go through all the books manually.

5. Major problem was lack of security.

6. The work is done manually.

7. Those who are interested in inquiring about the Bus Type, its Tickets Price, available seats, facility of the bus etc. has to walk to the Booking.

4. Development Environment & About Tool Used

4.1 Development Environment

Microsoft Visual Studio 2010/2012/2013/2015/2017/2019/2022.

.NET Framework 3.5/4.0/4.5/4.5.1/4.6.

MVC Version: MVC3/MVC4/MVC5.

Microsoft SQL Server 2005 or higher.

Web browsers with JavaScript enble.

4.2 About Tool Used

> ➢ Using the technology/software we developed our GUI since it can easily to design and we have already studies it.
> ➢ We use this software for database connectivity of our project also we use Oracle 10G.

5. Feasibility Study:

The project will be carried out during a period of 30 weeks. During this period, the following tasks must be accomplished:
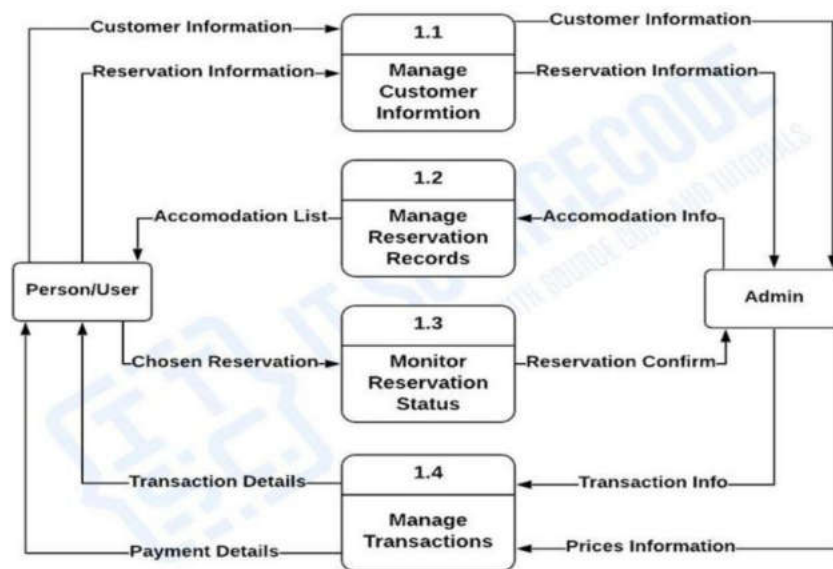
a) **Project Finalization:** In this module we have discovered some project topics and finalize the project.

b) **Technology Understanding:** In this module we have studied the feasibility of project and study of current systems ,its architecture.
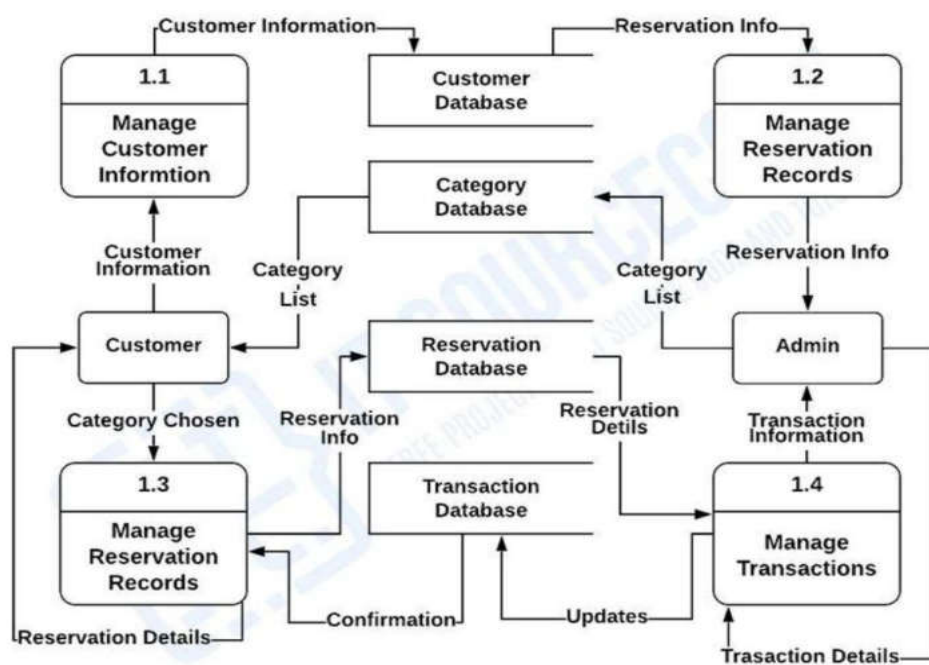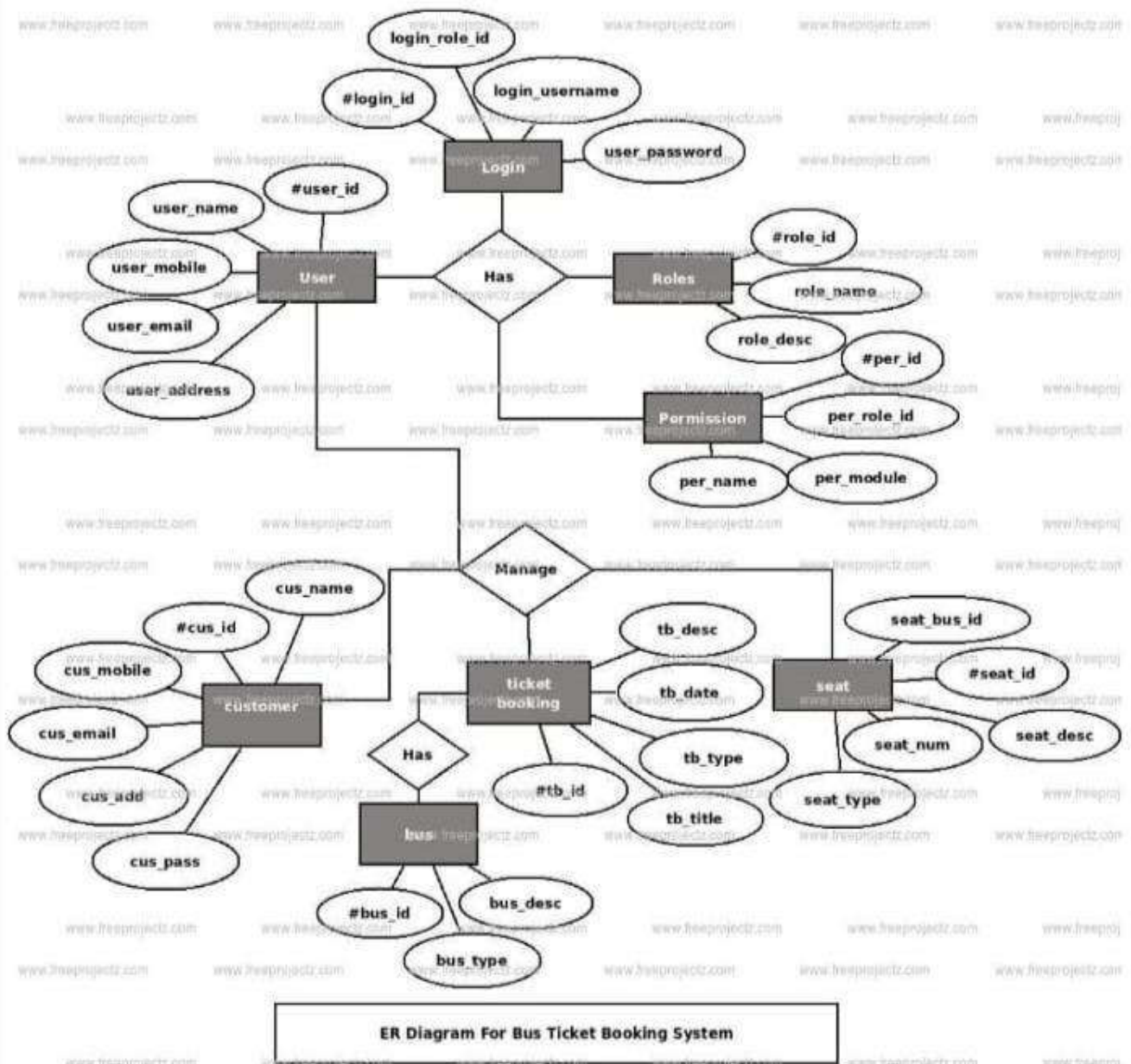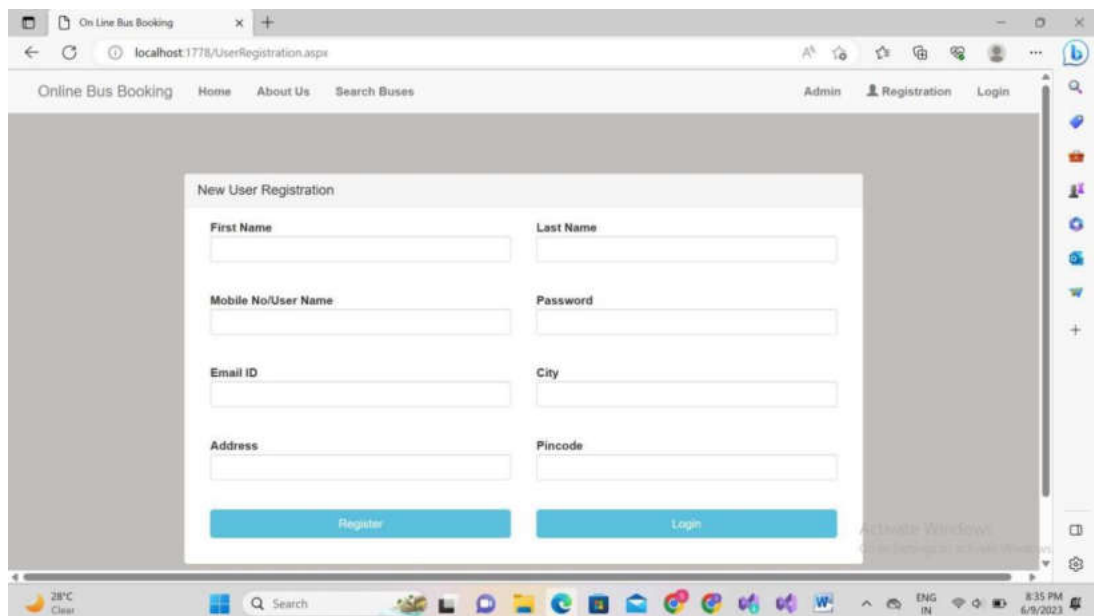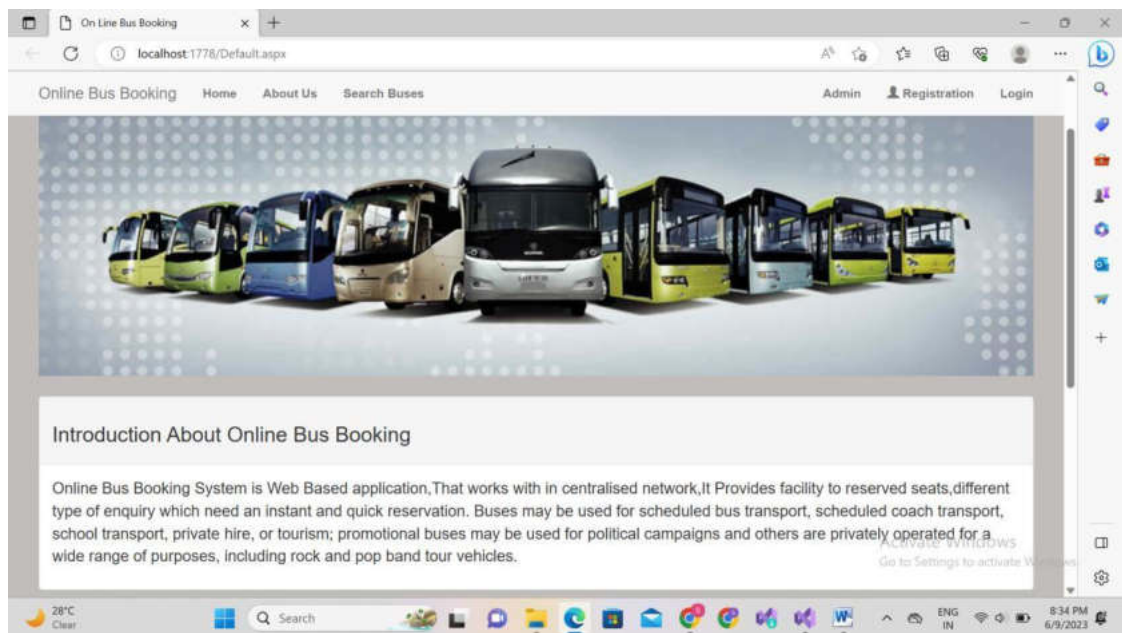
6. Data-Flow-Diagram

Level: 0
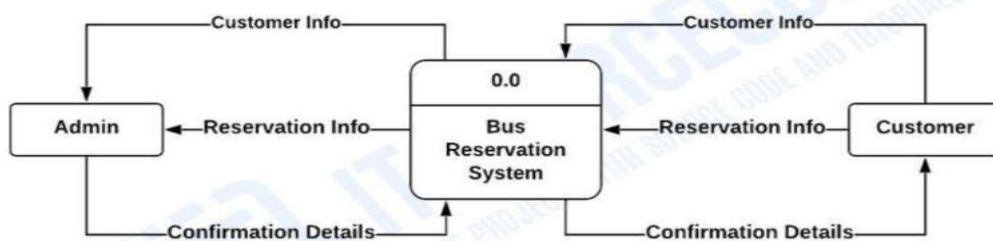
Level: 1

Level: 2

7. ER-Diagram
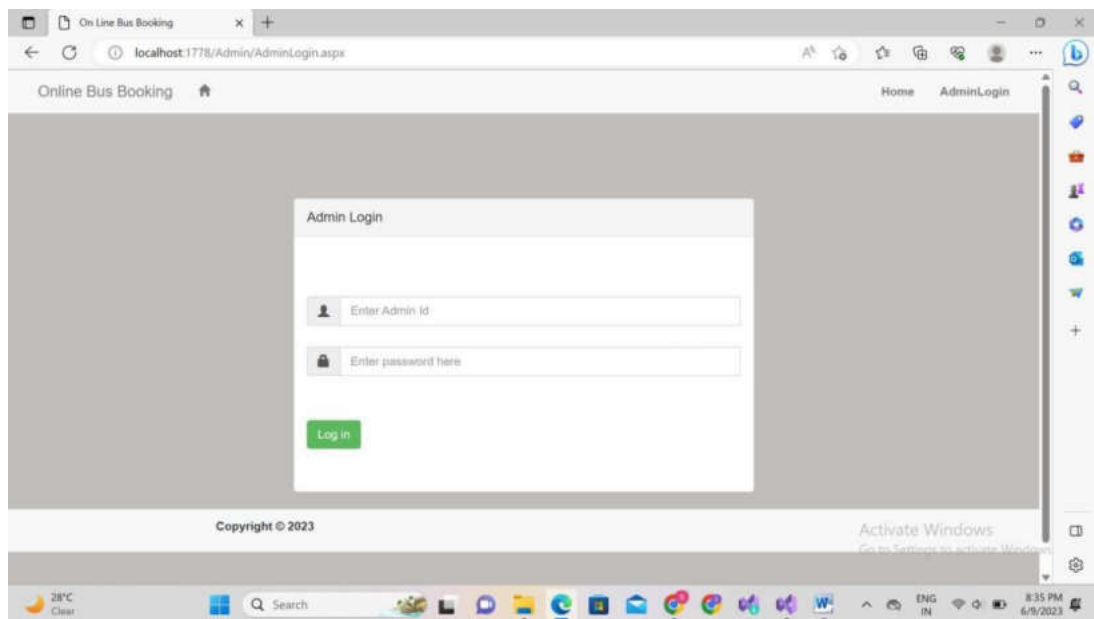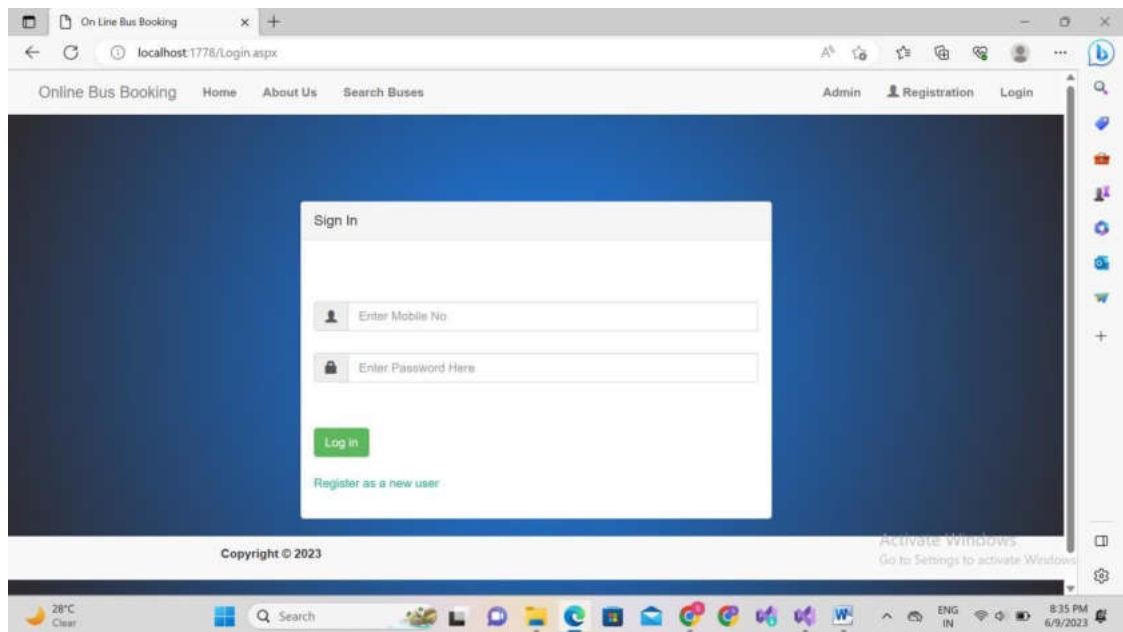
ER Diagram For Bus Ticket Booking System

8. Output Screen Shot

Online Bus Booking — Bus Details Report

Sr.No	Bus ID	Bus No	Bus Name	Bus Type	Seat Columns	Seat Row	Origin	Destination	Action
1	3	NV245632	Neeta Volvo	AC	7	5	Mumbai	Pune	Update Details Add Bus Schedule
2	4	64656	Atul Bus	AC	9	6	Nallasopara	Churchgate	Update Details Add Bus Schedule
3	5	A254635	Abhinav Transporters	AC	7	5	Mumbai	Surat	Update Details Add Bus Schedule
4	6	A254635	Vasai-Virar	Normal	9	6	Vasai	Virar	Update Details Add Bus Schedule
5	7	MH1213	Shivshahi	AC	1	2	Akluj	Pune	Update Details Add Bus Schedule

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Online Bus Booking — Booking Report

Sr.No	Bus Name	Passenger Name	Email ID	Contact No	Origin	Destination	Travel Date	Seat No	Fare	Booked By
1	Neeta Volvo	AnandSingh	abc@gmail.com	8291951419	Mumbai	Pune	25 Mar 2017	34	800.00	AnandSingh
2	Neeta Volvo	AnmoSharma	abc@gmail.com	9029451159	Mumbai	Pune	25 Mar 2017	35	800.00	AnandSingh
3	Neeta Volvo	AtulDubey	atul@gmail.com	98989898	Mumbai	Pune	25 Mar 2017	32	800.00	AtulDubey
4	Abhinav Transporters	AtulDubey	atul@gmail.com	9561454638	Mumbai	Surat	30 Mar 2017	31	800.00	AnandSingh
5	Abhinav Transporters	AmitDubey	a@gmail.com	8888245689	Mumbai	Surat	30 Mar 2017	32	800.00	AnandSingh
6	Abhinav Transporters	SurajDubey	a@gmail.com	8945621547	Mumbai	Surat	30 Mar 2017	33	800.00	AnandSingh
7	Abhinav Transporters	NehaDubey	neha@gmail.com	9029451159	Mumbai	Surat	28 Mar 2017	26	500.00	JitendraDubey
8	Neeta Volvo	AtulDubey	atul@gmail.com	9029451159	Mumbai	Pune	30 Mar 2017	11	250.00	JitendraDubey
9	Neeta Volvo	KiranDubey	kiran@tiwari.com	8888245689	Mumbai	Pune	30 Mar 2017	12	250.00	JitendraDubey

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9. Conclusion

It can be observed that computer applications are very important in every field of human endeavor. Here all the information about customer that made reservation can be gotten just by clicking a button with this new system, some of the difficulties encountered with the manual system are overcome. It will also reduce the workload of the staff, reduce the time used for making reservation at the bus terminal and also increase efficiency. The application also has the ability to update records in various files automatically thereby relieving the company's staff the stress of working from file security of data. Our project online bus reservation system provides an easy way for booking the bus tickets. Our project has succeeded in managing the data and providing the best service to the users.

10. References

https://shrinke.me/8yo4

https://docs.google.com/document/d/1S...

https://itsourcecode.com/uml/dfd/dfd-for-bus-reservation-system

A

PPEOJECT REPORT ON

"THE TREASURE HUNTING GAME"

Submitted to

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

As Partial Fulfillment of

Master of Computer Science

Submitted by

Mr. Viraj Satish Bhagat.

Miss. Asmita Ranjankumar Girme

Under the guidance of

PROF.MR. S.S. SALUNKHE

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ,

DIST-SOLAPUR- 413101 (M.S.)

2022-2023

1

CERTIFICATE

Certificate of project field work completion

Certificate that project fieldwork report titled **"THE TREASURE HUNTING GAME"** has been completed satisfactory impartial fulfillment of **Master of Computer Science** course of **Punyashlok Ahilyadevi Holkar Solapur University, Solapur** for the academic Year 2022-2023 by following students of **Greenfingers College of Computer & Technology, Akluj.**
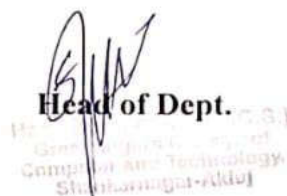
Mr .Viraj Satish Bhagat.
PRN : 202101025014439

Miss. Asmita Ranjankumar Girme.
PRN : 202101025014427

Project Guide   **Examiner**   **Head of Dept.**

Place:-Akluj
Date: -09 |06|2023   **External**

AMEYA TECHNOLOGY

DATE: June 30, 2023

Certificate of Project Completion

I am pleased to certify that THE TREASURE HUNTING GAME has been successfully completed by Mr. Viraj Satish Bhagat and Miss. Asmita Ranjankumar Girme Students of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the Class M.Sc. (CS)- II.

Throughout the duration of the project, Mr. Viraj Satish Bhagat has exhibited outstanding professionalism, technical expertise, and a deep commitment to delivering a high-quality outcome.

The team has shown exceptional attention to detail, timely communication, and a solution-oriented approach to addressing any challenges that arose during the project.

We look forward to future collaborations and opportunities to work together again.

Place: Akluj
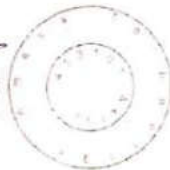
Mr. Ameya Tiwari

3

Acknowledgement

"When we start a journey towards something worthwhile it's never a simple trail nor an easy mile, but we often move on without back. At all the peoples who helped put us on track, so today when we've reached the end of our journey. We'd like to thank of all those who walked with us".

The completion of this project I feel obliged to express my gratitude towards all of them who contributed to the completion of our project. I would like to express my thanks who have guided me during this period. Words can hardly express my deep sense of gratitude for my project guide **Prof. S.S.Salunkhe,** and all faculty members for their intellectual, moral, technical and ceaseless help and co-operation guidance throughout the project work.

I would like to take an opportunity to convey my sincere gratitude to the Computer Science Department, GFCCT College.

I would also like to express my heartfelt gratitude towards my colleagues and friends for their moral and technical support throughout the duration of the project.

Yours Sincerely,

Mr.Viraj Satish Bhagat

Miss. Asmita Ranjankumar Girme.

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Index

__Introduction__

This chapter gives an overview about the aim,
objectives, background andoperation environment
of the system.

The project aims and objectives that will be achieved after
completion of this project arediscussed in this subchapter.
The aims and objectives are as follows:

- Sell the game.

- Add new version of game.

- Add new outfit for players.

- Make it multi-player game.

- For entertainment.

<u>Declaration</u>

The Head of Department of Computer Science,
Greenfingers College of Computer and Technology, Akluj.

We both hereby declare that this report book entitled " THE TREASURE HUNTING GAME" is a result of our own original research and that it has not been previously submitted for any degree, diploma, or other qualifications. The work presented in this report book is entirely our own and no part of it has been plagiarized.

The Treasure hunting game project described in this report book was developed using Asp.net or C# the guidance of Prof. S.S. Salunkhe, who providedvaluable inputs and feedback throughout the development process.

We confirm that all the data and information presented in this report book are authentic and accurate to the best of my knowledge. We have properly cited and referenced all the sources used in this report book.

Furthermore, we acknowledge that the rights to the The Treasure Hunting Game project, including all intellectual property rights, belong to Greenfingers College of Computer and Technology and may not be reproduced or distributed without the express permission of the institution.

Viraj Bhagat

&
 Asmita Girme

Date:

7

System Requirement

❖ **Hardware Platform : -**

➢ Processor: - Any Pentium Processor.

➢ Hard Disk: - Minimum 2 GB Hard Disk Drive.

➢ RAM: - Minimum 512 MB RAM.

❖ **Application Platform : -**

➢ Windows

➢ Visual Studio Code

❖ **Front End:** `Visual Studio, Windows Forms .Net with C#`

❖ **Design Interface**: Microsoft Visual studio

Objective of System

- **Improvement in control and performance**

  The system is developed to cope up with the current issues and
  problems of library.
  The system can add user, validate user and is also bug free.

- **Earn money**

  When game will be launch, we can earn money by selling
  outfit of character and we can sell the new character.

- **Championship**

  We can do a championship between the players with big
  amount for winning price

- **Option of online**

  we can access the game offline as well as online, and we
  will add multiplayer in next updates.

Advantages:

1. Entertainment and Fun: Games are primarily designed to provide enjoyment and entertainment. They offer a way to relax, have fun, and escape from the pressures of daily life. Whether it's a video game, board game, or outdoor activity, games can be a source of pure enjoyment.
2. Cognitive Development: Games can stimulate and challenge the brain, leading to improved cognitive abilities. They often require problem-solving, strategic thinking, critical analysis, and decision-making skills. Regular engagement in games can enhance memory, attention span, creativity, and logical reasoning.
3. Skill Development: Many games involve the development of specific skills. For example, video games can improve hand-eye coordination, motor skills, and reaction time. Board games can enhance social skills, communication, teamwork, and negotiation abilities. Sports and outdoor games contribute to physical fitness, coordination, and endurance.
4. Learning Opportunities: Educational games are designed with the intention of teaching specific concepts or skills. They can be particularly beneficial for children, as they make learning enjoyable and engaging. Educational games can cover subjects like math, science, language, history, and more, helping players acquire knowledge in an interactive way.
5. Social Interaction: Games often bring people together, fostering social interaction and communication. Multiplayer video games, board games, and team sports encourage players to collaborate, strategize, and work together towards a common goal. These activities can improve social skills, build relationships, and create a sense of belonging and community.
6. Stress Relief: Engaging in games can provide stress relief and relaxation. They offer a temporary escape from the challenges and pressures of life, allowing individuals to unwind and recharge. Playing games can trigger the release of endorphins, which are natural mood enhancers, promoting feelings of happiness and well-being.

`

<u>Disadvantages</u>

Distraction – Mobile games can be a major distraction, taking your attention away from other important tasks and responsibilities.

Cyberbullying – Some mobile games have chat features that can be used for cyberbullying, exposing young players to harmful behavior and negative social interactions

Poor Health: Spending excessive time on online games can lead to physical health issues, such as poor posture, carpal tunnel syndrome, headaches, and eye strain. Additionally, it can also lead to poor mental health, including anxiety disorders and depression.

Need of this Project

   As we know in this new generation creation of game is impotent for earn money it is also way to earn money by using some languages like C#, asp.net, C++, etc. New generation people like to play games For example pubg like this game company earn money.

   Games are developed as creative outlet and generate a profit. Game making Is considered both art and science. Development is normally funded by a publisher. Well-made games bring profit more readily.

   I firmly believe that all developers aiming to improve their programming skills, or even if you are just getting started with it, should engage themselves in building a game from scratch. Even if it is a simple architecture, you will gain a lot of essential skills on this journey.

   Working on developing a simple game with C# was the first major project that I choose to construct from scratch. It was overall an extremely fun experience, but the more vital element to consider is the amount of exposure and knowledge I gained throughout the progression of the project.
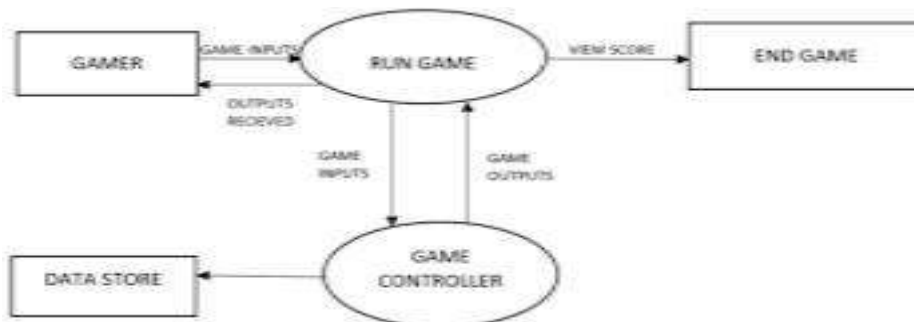
   The best part is even if you decide to not work on future gaming projects, the overall knowledge you have gained during the course of completing your project will let you accomplish all the primary requirements that a beginner programmer is looking for, especially in the aspect of the real-world application.

Data Flow Diagram

DFD 0 level:

DFD 1 level:

SCOPE OF THE Games

- **Scope in games:**
  Working on developing a simple game with C# was the first major project that I choose to construct from scratch. It was overall an extremely fun experience, but the more vital element to consider is the amount of exposure

- **Structure:** The system allows the creation and management of fee structures based on items, dresses, weapon.

- **Reporting and Analytics:** The system provides customizable reports on fee-related information, enabling administrators to make data-driven decisions related to fee management.

- **Automated Reminders:** The system sends automated reminders to increase the score or level.

- **Item accessibility:** The game can be integrated with a different itmes in it.

- **Mobile Application:** The game can have a mobile application that canbe accessed by players providing them with real-time updates on fees, payments, and dues.

The scope of the game is focused on increasing level and tackling problems, with features that allow for efficient and accurate measure a score, reporting, and analysis. The system aims to provide a better overall user experience for plyers, while also improving enjoyment for playing game.

DETAILS OF EXISTING GAME

➢ **Management:** There we need take care of management in game some we have many user at the same time, we need take care of code that we have.

➢ **Spreadsheet-based Management:** Some institutions may use spreadsheets to manage fee-related information, including student fee balances, payments, and dues.

➢ **Other Games**: There are already games are available in the market that contain same contain.

➢ **Third-party Software:** Some time we have add some version like dress code but they are already taken by some other company so some time it contain third party software for outfit.

➢ **Limitations:** The existing game may have limitations related to accuracy, efficiency, and scalability. For example, some time it cannot add an new item in it. It can be prone to errors and can be time-consuming to manage, while in-house and third-party software may have limitations related to customization and integration.

➢ **Lack of audience:** The existing game does have an any audience as expected but new version of game will be like mini militia.

➢ **Lack of multiplayer:** The existing game we cannot play on multiplayer so two friends cannot play each other

UPCOMING UPDATES

- ➢ **Accuracy:** In the Treasure Hunting Game can be prone to errors, it is simple game which accept the goodies in it like spanner, arrow, bow, etc. zero in risk of errors.

- ➢ **Efficiency:** Manual and spreadsheet-based fee management systems can be time-consuming to manage, especially for large educational institutions with a high volume of fee-related transactions. The new system can help to improve efficiency by automating fee management processes, such as fee collection and tracking, fee reminders, and reporting.

- ➢ **Integration:** Existing Treasure Hunting Game may not be integrated with other outfit changing function in a game information about items which player can access within it, which

- ➢ **Mobility:** Existing Treasure Hunting Game may not have a mobile application, which can limit access and real-time updates for players. The new system can help to improve mobility by providing a mobileapplication that can be accessed by students and parents.

Overall, the need for a new GFCCT the Treasure Hunting Game developed in C# and Forms arises from the limitations and challenges of existing fee management systems, and the desire to improve accuracy, efficiency, in the Treasure Hunting Game.

About GAME

The GFCCT the Treasure Hunting Game developed in C# and Forms is a console base application that is designed to play game in it for reducing stress. The system allows for the efficient management of fee-related processes, including free outfit collection, free tracking ranking ,fee reminders The system is built on the C# programming language.

Some of the key features of the Treasure Hunting Game include:

1. User-friendly interface for
2. Automated gives item names.
3. Customizable cloths or outfit of player.
4. Single player game.
5. Customizable Score during playing.
6. We can add the new items in it.
7. Mobile application for players.

"The TREASURE HUNTING GAME "is designed to provide gaming experience effective it helps people to reduce the stress can help to improve happiness in it as given them.

E-R Diagram

2- In the E-R diagram, which is show a simple board game schema that captures the legal moves available in each position on a board: We want to translate "Moves" into an SQL table and maintain the constraints in the ER diagram?
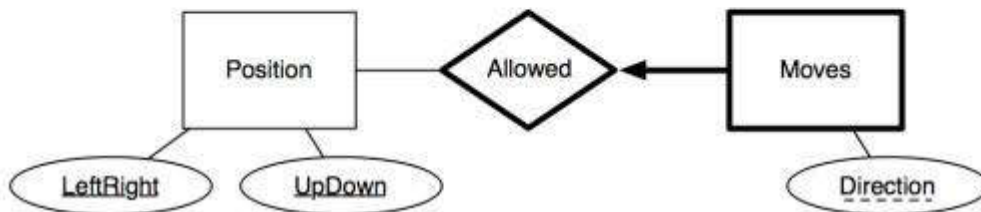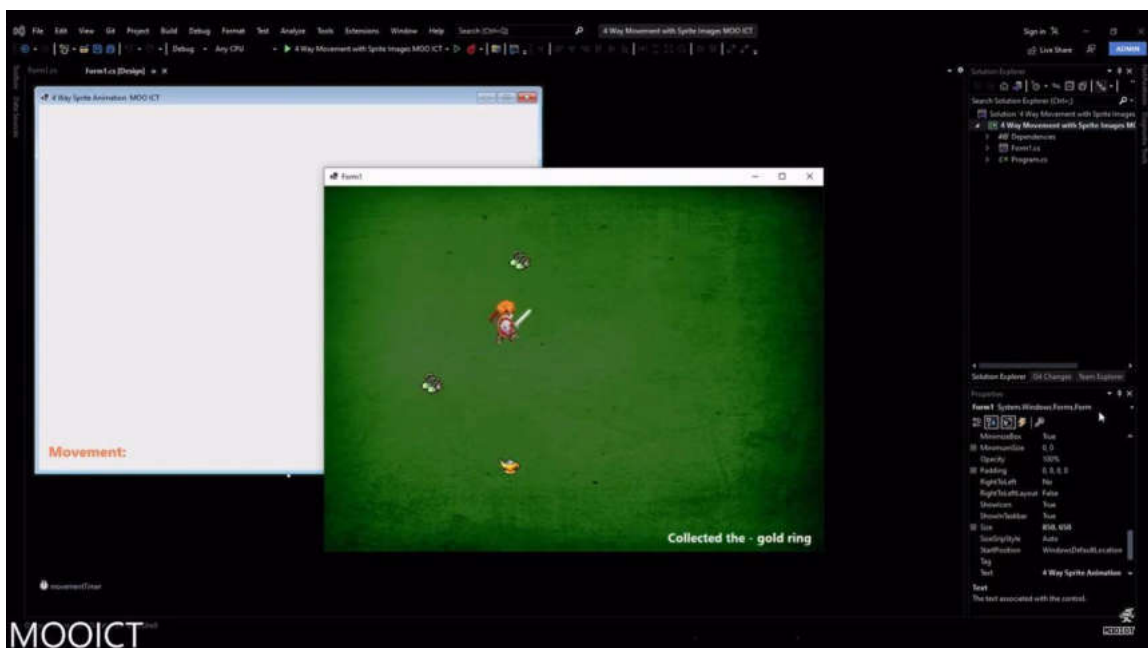
Screen Design

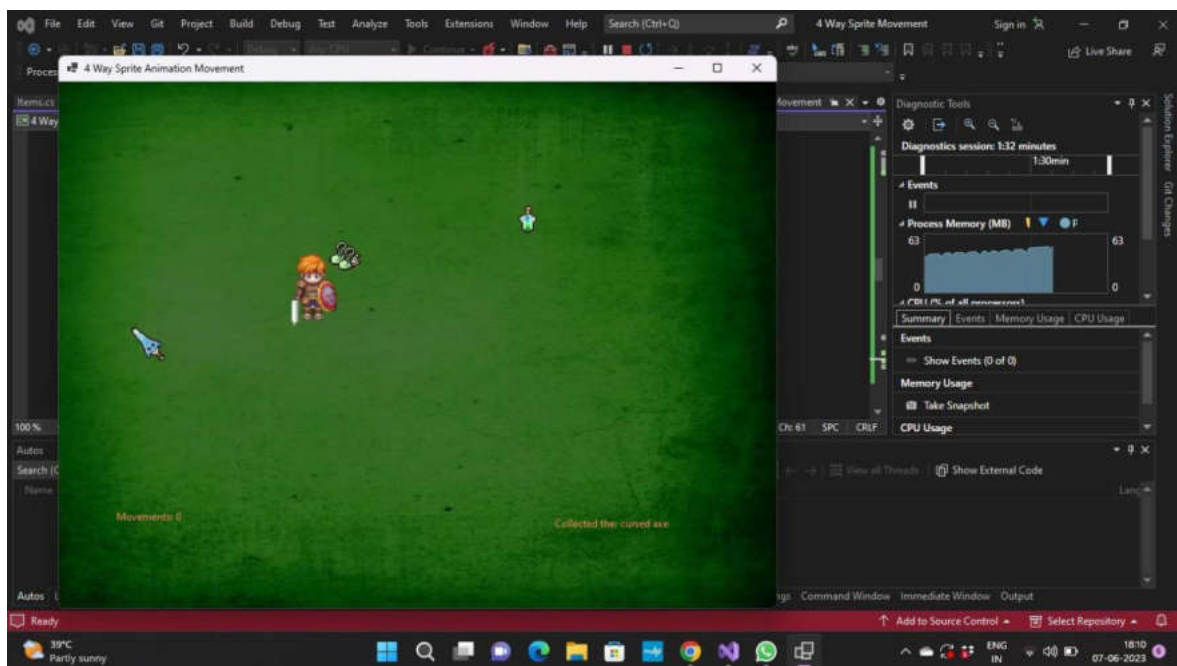1) Background window:-

2) Main Portal:-

1) Player: -

2) Items:-

5)result :

6) Report 2:-
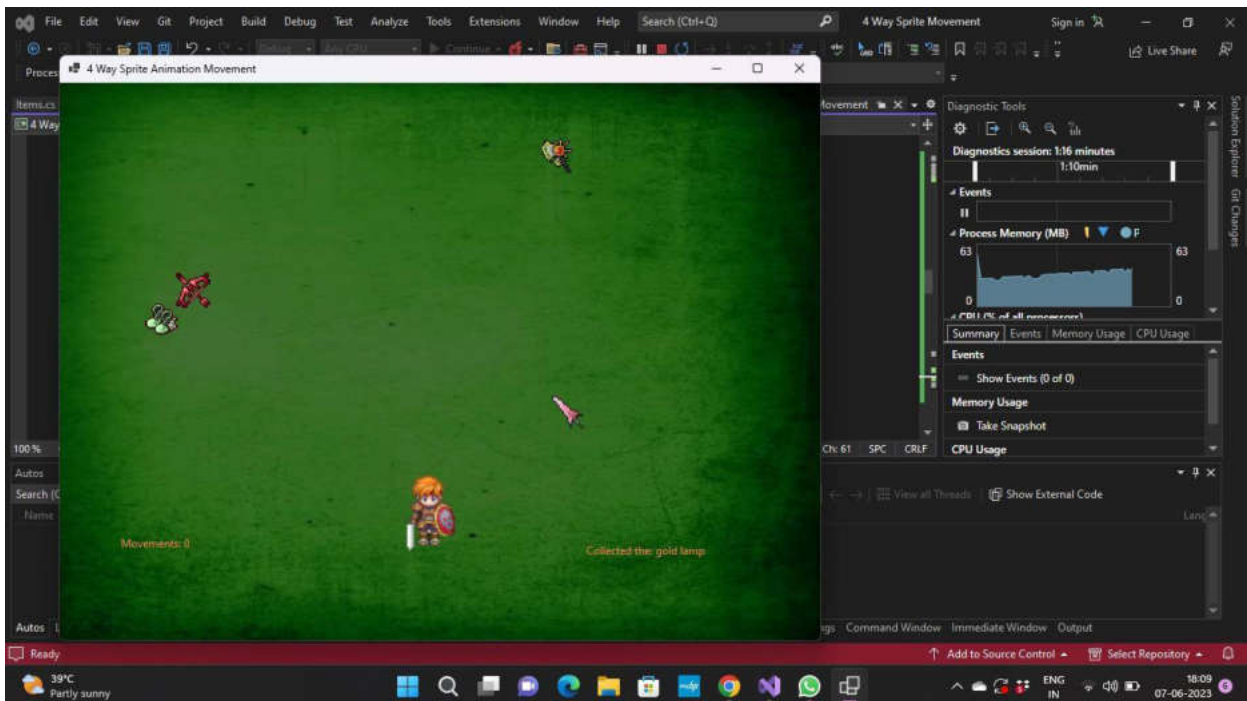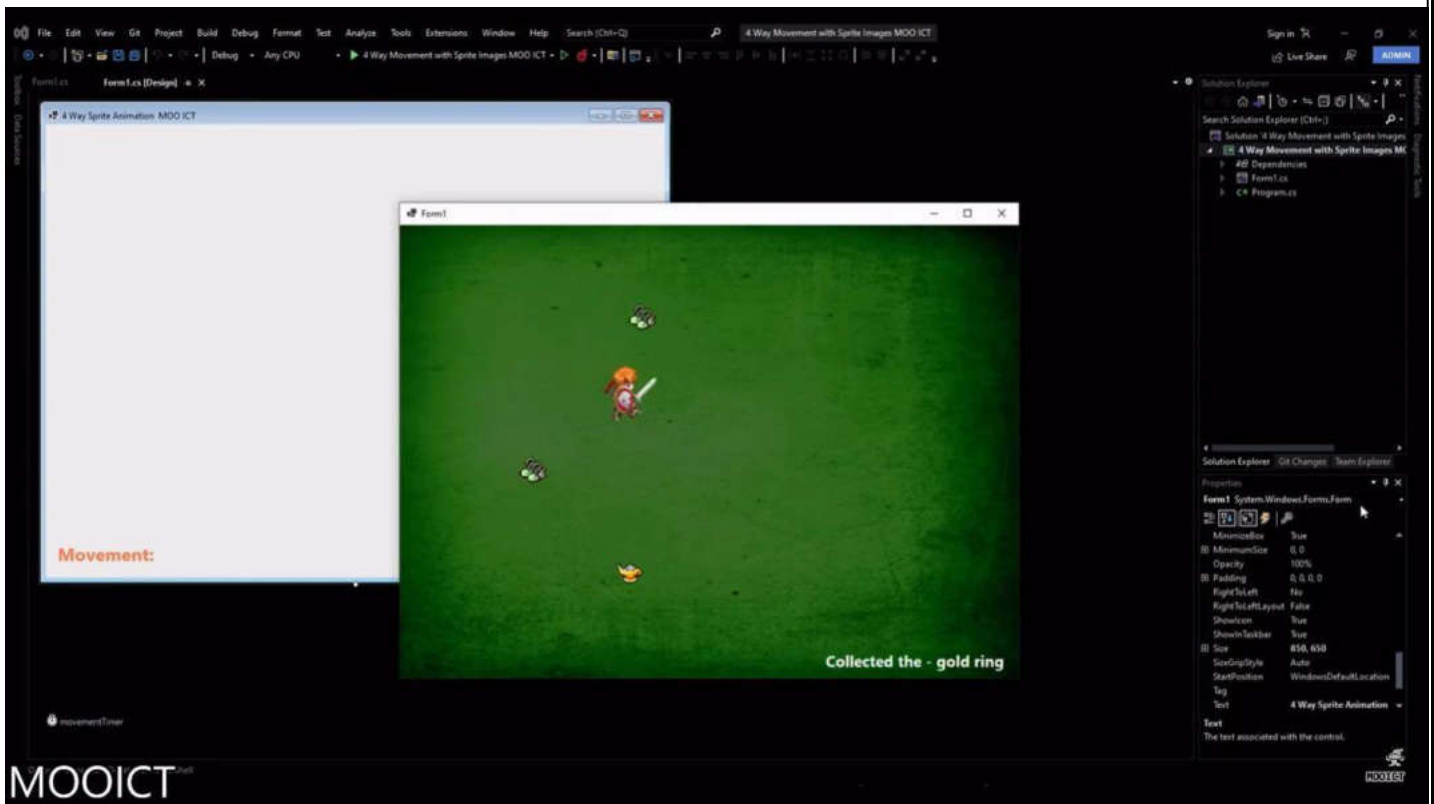
__Conclusion__

__The Hunting game:__ There are two players that can play the game at a time. Each player can handle one of the paddles using the control keys (up and down keys , <- and -> keys).The hunting game: Single player will control the direction and collect the items fromit, we can add level in it with difficulties

Future Scope :
- ˆ Mobile Application
- ˆ Data Base
- ˆ Online players

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A

Project Report

On

"Simple Banking System "

Submitted to

Punyashlok Ahilyadevi Holkar Solapur University, Solapur.

In the Partial fulfilment of

"B.Sc(ECS)"

Submitted By

Mr. Jadhav Chetan Pratap.

Mr. Kalange Aniket Nitin.

Under the Guidance of

Prof. Mr. Kshirsagar B.J. Sir

Greenfingers College Of Computer and Technology, Akluj

Year 2022-2023

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ
AFFILIATED TO PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY, SOLAPUR

CERTIFICATE

This is to certify that the project on **"SIMPLE BANKING SYSTEM"** in partial fulfillment of the requirement for the Academic Year 2022-23 Of Bachelor of Computer Science B.Sc. (ECS-III) To Punyshlok Ahilyadevi Holkar Solapur University, Solapur. They have carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.

Submitted By
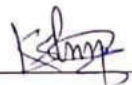
Mr. JADHAV CHETAN PRATAP

Mr. KALANGE ANIKET NITIN
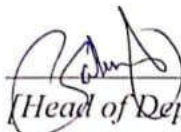
Place : Akluj

Date : 08/06/2023

[Project Guide]   [Internal/External Examiner]

[Head of Department]

B.Sc. (ECS)

Greenfingers College of Computer and Technology, Akluj

Bank of Baroda

बैंक ऑफ़ बड़ौदा
Bank of Baroda

PAYAL INFO SERVICES,

SAMIR SHAIKH:- 9890123701   CENTER:-YASHWANTNAGAR

CERTIFICATE

This is to certify that Mr. / Miss. _Jadhav Chetan Pratap_ Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the class B.Sc. [ECS] - III. He / She has developed software for our organization. During the project work, he/she was sincere, hardworking to learn, and show good potential. We wish him/ her all the best for the future.

Place: Akluj

Date: 03/06/2023

Name and Signature

Bank of Baroda

बैंक ऑफ़ बड़ौदा
Bank of Baroda

PAYAL INFO SERVICES,

SAMIR SHAIKH:- 9890123701   CENTER:-YASHWANTNAGAR

CERTIFICATE

This is to certify that Mr. /~~Miss.~~ Kalange Aniket Nitin _____ Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has been studying in the class B.Sc. [ECS] - III. He / ~~She~~ has developed software for our organization. During the project work, he/~~she~~ was sincere, hardworking to learn, and show good potential. We wish him/~~her~~ all the best for the future.

Place: Akluj

Date: 03/06/2023

Name and Signature

ACKNOWLEDGMENT

Acknowledgment

" When we start the journey towards something worthwhile it's never a simple trail nor an easy mile ,but we often move on without back. At all the peoples who helped put us on track , so today when we've reached the end of our journey .we'd like to thank of all those who walked with us ."

I sincerely thank to all who's blessing & good wishes have enabled me to complete the   task of **"Simple Banking System"**.

It is a moment of great satisfaction pleasure gratitude for me to give heartily thanks those who help me to complete this project.

I am also helpful to Head, Department of Computer Science am also thankful to **Prof. Salunkhe S.S. Sir**

Department of Computer science.

Also, I would like to take this opportunity to thanks our lecturers as wellas guide **Prof.Kshirsagar B.J. Sir** for their valuable guidance & suggestions to complete this project workin time.

I must also thank all my friends & well-wishers whose kind helps co-operation encouragedme immensely to complete the project.

Yours Faithfully,

Mr. Jadhav Chetan Pratap.

Mr. Kalange Aniket Nitin.

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INTRODUCTION

Introduction

During the past several decades personnel function has been transformed from a relatively obscure record keeping staff to central and top level management function There are many factors that have influenced this transformation like technological advances, professionalism and general recognition of human beings as most important resources

A simple banking system in Python is a software application that allows users to perform basic banking transactions such as Login account creation, deposit, withdrawal, balance enquiry, transation history and Log out . The system is designed to provide a user-friendly interface and ensure the security of user data and transactions.

This project intends to introduce more user friendliness in the various activities such as Login account creation, deposit, withdrawal, balance enquiry, transation history and Log out. The Login of Account holder has been made quite simple as all the details of the customer can be obtained by simply keying in the identification of account number of that customer. Similarly, Transition history can also be accomplished by using the account number with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record absolutely up-to-date

The entire information has maintained in the Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be accessible from the file.

OBJECTIVE OF PROJECT

OBJECTIVE OF THE PROJECT

A simple banking system in Python is a software application that allows users to perform basic banking transactions such as Login account creation, deposit, withdrawal, balance enquiry, transation history and Log out . The system is designed to provide a user-friendly interface and ensure the security of user data and transactions.

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The entire information has maintained in the Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be accessible from the file

The main objective of our project is providing the different typed of customers facility the main objective of this system is to find out the actual customer service Etc

It should fulfill almost all the process requirements of any Bank.

It should increase the productivity of bank by utilizing the working hours more and more, with minimum manpower.

This project includes the entire upgraded feature required for the computerization banking system. This system is very easy to use, so that any user can use without getting pre-knowledge about this Its very much user friendly and meet almost all daily working process requirements. This system is completely GUI based and can be use by mouse and as well as keyboard. This system is melded in such a way that has got all features to upgrade without making much change in existing components

FEASIBILITY
ANALYSIS

Feasibility Analysis

Depending on the results of the nunal investigation, the survey is expanded to a more detailed feanbitny study A feasibility study us a test of a system proposal According to its workalnity, impact on the organization, ability to meet user needs and effective of the resources its main task done during the feasibility study are

1. Evaluation of existing system and procedure Our group went to various Banking Professionals to gather information about the software system. They are using and evaluating those system and the procedures invoked in it during the period of feasibility study

2. Analysis of alternative candidate systems after studying the various systems we derived various alternatives through which we develop our project and evaluated the alternatite The most appropriate is selected

FEASIBILITY

STUDY

FEASIBILITY STUDY

The only tangible benefit provided by the proposed system is that the paper work is reduced to the minimum and hence the reduction in cost incurred on Stationary and its stage. The system provides many benefits that can't be measured in terms of Money for user's friendliness, more user response being more efficient.

TECHNICAL FEASIBILITY

The proposed system is technically feasible as it can be developed easily with the help of available technology The proposed system requires IDLE using Python as a Interface for Programming & back-end as .txt file for storing maintaining records.

OPERATIONAL FEASIBILITY

Automation makes our life easy. The proposed system is highly user friendly and is much easily able to interact with the system. Therefore the users will readily accept the system as data entry and making queries can be easily done.

HARDWARE

REQUIREMENTS

Hardware Requirements

Hardware is a set of physical components, which performs the functions of applying appropriate, predefined instructions. In other words, one can say that electronic and mechanical parts of computer constitute hardware.

This package is designed on a powerful programming language Python. It is a powerful Graphical User Interface. The backend is Notepad, which is used to maintain database. It can run on almost all the popular microcomputers. The following are the minimum hardware specifications to run this package:

Personal Computer: -

It minimum contains i3 Processor with 2 GB RAM or More .

SOFTWARE

REQUIREMENTS

<u>Software Requirments</u>

    The software is a set of procedures of coded information or a program which when fed into the computer hardware, enables the computer to perform the various tasks. Software is like a current inside the wire, which cannot be seen but its effect can be felt.

1. Operating System:- Windows 10 or more

2. Application Software:-

      Application software uses front end Python 3.11.1 and Notepad etc.

    Editor:- Pycharm / Visual Studio Code.

NEED OF

PROJECT

Need of Project

A simple banking system in Python can be useful for individuals or small businesses who want to manage their finances without having to rely on a traditional bank. It can also be a great learning tool for students who want to gain practical experience in programming and financial management. With a simple banking system in Python, users can easily track their transactions, monitor their account balances, and perform basic banking functions from the comfort of their own computer. Additionally, by using Python, the program can be easily customized and expanded to include additional features as needed.

SCOPE OF

PROJECT

Scope of Project

      A simple banking system in Python can be useful for individuals or small businesses who want to manage their finances without having to rely on a traditional bank. It can also be a great learning tool for students who want to gain practical experience in programming and financial management. With a simple banking system in Python, users can easily track their transactions, monitor their account balances, and perform basic banking functions from the comfort of their own computer. Additionally, by using Python, the program can be easily customized and expanded to include additional features as needed.

The scope of a simple banking system in Python can include various functionalities such as:

   1. **Account creation and management**: The system should allow users to create and manage their accounts by providing basic information such as name, address, email, and phone number.

   2. **Credit and Debit:** The system should allow users to deposit and withdraw money from their accounts.

   3. **Balance Enquiry:** Users should be able to check their account balance at any time.

   4. **Transaction History:** The system should maintain a record of all the transactions made by the user, including deposits, withdrawals, and transfers.

5. **Security**: The system should ensure the security of user data and transactions by implementing appropriate security measures such as encryption and authentication.

6. **User Interface**: The system should have a user-friendly interface that allows users to easily navigate through the different functionalities.

Overall, the scope of a simple banking system in Python would be to provide basic banking services to users while ensuring their security and convenience

FACT FINDING TECHNIQUES

Fact Finding Techniquies

1. Interviews: Conducting interviews with potential users of the banking system can help identify their needs and preferences.

2. Surveys: Surveys can be used to gather feedback on potential features and functionality of the banking system.

3. Focus groups: Focus groups can be used to gather feedback from a group of potential users on their experience with the banking system.

 4. Industry reports and publications: Reviewing industry reports and publications on banking systems and technology can provide insights into current market trends and demands for banking services.

 5. Case studies: Analyzing case studies of successful banking systems and their implementation processes can provide valuable insights into the development of a simple banking system.

 6. Prototyping and testing: Using prototyping and testing can help gather feedback and refine the design of the banking system.

 7. User personas and scenarios: Creating user personas and scenarios can help understand how users will interact with the system and identify areas for improvement.

SOFTWARE DEVELOPMENT LIFE CYCLE

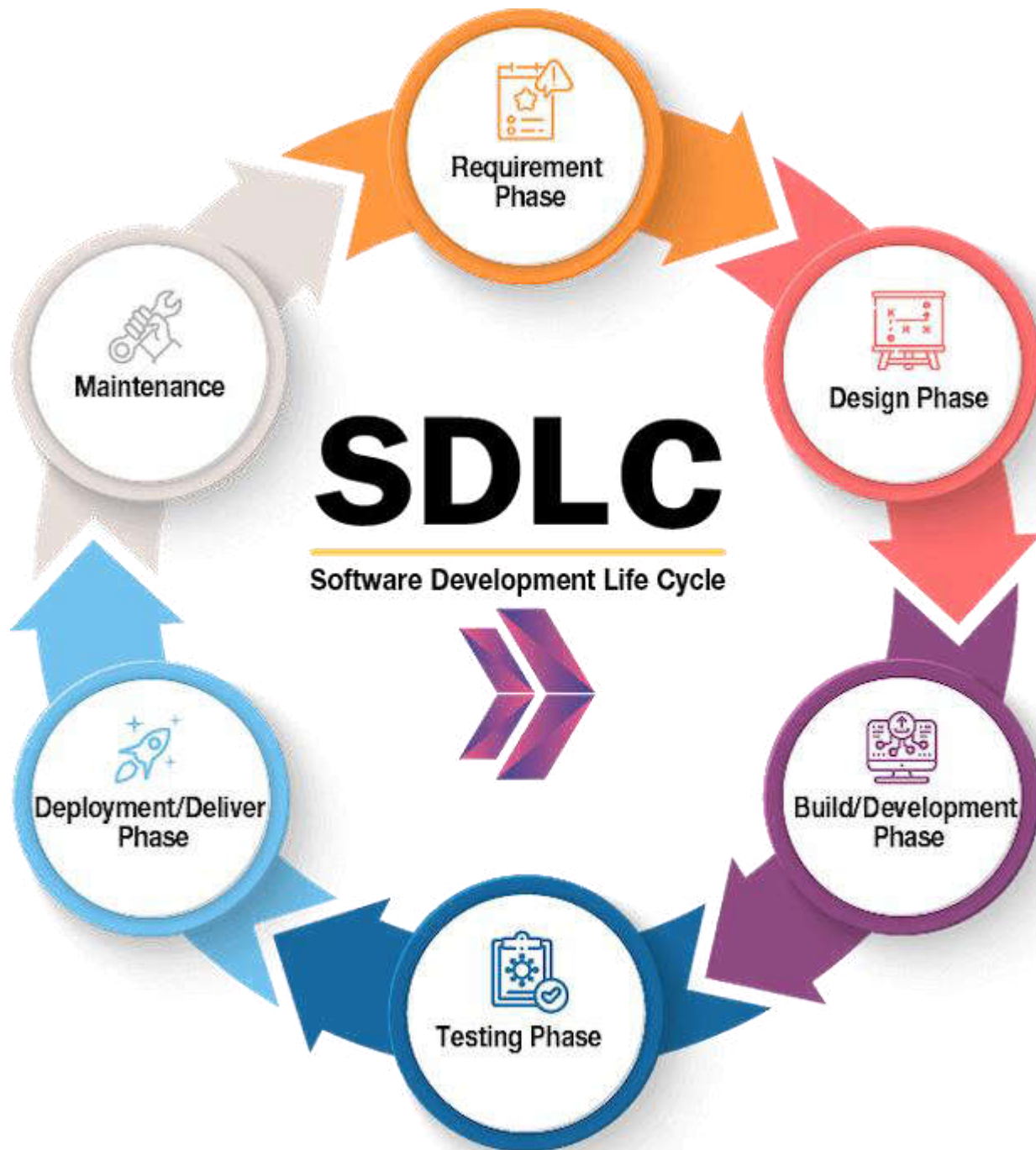# SOFTWARE LIFE DEVELOPMENT CYCLE

A system development life cycle is a logical process by which system analysts, software engineers, programmers, and end users build information systems and computer applications to solve business problems and needs.

The major phases involved in the MIS development process are referred to as system development life cycle. Each phase of the development process must have well defined

objectives and at the end of each phase progress towards meeting the objectives must be evaluated.

The development process should not continue until the objectives of all prior phases have been met.

System development life cycle is a phased approach to analysis and design to ensure that systems are best developed.

The system development life cycle can be divided into seven phases as shown in fig.

The software development life cycle (SDLC) is a process used by software developers to design, develop, test, and deploy software. The SDLC consists of several phases that are typically followed in a sequential order:

1. **Planning:** In this phase, the project goals and requirements are defined, and a plan is created for how the project will be executed.

2. **Analysis**: In this phase, the requirements are analyzed in detail to determine the scope of the project and identify any potential issues or risks.

3. **Design:** In this phase, the software architecture is designed, including the user interface, database schema, and other technical details.

4. **Implementation:** In this phase, the actual coding of the software is done, based on the design created in the previous phase.

5. **Testing:** In this phase, the software is tested to ensure that it meets the requirements and functions correctly.

6. **Deployment**: In this phase, the software is released to users, either through a public release or an internal deployment.

7. **Maintenance:** In this phase, the software is monitored and updated as needed to fix any bugs or add new features.

Following the SDLC helps ensure that software is developed in a structured and organized manner, with each phase building on the

work done in the previous phase. This can help reduce errors and improve the overall quality of the software.

INTRODUCTION TO FRONT-END TOOL

Introduction to Front-end tool

Python is a high-level, interpreted programming language that is widely used for various applications, including web development, data analysis, and artificial intelligence. While Python is typically associated with back-end development, it can also be used as a front-end language to create dynamic and engaging user interfaces. In this report, we will explore the benefits of using Python for front-end development, discuss popular frameworks and libraries, provide practical examples, and highlight potential limitations. By the end of this report, readers will have a better understanding of how Python can be used to create compelling user experiences.

Need of Python Programming

Python programming is in high demand due to its versatility and ease of use. Python is a popular language for web development, data analysis, machine learning, artificial intelligence, and scientific computing.

Its simple syntax and large community of developers make it an accessible language for beginners and experts a like. Python's popularity in web development is due to its ability to create dynamic and engaging user interfaces.

Python frameworks such as Django and Flask allow developers to create robust web applications quickly and efficiently. Additionally, Python's ability to integrate with other languages and technologies makes it a valuable tool in creating complex web applications.

In data analysis and machine learning, Python has become the language of choice due to its extensive libraries and tools such as NumPy, Pandas, and Scikit-learn. These libraries allow developers to analyze large datasets, build predictive models, and create visualizations. Python's versatility extends beyond web development and data analysis.

It can be used for scientific computing, game development, desktop applications, and more. Its flexibility and ease of use make it a valuable tool for developers across industries.

In conclusion, the need for Python programming is evident in its versatility, ease of use, and extensive community of developers. As

technology continues to evolve, Python will remain a valuable tool for creating compelling user experiences.

Advantages of Python Programming

1. Easy to Read, Learn and Write

Python is a **high-level programming language** that has English-like syntax. This makes it easier to read and understand the code. Python is really easy to **pick up** and **learn**, that is why a lot of people recommend Python to beginners. You need less lines of code to perform the same task as compared to other major languages like **C/C++** and **Java**.

2. Improved Productivity

Python is a very **productive language**. Due to the simplicity of Python, developers can focus on solving the problem. They don't need to spend too much time in understanding the **syntax** or **behavior** of the programming language. You write less code and get more things done.

3. Interpreted Language

Python is an interpreted language which means that Python directly **executes the code** line by line. In case of any error, it stops further execution and reports back the error which has occurred. Python shows only one error even if the program has multiple errors. This makes **debugging** easier.

4. Dynamically Typed

Python doesn't know the type of variable until we run the code. It automatically assigns the data type during **execution**. The

programmer doesn't need to worry about declaring variables and their data types.

5. Free and Open-Source

Python comes under the **OSI approved** open-source license. This makes it **free** to **use** and **distribute**. You can download the source code, modify it and even distribute your version of Python. This is useful for organizations that want to modify some specific behavior and use their version for development.

6. Vast Libraries Support

The standard library of Python is huge, you can find almost all the functions needed for your task. So, you don't have to depend on external libraries.

But even if you do, a **Python package manager (pip)** makes things easier to import other great packages from the **Python package index (PyPi)**. It consists of over 200,000 packages.

7. Portability

In many languages like C/C++, you need to change your **code** to run the program on different platforms. That is not the same with Python. You only write once and run it anywhere.

FUTURE

ENHANCEMENT

Future Enhancement

   The scope of a simple banking system project in Python would include creating a program that allows users to perform basic banking functions such as creating accounts, depositing and withdrawing money, and checking account balances. The program would also need to have a secure login system to protect user information and transactions.

  Additional features that could be included in the project may include:

  1. Transfer funds between accounts

  2. View transaction history

  3. Generate account statements

  4. Set up automatic payments or bill pay

   5. Send and receive money through online banking services.

 The project could be expanded to include more advanced features such as fraud detection, loan management, and investment tracking. However, the scope of the project would depend on the level of complexity desired and the intended audience for the program.

E – R DIAGRAM

E - R Diagram

ER-modeling is a data modeling technique used in software engineering to produce a conceptual data model of a information system. Diagrams created using this ER- modeling technique are called Entity-Relationship Diagrams, or ER diagrams or ERDS. So you can say that Entity Relationship Diagrams illustrate the logical structure of databases.

Dr. Peter Chen is the originator of the Entity-Relationship Model His original paper about ER-modeling is one of the most cited papers in the computer software field Currently the ER model serves as the foundation of many system analyses and design methodologies, computer-aided software engineering (CASE) tools, and repository systems

The onginal notation for ER-Diagrams uses rectangles to represent entities, and diamonds to represent relationships

There are three basic elements in ER-Diagrams

Entities are the "things" for which we want to store information. An entity is a person, place, thing or event

Attributes are the data we want to collect for an entity

Relationships describe the relations between the entities

ERDS show entities in a database and relationships between tables within that database It is essential to have ER-Diagrams if you

want to create a good database design. The diagrams help focus on how the database actually works

Entity (Instance)

An instance of a physical object in the real world

Entity Class

Group of objects of the same type

Eg. Entity Class Student". Entities "John". "Trish" etc

Attributes

Properties of Entities that describe their characteristics.

Types:

Simple

Attribute that is not discible, gags

Composite

Auribute composed of several simple attributes. e.g.address (house number, street, dotricte

Multiple

Attribute with a set of possible values for the same

entity, eg. Phone (home, mobile etc y or email

Key

Uniquely Ids the Entity eg PPSN, Chassis No.

Each simple attribute associated with a VS that may be assigned to that attribute for each individual entity.

e.g. age=integer

TESTING & DEBUGGING

Testing and Debugging

INTRODUCTION:-

The implementation phase of software development is concerned with translating design specification into source code. The preliminary goal of implementation is to write source code and internal documentation so that conformance of the code to its specifications can be easily verified, and so that debugging, testing and modifications are eased. Thus goal can be achieved by making the source code as clear and straightforward as possible Simplicity, clarity and elegance are the hallmark of good programs, obscurity, cleverness and complexity are indications of inadequate design and misdirected thinking,

Source code clarity is enhanced by structured coding techniques, by good coding style. by, appropriate supporting documents, by good internal comments, and by feature provided in modern programming languages

The implementation team should be provided with a well-defined set of software requirement, an architectural design specification, and a detailed design description. Each team member must understand the objectives of implementation

TERMS IN TESTING FUNDAMENTAL

1. Error

The term error is used in two ways It refers to the difference between the actual output of software and the correct output in this interpretation, error is essential a measure of the difference between actual and ideal Error is also to used to refer to human action that result in software containing a defect or fault

2. Fault

Fault a condition that causes to fail in performing its required function. A fault is a basic reason for software malfunction and is synonymous with the commonly used term Bug

3. Failure

Failure is the inability of a system or component to perform a required function according to its specifications A software failure occurs if the behavior of the software is the different from the specified behavior Failure may be caused due to functional or performance reason

a. Unit Testing

The term unit testing comprises the sets of tests performed by an individual programmer prior to integration of the unit into a larger system.

A program unit is usually small enough that the programmer who developed it can test it in great detail, and certainly in greater detail than will be possible when the unit is integrated into an evolving software product. In the unit testing the programs are tested.

separately, independent of each other. Since the check is done at the programs level, it is also called program teasing

b. Module Testing

A module and encapsulates related component. So can be tested without other system module

c. Subsystem Testing

Subsystem testing may be independently design and implemented common problems are sub-system interface mistake in this checking we concentrate on it

There are four categories of tests that a programmer will typically perform on a program unit.

1) Functional test

2) Performance test

3) Stress test

4) Structure test

1) Functional Test

Functional test cases involve exercising the code with Nominal input values for which expected results are known, as well as boundary values (minimum values, maximum values and values on and just outside the functional boundaries) and special values

2) Performance Test

Performance testing determines the amount of execution time spent in various parts of the unit, program throughput, response time, and device unlization by the program unit. A certain amount of avoid expending too much effort un fine-tuning of a program unit that contributes little to the overall performance of the entire system. Performance testing is most productive at the subsystem and system levels

3) Stress Test

Stress test are those designed to intentionally break the unit. A great deal can be learned about the strengths and limitations of a program by examining the manner in which a program unit breaks

4) Structure Test

Structure tests are concerned with exercising the internal logic of a program and traversing particular execution paths Some authors refer collectively to functional performance and stress testing as "black box" testing While structure testing is referred to as "white box" or "glass box" testing. The major activities in structural testing are deciding which path to exercise, deriving test date to exercise those paths, determining the test coverage criterion to be used, executing the test, and measuring the test coverage achieved when the test cases are exercised.

DEBUGGING

Defect testing is intended to find areas where the program does not confirm to its specifications. are designed to reveal the presence of defect in the system. When defect have been found in the program. There must be discovered and removed. This is called "Debugging

HOME

PAGE

Home Page :

The Home Page of "Simple Banking System " Application consists of following :

Login:

The user can Login to his account by entering valid name,account number and password which is given at the creation of account .

If the name ,account number and password are valid then login is successfull. And user goes to next step.

If the entered information is not valid then its show error or a dialogue box that shows message like "Invalid credentials ,Try Again"

Create new account :

The new user wants to create new bank account so, he has to enter the information like name ,opening credit and password.

After clicking on submit button it will gives a new unique bank account number which can be used to access your bank account .

Quit :

The whole process is completed then if you want close the application you use Quit . on clicking on quit it will close the application.

AFTER

LOGIN

After Login :

After filling the valid information you are comes to main working page of the "Simple Banking System"

It will the display the name of account holder to be logged in .

Which can be perform following :

Check Balance:

Which is shows account holders current bank balance in ruppes.

Credit amount in your amount :

If account holder want to deposit the money in his account then he/she can easily credit it .

After credit you can check account balance is updated as credited.

And also shows a message like "Amount Credited Successfully

" **Debit amount from account :**

If account holder want to debit money from his account then he / she can easily do it .

After debit you can check account balance is updated as debited .

And also shows a message like "Amount Debited Successfully "

View Transition History:

The view Transition History consists of the date and time of credited or debited amount also displays the amount to be credited or debited from the account with current balance .

<u>Logout :</u>

The overall process is complete then you can logout .

After the logout it goes to home page .

SCREENSHOTS
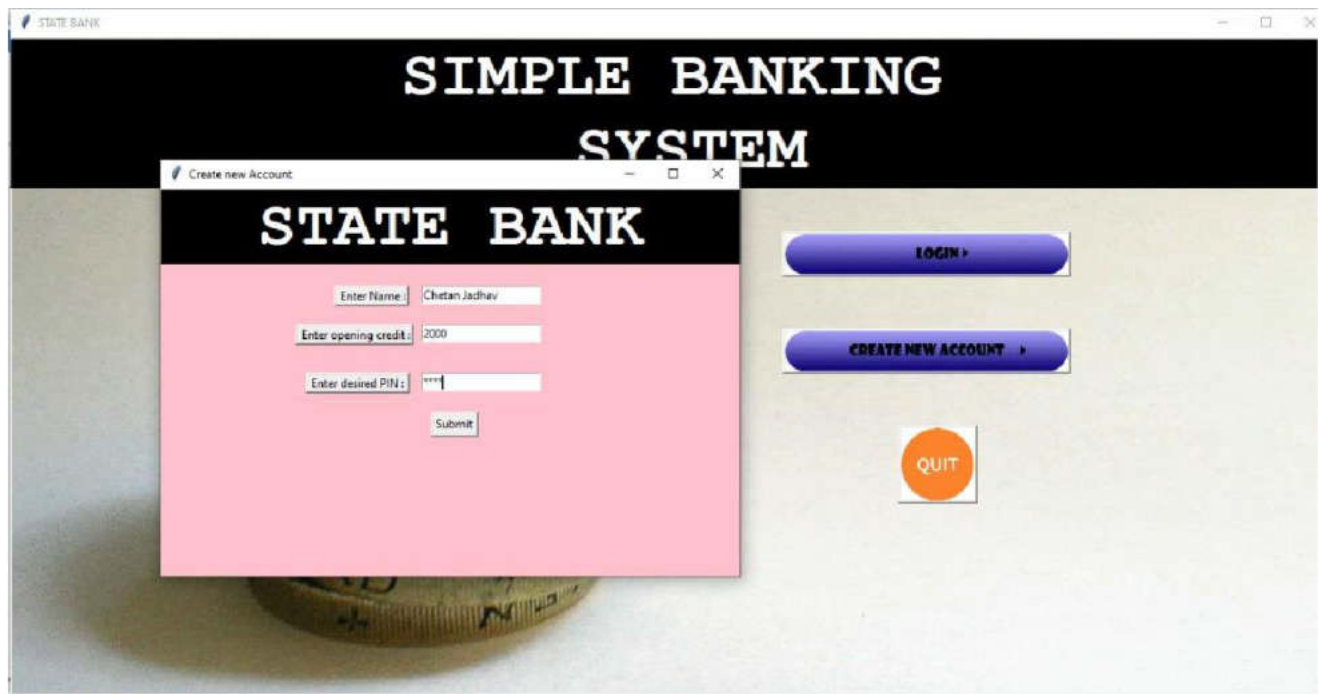
Home Page :

Create New Account :

Entering the valid information:

Account Number :

Login page :

Entering valid Information :

After Login Main Menu :

Credit Amount in your Account :

Entering Amount:

Amount credited :
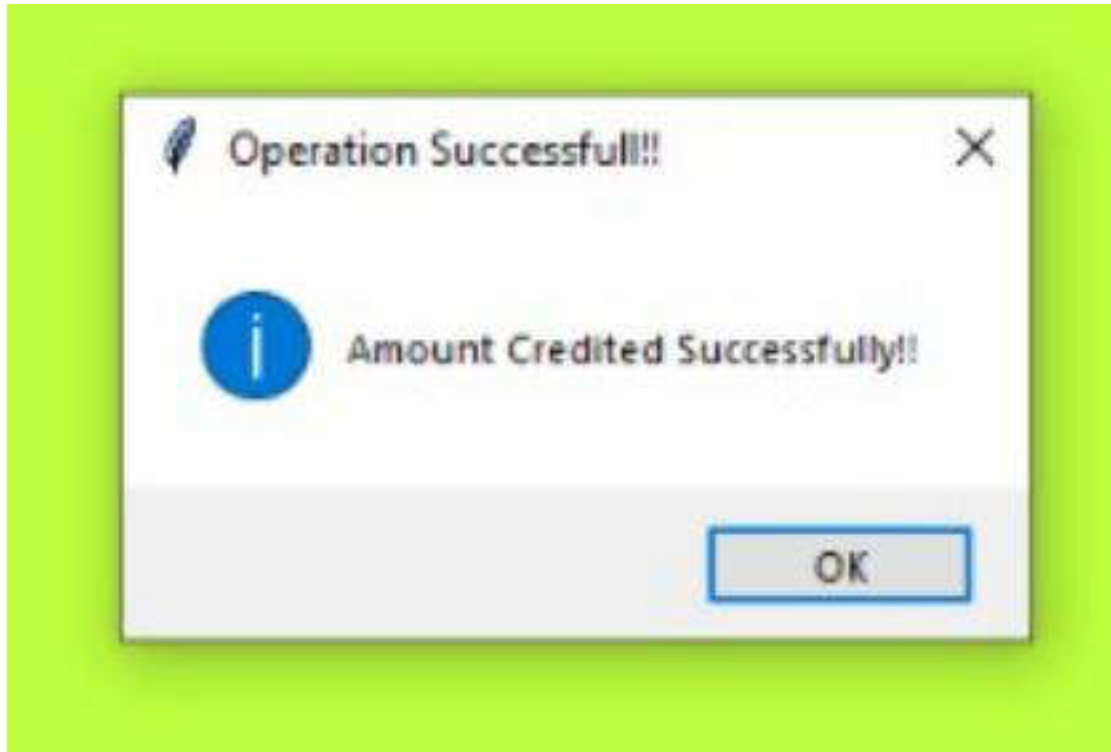
Check Balance after Credit :

Debit Amount From your account :
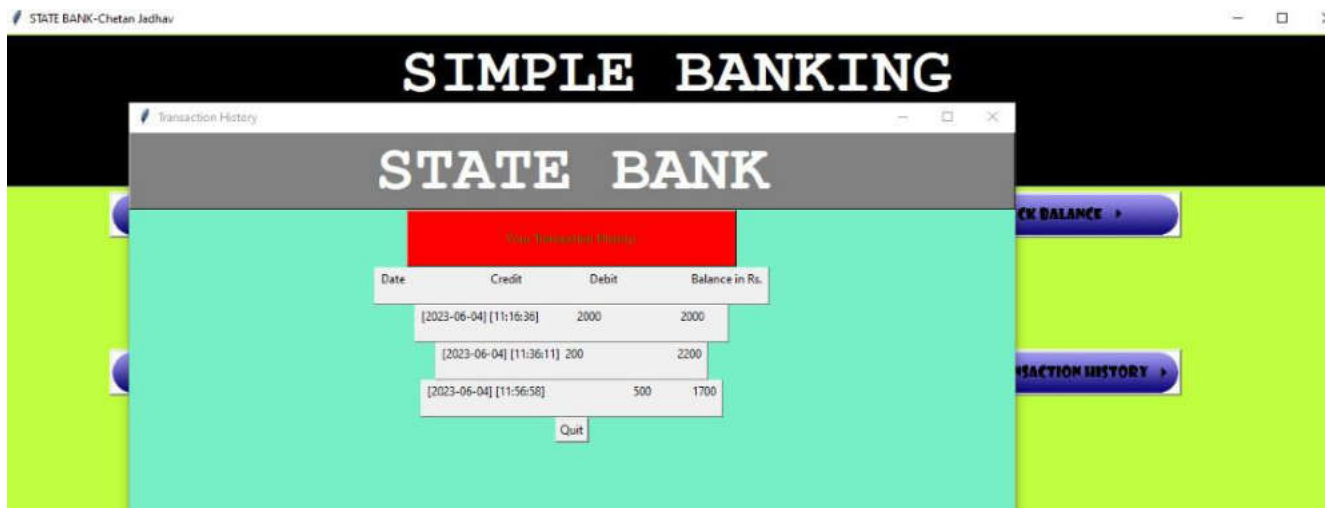
Entering the amount to be debited:

After Amount Debited :

Check Balance After Amount Debited:

View Transition History:

Log Out :

FUTURE SCOPE

OF PROJECT

Future Scope Of Project

The future scope of a simple banking system could include:

1. Integration with new technologies: As technology continues to evolve, simple banking systems may need to integrate with new technologies such as blockchain, artificial intelligence, and machine learning to stay competitive.

2. Enhanced security features: With the increasing threat of cyber attacks, banking systems will need to continue to enhance their security features to protect customer data and prevent fraud.

3. Mobile banking: With the rise of mobile devices, banking systems will need to focus on providing a seamless mobile banking experience for customers.

4. Personalization: Simple banking systems may also focus on providing a more personalized experience for customers, tailoring products and services to their specific needs and preferences.

5. Open banking: The concept of open banking, where banks share customer data with third-party providers, is gaining traction in

many countries. Simple banking systems may need to adapt to this trend to remain competitive.

Overall, the future scope of a simple banking system will likely involve a continued focus on innovation and customer-centricity, as well as a commitment to staying up-to-date with the latest technologies and trends in the industry

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SEARCH ENGINES –

YAHOO, GOOGLE etc.

A

Project Report On

‘RESTAURANT MANAGEMENT SYSTEM’

Submitted to

GREENFINGERS COLLEGE OF COMPUTER AND
TECHNOLOGY, AKLUJ

For

Bachelor of Entire Computer

Application

By

Miss. Dixit Renuka G.

Miss. Talekar Tejashri N.

Under the guidance of,

Prof. Kshirsagar B. J.

Greenfingers College of Computer and Technology, Akluj.

2022-23

GREENFINGRES COLLEGE OF COMPUTER SCIENCE AND
TECHNOLOGY, AKLUJ.

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ
AFFILIATED TO PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR
UNIVERSITY, SOLAPUR

CERTIFICATE

This is to certify that the project on "**RESTAURANT MANAGEMENT SYSTEM**" in partial fulfillment of the requirement for the Academic Year 2022-23 Of Bachelor of Computer Application B.C.A III To Punyshlok Ahilyadevi Holkar Solapur University, Solapur. They have carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.

Submitted By

DIXIT RENUKA G.

TALEKAR TEJASHRI N.

Place : Akluj

Date : 08/06/2023

[Project Guide]

[Internal/External Examiner]

[Head of Department]
B.C.A.
Greenfingers College of Computer and Technology, Akluj

दिनांक 06 / 06 / २०२3

CERTIFICATE

This is to certify that **Miss. Talekar Tejshri N.** of **BCA-III** year student of **Greenfingers College of Computer and Technology, Shankarnagar- Akluj** has done project work on **Restaurant Management System** under the guidance of **Mr. Kshirsagar B.J.**

She has shown a keen interest in learning and doing his work during the project. We also found her conduct to be satisfactory.

We wish her all the best in her future professional endeavors.

Place: Akluj
Date:

HOTEL GALANDE
Proprietor

ABSTRACT

The purpose of this project is to develop a Fast-food Restaurant management system. It is a system that will assist managers and administrators in managing restaurants effectively and also a system that enabled customer to place their food order online at any time from any place. There as on to develop the system is to Reduce the workload in the present system and reduce time wasted in data processing. It provides a user-friendly web-page for displaying food menu and

effective advertising of Paramount cuisine services products to the customers with cheaper cost. The system was designed and implemented using the Python using tkinter. The system was developed using the Waterfall-model software development approach.

ACKNOWLEDMENTS

Me, the student of BCA-III from Greenfingres College of Computer Science and Technology, Akluj has prepared the project on '**Restaurant Management System**' to make my project successfully.

I would like to thank our college teachers and lab-course teachers. I Would like to give special thanks to **Prof. Kshirsagar B.** who gave me a proper guidance for making my project successful. He also give me all the necessary information during our project and give me moral support.

INDEX

INTRODUCTION TO EXISTING SYSTEM

The **Restaurant Management System Project In Python** is a fully functional desktop application developed in Python that covers all of the features. This Restaurant Management System is designed to manage the billing transactions of a restaurant, which can be useful for faster and smoother business transactions.

This can be one of the best fundamental projects in Python for beginners who want to develop their own system. This **Restaurant Management System In Python** is quite useful, and the concept and logic of the project are simple to grasp.

The **Restaurant Management System Project In Python Using Tkinter** is important because it is often overlooked in the restaurant business. At times, this software is seen as nothing more than a mobile cash register. But software systems for running a restaurant do

a lot more than that. They make things run more smoothly, cut down on wait times, and make a big difference in how happy your customers are, which has a direct effect on the success of your restaurant.

AIM AND OBJECTIVE

The aim is to develop a reliable and sustainable system that will assist the restaurant by reducing the work of staff, waiters, and also to increase customer satisfaction and also designed Implementation of a computerized Restaurant Management Information System. While the objectives are: 1. To facilitate accurate processing and delivery of the order to customers .2. To determine how a computerized management information system has facilitated an increase in productivity, and a decrease in paperwork, and the ability to analyse trouble spot.

PROJECT ANALYSIS

Introduction to Proposed System

The **Restaurant Management System Project In Python Code** includes a number of functions that are required to run a restaurant. It's an umbrella term for a variety of tools and practices that help restaurants function smoothly and efficiently while providing excellent customer service.

- To provide interface that allows promotion and menu.

- To prevent interface that shows customers' orders detail to front-end and delivery boys for delivering customers' orders
- Tools that generate reports that can be used for decision making
- A tool that allows the management to modify the food information
- The system will also allow the management to update order status (delivered, canaled, cooking, etc.) and assign delivery boy to every order made

Feasibility Study

It is carried out to understand and determine possibility or probability of either working with the existing system or developing completely new system. It is preliminary investigation which emphasizes on "Look before you leap". It helps to obtain an overview of the problem and also consider that fact weather feasible solution exists or not.

⭕ Technical Feasibility:

Our tool can be used with present system requirement. User need not to have the technical knowledge to use the system.

⭕ Economic Feasibility:

Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. Our application is not included any extra cost as it develops with python language.

⭕ Operational or Behavioral Feasibility:

Our system will be implemented in parallel to the existing system i.e. manual system. It will make easy to load a particular location which consumes more time for manual searching. It will provide the fast searching the location. We can modify the location easily.

NEED FOR COMPUTERIZATION

Computerization of Restaurant Management System is helpful in following ways,

- Saving lot of tome for search the particular record or bill in your restaurant.

- The being automated recording and all bill information.
- Easy to manage the quantity present in restaurant.

- No paper working is need to save the record , order, demand customer details of the restaurant and order of food.

FUTURE ENHANCEMENT

Key features that a restaurant management system should have:

○ **Ease of operations**

○ **Point-of-Sale Operations**

○ **Updating menu –** Making changes to your menu, whether on your Online Ordering portal, order management or POS should be easy. You might want to update pricing (we have found this to be one of the most often recurring needs). So make sure you ask for a demo of the menu update process before you make a purchase. Nobody wants to be making calls to the support team to make simple menu changes.

REQUIREMENT   SPECIFICATION

✠ **Software Requirement:**

⊙ **Language Used:** Python

⊙ **Operating System:** Windows 10

⊙ **IDE:** PyCharm

⊙ **Version:** 3.8 OR 3.9

⊙ **Type:** Desktop Application

⊙ **RAM-**64MB

✠ **Hardware Requirement:**

⊙ **Processor:** Intel Pentium 4 or more

⊙ **Ram:** 1 GB or more

⊙ **Hard disk:** 40 GB hard disk recommended for the primary

partition.

BENEFITS OF THE SYSTEM

- **Improve your customer relationships** – This will improve the customer experience and make them happier.

- **Sales Monitoring** – This means that it gives you the power to make better business decisions.

- **Automated Evaluation** – Actually, this restaurant management software has the ability to automate report generating. It assists the company in devising effective future strategies to strengthen existing client connections and attract new ones.

- **Satisfaction among employees** – In that case, employees like to feel like they can trust their boss, so letting them manage their own shifts is a good way to give them some freedom.

- **Error Reduction** – Writing down orders for kitchen personnel might lead to blunders owing to illegible handwriting. As a result, the chances of the person preparing the orders making an error are reduced.

- **Productivity Increased** – The restaurant management software takes care of time-consuming tasks like looking up prices and putting out tables.

DEFINITION OF TERMS

○ **Food:**

Can be defined as an edible substance that human beings or animals eat or drink that supplies all the nutrients that will sustain maintain, and promote life and growth.

O Customer:

A client who buys goods or services from a shop either online or not.

O Restaurant:

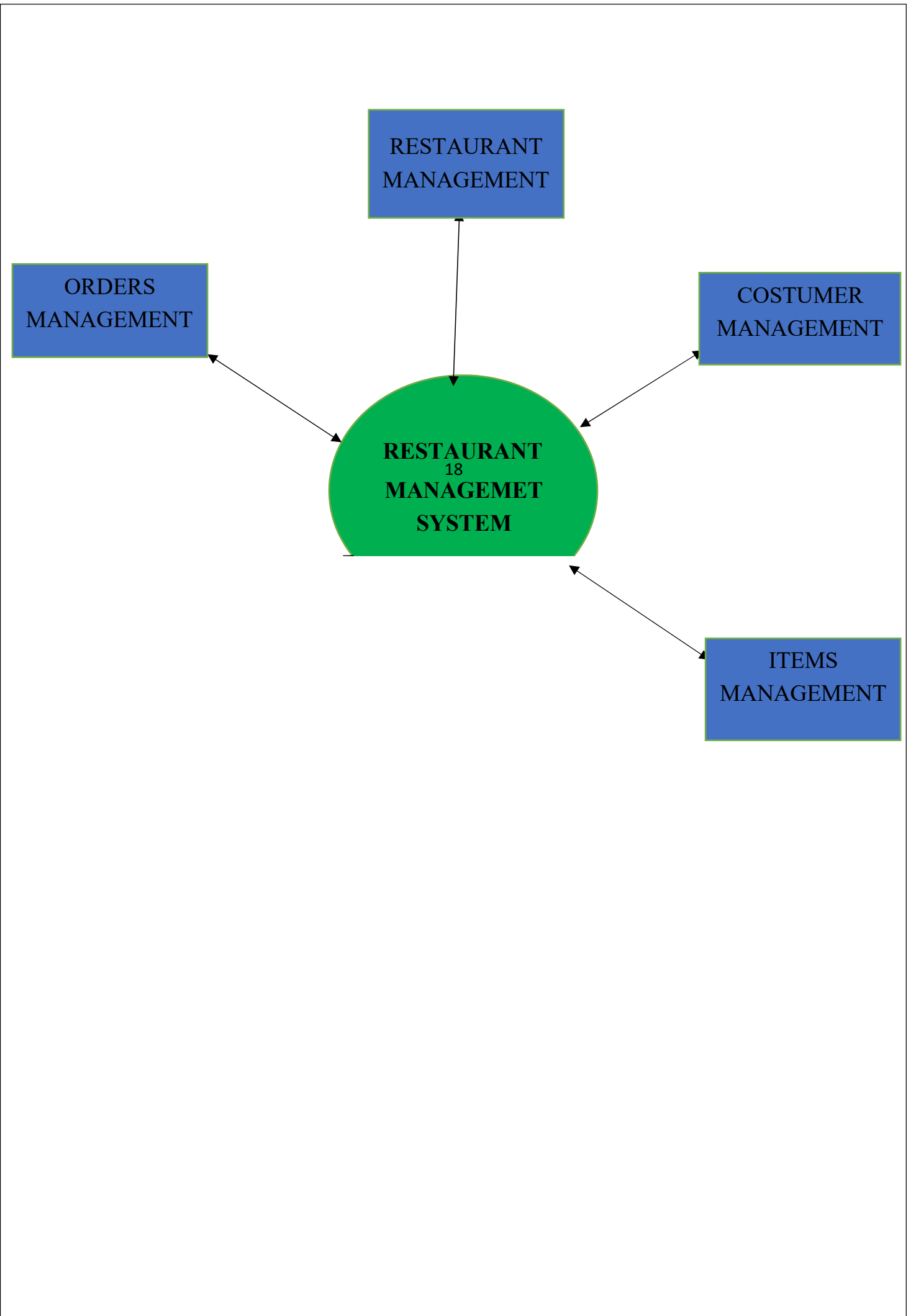(eating place) is a place where drinks and meals are served to customers.

O Fast food:

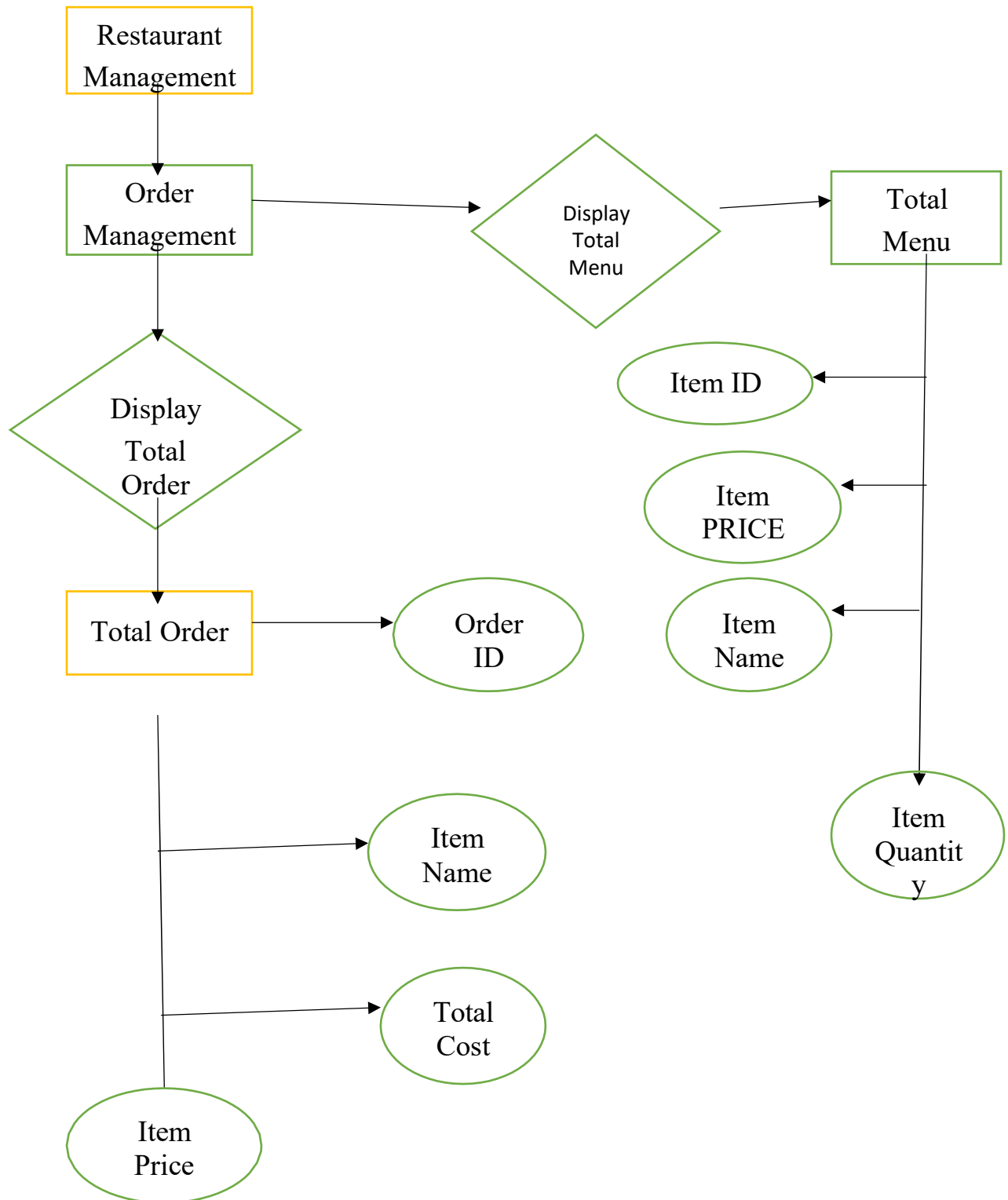Hot food that is served very quickly in a special restaurant and often taken away to be eaten.

O Online ordering:

The Online Ordering System can be defined as a simple and convenient way for customers to purchase food online, without having to go to the restaurant.

DATA FLOW DIAGRAM

```
                        ┌─────────────────┐
                        │   RESTAURANT    │
                        │   MANAGEMENT    │
                        └─────────────────┘
                                 ▲
                                 │
┌─────────────────┐              │              ┌─────────────────┐
│     ORDERS      │              │              │    COSTUMER     │
│   MANAGEMENT    │              │              │   MANAGEMENT    │
└─────────────────┘              ▼              └─────────────────┘
         ▲                 ╭───────────╮                ▲
          ╲               │ RESTAURANT │               ╱
           ╲              │     18     │              ╱
            ╲             │  MANAGEMET │             ╱
             ╲            │   SYSTEM   │            ╱
                          ╰───────────╯                ▼
                                                ┌─────────────────┐
                                                │      ITEMS      │
                                                │   MANAGEMENT    │
                                                └─────────────────┘
```

E-R DIAGRAM

```
Restaurant
Management
    |
    v
Order
Management  -------->  Display Total Menu  -------->  Total Menu
    |                                                      |
    v                                                      v
Display                                              Item ID
Total
Order                                                Item PRICE
    |
    v                                                Item Name
Total Order  -------->  Order ID
    |                                                Item Quantity
    |-------->  Item Name
    |
    |-------->  Total Cost
    |
    v
Item Price
```

TE
ST
IN
G

The process of execution of a program explicit intention of finding errors is called as testing. The intention is to finding the situations in which the system is likely to fail. A successful test is to one that fined errors.

There are following basic tests:

⭕ Unit Testing:

Unit testing is testing the changes made in an existing or new program. In this phase individual modules are tested.

⭕ Integrated Testing:

After completion of Unit testing, combining the modules which are interacting with each other is integration testing. Integrated testing we adapted top down integration testing.

⭕ System Testing:

This is check for the integration between different modules. This also checks for discrepancies between the system and its original objective. The primary concern is the compatibility between different modules. Exceptional handling testing is done at this stage.

⭕ Storage time Testing:

This involved entering data until the capacity was reached in the disk. This is across verification between the actual and claimed storage requirement.

⭕ Performance Time Testing:

Carried out to implementation to verify how much time the machine takes to respond to queries etc. and changes may be made to source code to improve on this if required.

SYSTEM IMPLEMENTATION

System implementation deals with the testing and debugging of the implemented design of the software in process. Here, the choice of environment used is shown, the architecture used for the implementation is explained and the software is tested at each level of construction to test for efficiency and discover possible technical defects. The conversion of the software and documentation is also done at this level. The choice of programming language depends on the system to be developed. However, the main aim of this project is to design and implement a web page for online food ordering, this focused the researcher on using PYTHON as the standard programming tools for implementing the system.

OUTPUT

Screen Shots

Restaurant Management System

Food

☑ Roti	5
☐ Daal	0
☑ Fish	2
☐ Subji	0
☐ Kabab	0
☐ Chawal	0
☐ Mutton	0
☑ Paneer	1
☐ Chicken	0

Drinks

☐ Lassi	0
☐ Coffee	0
☐ Faluda	0
☐ Shikanji	0
☐ JalJeera	0
☑ Roohafza	2
☐ Masala Tea	0
☐ Black Tea	0
☑ Badam Milk	6

Cakes

☐ Oreo	0
☐ Apple	0
☐ KitKat	0
☑ Vanilla	1
☐ Banana	0
☐ Brawnie	0
☐ Pineapple	0
☐ Chocolate	0
☐ Black Forest	0

1450

7	8	9	+
4	5	6	-
1	2	3	*
Ans	Clear	0	/

Cost of Food	350Rs	Sub Total	1400Rs
Cost of Drinks	600Rs	Service Tax	50 Rs
Cost of Cakes	450Rs	Total Cost	1450Rs

Total Receipt Save Reset

Restaurant Management System

Food		Drinks		Cakes	
☑ Roti	12	☐ Lassi	0	☑ Oreo	1
☐ Daal	0	☐ Coffee	0	☐ Apple	0
☑ Fish	4	☑ Faluda	4	☐ KitKat	0
☐ Subji	0	☐ Shikanji	0	☑ Vanilla	2
☐ Kabab	0	☐ JalJeera	0	☐ Banana	0
☐ Chawal	0	☑ Roohafza	5	☐ Brawnie	0
☑ Mutton	3	☑ Masala Tea	3	☐ Pineapple	0
☐ Paneer	0	☐ Black Tea	0	☑ Chocolate	1
☐ Chicken	0	☐ Badam Milk	0	☐ Black Forest	0

Cost of Food	880Rs	Sub Total	3530Rs
Cost of Drinks	680Rs	Service Tax	50 Rs
Cost of Cakes	1970Rs	Total Cost	3580Rs

Calculator keys:
7 8 9 +
4 5 6 -
1 2 3 *
Ans Clear 0 /

ReceiptRef: BILL9067   27/06/22

Items:	cost of Items(Rs)
Roti	120
Fish	400
Mutton	360
Faluda	320
Roohafza	300

Total   Receipt   Save   Reset

33

CONCLUSION

This is achieved through an easy to use graphical interface menu options. The users can add any number of items to the cart from any of the available food categories by simply clicking the add to cart button for each item. Once item is added to the cart, user is presented with detailed order to review or continue shopping.

BIBLIOGRAPHY

The way to collected the information related to the project by, **Website**
www.Google.com

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY , AKLUJ

A

PROJECT ON

"HOSPITAL MANAGEMENT SYSTEM"

SUBMITTED TO

PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY ,   SOLAPUR

IN PARTIAL FULFILLMENT OF THE

REQUIREMENT OF

BACHELOR OF COMPUTER SCIENCE BSc(ECS)

SUBMITTED BY

MR. Patil Sangram Santosh

MR. Potekar Vikram Rahul

UNDER THE GUIDANCE OF

PROF. kshirsagar Sir

ACADEMIC YEAR - 2022-2023

PUNYSHLOK AHILYADEVI HOLKAR SOLAPUR UNIVERSITY , SOLAPUR

GREENFINGERS COLLEGE OF COMPUTER AND TECHNOLOGY, AKLUJ

Certificate

This to certify that the project report on" Hospital management system " in partial of the requirement for the academic year 2022-2023 of Bachelor Of Computer

Science (BSc[ECS]-III) to the Solapur University, Solapur. He has carried out it satisfactorily. To the best of my knowledge and belief, the matter presented in this project report has not been submitted earlier.

Submitted by

MR. Patil Sangram Santosh

MR. Potekar Vikram Rahul

Place : Akluj

Date: 07/06/2023

Name Of Guide
Examiner
Prof. Salunkhe sir

HOD

External

Devdatt Clinic

Dr. Girish mane-shendage

CERTIFICATE

This is to certify that Mr. / ___Sangram Santosh patil_____
Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has
been studying in the class B.Sc. [ECS] III. He has developed software for our
organization. During the project work, he was sincere, hardworking to learn, and show
good potential. We wish him all the best for the future.

Place: Akluj
  Date: 02/06/2023

Dr. Girish Mane
BHMS
Reg.No 62308
Name and Signature
Dr. Girish D. Mane.

123-456-7890

Devdatt Clinic

Dr. Girish mane-shendage

CERTIFICATE

This is to certify that Mr. / _Vikram Rahul potekar_ _____
Student of Greenfingers College of Computer and Technology, Shankarnagar- Akluj has
been studying in the class B.Sc. [ECS] III. He has developed software for our
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Date: 02/06/2023

Dr. Girish Mane
BHMS
Reg No 62308
Name and Signature
Dr. Girish D. Mane.

123-456-7890

HOSPITAL MANAGEMENT SYSTEM

ACKNOWLEDGMENT

ACKNOWLEDGEMENT

This Project report was completed as a result of support from many people, although not all of them can be mentioned.

We wish to express our sincere gratitude to God for his protection, providence, guidance and above all, for sustaining us.

We are greatly indebted to our good supervisor **Mr. kshirsagar sir** for his useful and necessary observation, suggestions, contribution and corrections. We would not have been able to achieve anything in this research without your supervision. May God enrich you greatly in every area of life.

Finally, we wish to express our appreciation to our parents for their love and support.

Student's Name

MR.PATIL SANGRAM SANTOSH

MR.POTEKER VIKRAM RAHUL

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2	**Scope Of Project** Existing system Goals Objective Scope of system purpose of system
3	**System Requirement** Software Requirement Hardware Requirement
4	**Requirement Analysis** Feasibility study 　　Technical Feasibility study 　　　Operational Feasibility study 　　　Economical Feasibility study
5	**DIAGRAM DESIGN** System Analysis ERD Zero level DFD First level DFD
6	**Database Design**
7	**Screen shot**
8	**Limitations Of System**
9	**CONCLUSION**

INTRODUCTION

The project Hospital Management system includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy, and labs. The software has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id.

The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

Hospital Management System is powerful, flexible, and easy to use and is designed and developed to deliver real conceivable benefits to hospitals. Hospital Management System is designed for multispeciality hospitals, to cover a wide range of hospital administration and management processes. It is an integrated end-toend Hospital Management System that provides relevant information across the hospital to support effective   decision making for patient care, hospital administration and critical financial accounting, in a seamless flow. Hospital

Existing System

1)Paper Work

2)Time Consuming

3)Lots of time required For Display Result

4)This system manually Handle.

OBJECTIVE

Objective:-

1) Define hospital

2) Recording information about the Patients that come.

3) Generating bills.

4) Recording information related to diagnosis given to Patients.

5) Keeping record of the Immunization provided to children/patients.

6) Keeping information about various diseases and medicines available to cure them.

These are the various jobs that need to be done in a Hospital by the operational staff and Doctors. All these works are done on papers.

Goals

1- User friendly

2- Simple fast

3- Low cost and effective

4- It deals with the collection of patient's information

SCOPE OF SYSTEM

Scope of the Project:-

1) Information about Patients is done by just writing the Patients name, age and gender. Whenever the Patient comes up his information is stored freshly.

2) Bills are generated by recording price for each facility provided to Patient on a separate sheet and at last they all are summed up.

3) Information about various diseases is not kept as any document. Doctors themselves do this job by remembering various medicines.

All this work is done manually by the receptionist and other operational staff and lot of papers are needed to be handled and taken care of. Doctors have to remember various medicines available for diagnosis and sometimes miss better alternatives as they can't remember them at that time.

MODULES:

The entire project mainly consists of 7 modules, which are

Admin module

User module (patient)

Doctor module

Nurse module

Accountant module

Admin module:

manage department of hospitals, user, doctor, nurse, pharmacist, laboratorist accounts.

watch appointment of doctors

watch transaction reports of patient payment

watch blood bank report

watch medicine status of hospital stock

watch operation report

user module(patient):

View appointment list and status with doctors

View prescription details

View medication from doctor

View doctor list

View blood bank status

Manage own profile

Doctor module:

Manage patient. account opening and updating

Create, manage appointment with patient

Create prescription for patient

Provide medication for patients

Manage own profile

Nurse module:

Manage patient. account opening and updating

Provide medication according to patient prescription

Manage blood bank and update status

Manage own profile

Accountant module:

Create invoice for payment

Order invoice to patient

Take cash payment

Watch payment history of patients

Manage own profile

Purpose of System :

It enables doctors and admin to view and modify appointments schedules if required. The purpose of this project is to computerize. All details regarding patients details and hospital details.

System Requirement :

HARDWARE REQUIREMENT:

The most common set of requirements define by any operating system software application is the physical computer resources, also known as hardware. A hardware requirement list is obtained accompanied by a

hardware capability list (HCL), especially in case of operating system. An HCL lists tested, capability and sometime incompatible. Hardware devices for a particular operating system of application.

The following some section discuss the various aspects of hardware requirement.

HARDWARE REQUIREMENTS FOR PRESENT PROJECT: -

PROCESSOR: - Intel dual Core, i3

RAM: - 8 gb

HARD DISK: - 80GB

SOFTWARE REQUIREMENT:

Software requirements deal with defining software resources requirements and pre-requisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or prerequisites are generally not included in the software installation package and need to be installed separately before the software is installed.

SOFTWARE REQUIREMENT FOR PRESENT PROJECT:
OPERATING SYSTEM : window 10

 FRONT END :   Python

BACK END :SQLite

FEASIBILITY STUDY

It is the measure of how beneficial or practical the development of an Multiplex System Will be ,to an organization.It is a process , which defines exactly what a project is , what strategic issues need to be Considered to assessits feasibility, or likelihood of succeeding ideally , it's the process of making rational decisions about a number of enduring characteristics of the project.

It is an evaluation of a proposed design , to determine the difficulities in carrying out the designated task .Generally , it precedes technical development and implementation .In other words .it is an evaluation or analysis of the potential impact of the proposed project:-

     1) Technical Feasibility
     2) Operational Feasibility
     3) Economical Feasibility

1.Technical Feasibility :-

It's the measure of the practically of the specific technical solution .A measure of the availability of technical resources and experties.

Technical feasibility address major issues such as:-

1)Is the proposed technology or solution is practical?

2)Do we currently possess the necessary technology?

The "Multiplex Management System "is found to be technically feasible , as the resources And technology required by it is available.

2)Operational Feasibility:-

It's the measure of how well the solution of problem or a specific solution will work in the organization.

A measure of how people feel about the system/project.

"Multiplex Management System" is operationally feasible as it can be easily used by the users.

The users as well as management/admin will feel good using system :

1) The system provides the user analysis easily stock information and less time consuming system.

2) It provide the users to view the sales on brands in various Malls .

3) It provides adequate throughput and response time.

3)Economical Feasibility:-

It's the measure of the cost-effectivness of the project,often called as cost-benefit analysis.

"Multiplex management System" is economically feasible ,because it reduces

the expense as well as time in the manual system.

Following factors are studied for economic feasibility of project:

1)System analysis's time .

2)Cost of systems study.

3)Estimated cost of hardware.

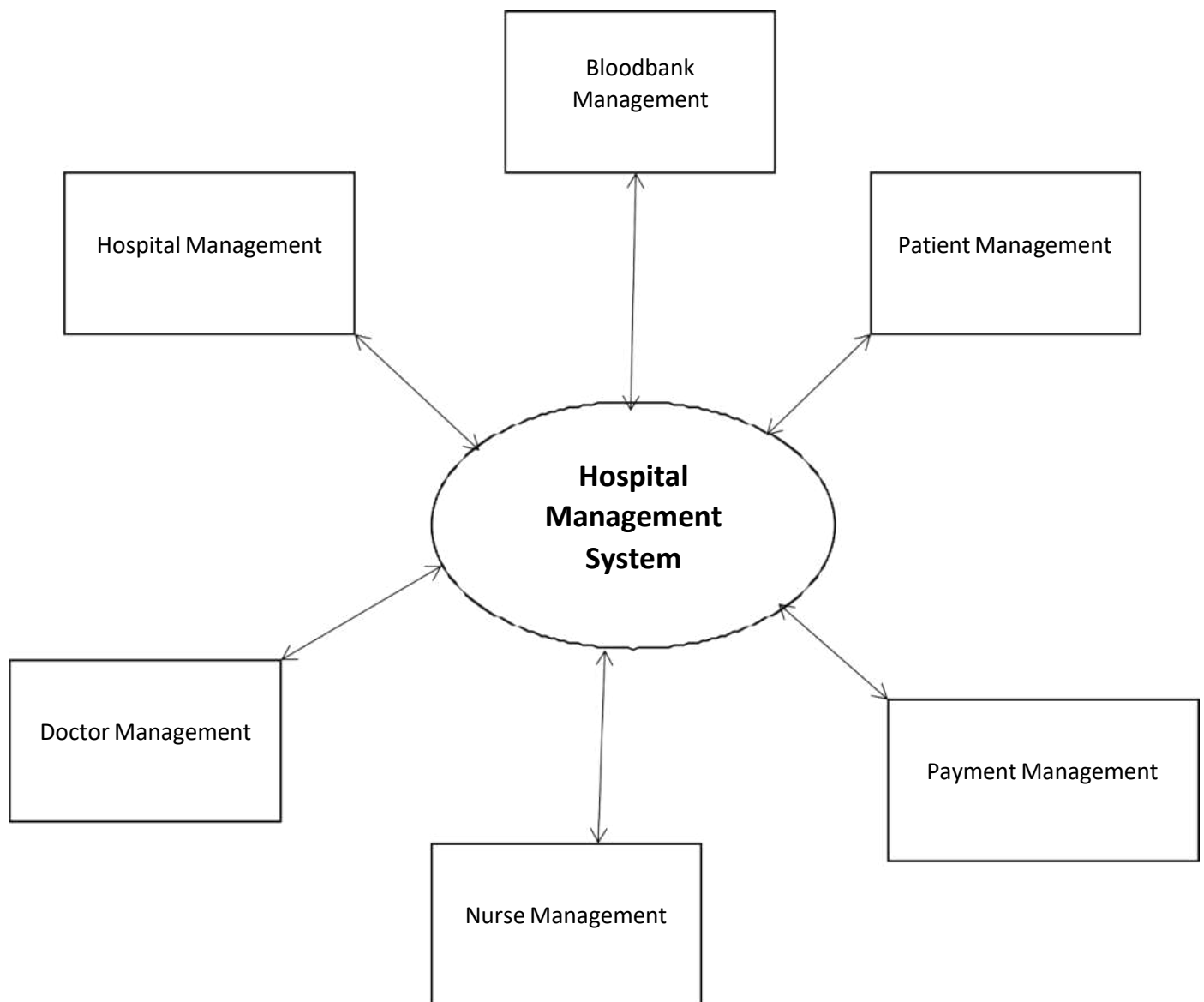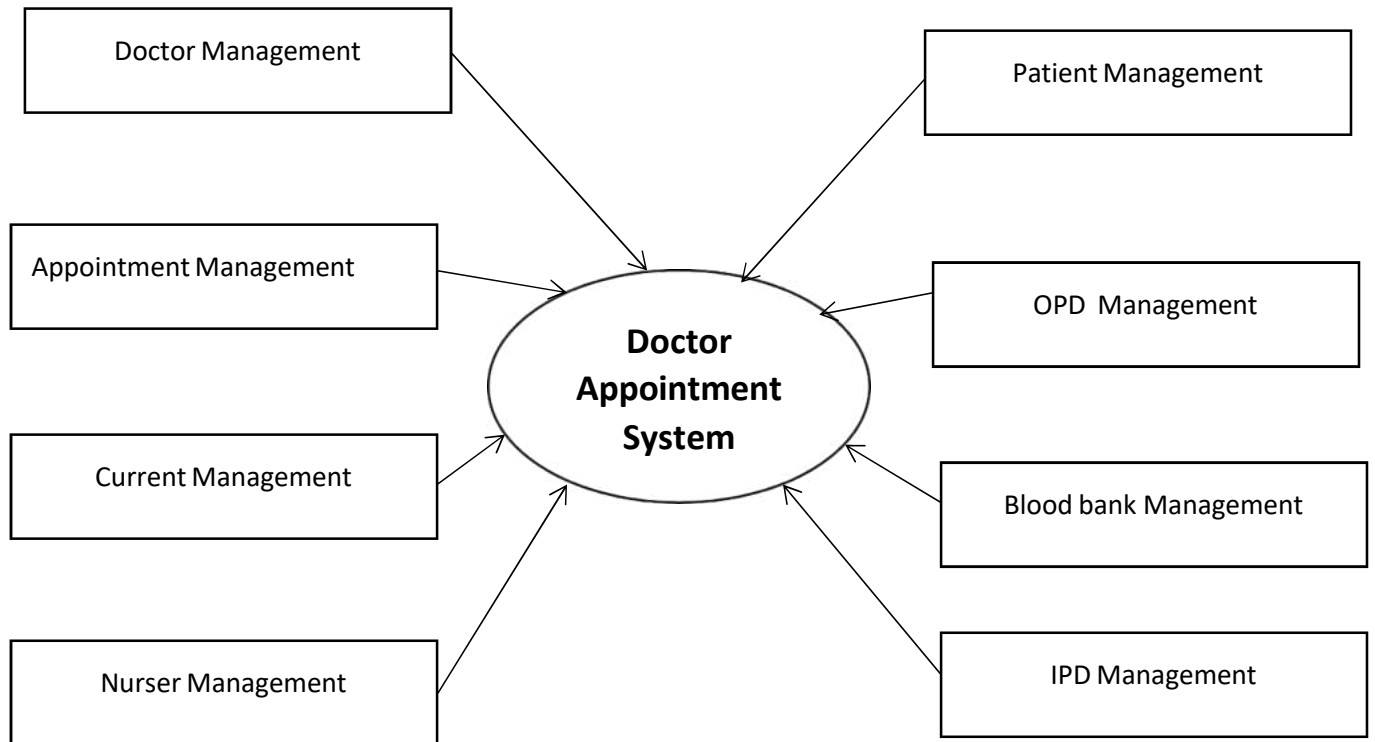4)Cost of packaged software /software development

SYSTEM DESIGN

ER-DIAGRAM
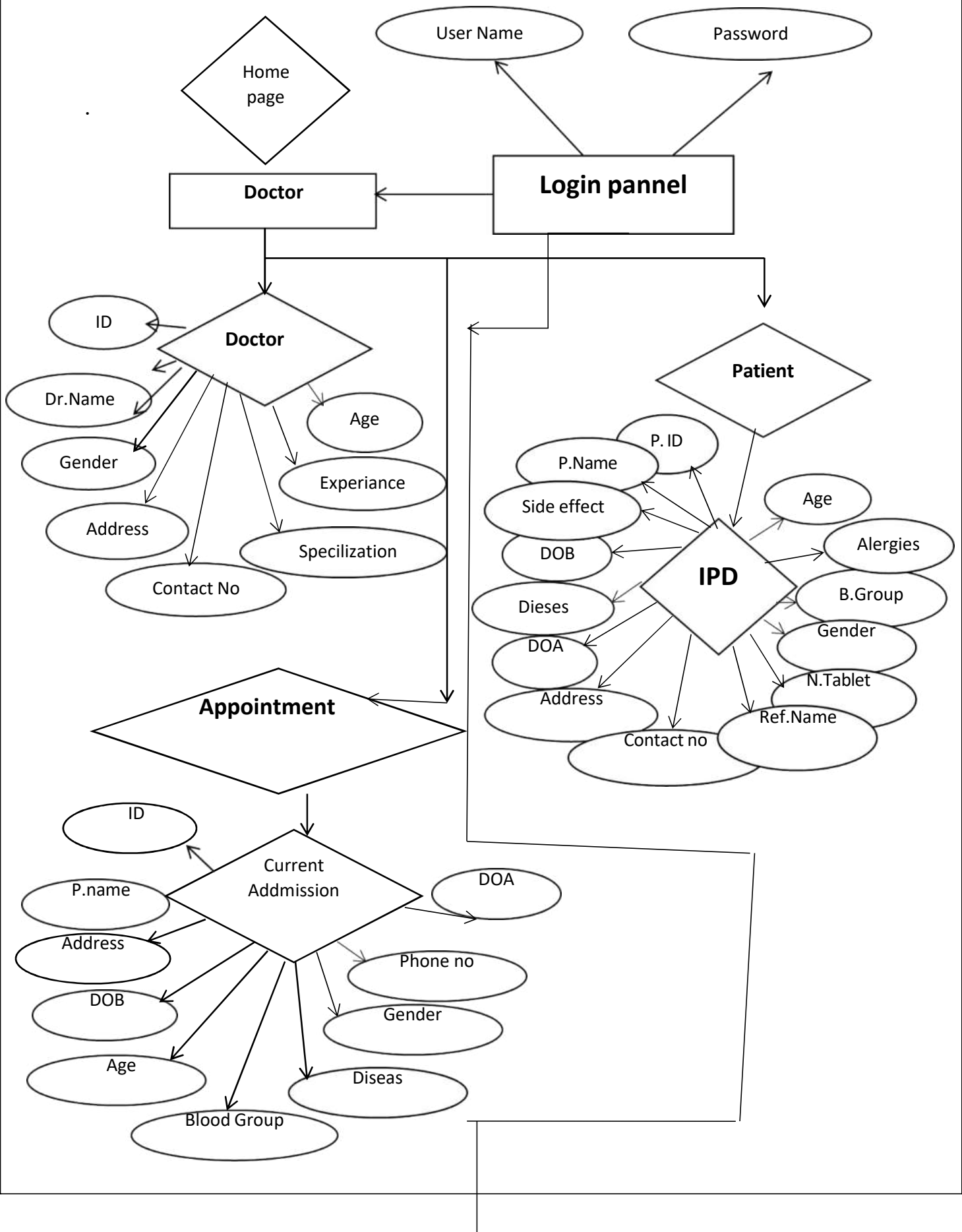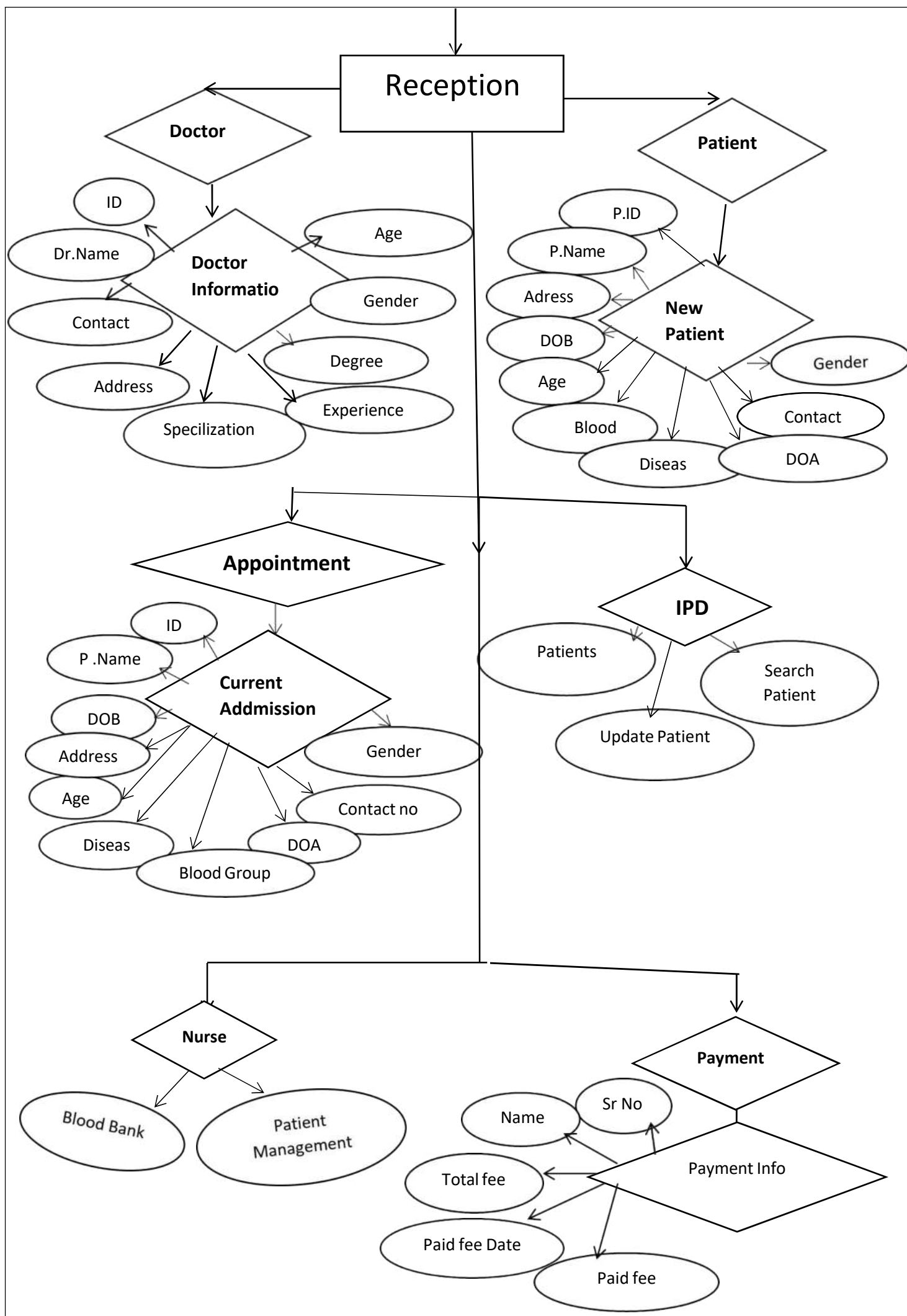
DFD-FLOW DIAGRAM:
ZERO LEVEL DFD

Bloodbank Management

Hospital Management

Patient Management

Hospital Management System

Doctor Management

Payment Management

Nurse Management

Zero Level DFD :   Hospital Management System

FIRST LEVEL DFD:

Doctor Management

Patient Management

Appointment Management

OPD Management

Doctor Appointment System

Current Management

Blood bank Management

Nurser Management

IPD Management

First Level DFD :Doctor Appointment System

Database Design

Doctor

NAME	NULL?	TYPE
ID	NOT NULL	NUMBER(30)
DOCTOR NAME		VARCHAR(20)
CONTACT NO		NUMBER(30)
ADDRESS		VARCHAR(20)
AGE		NUMBER(30)
GENDER		VARCHAR(20)
DEGREE		VARCHAR(20)
SPECIALIZATION		VARCHAR(20)
EXPERIENCE		VARCHAR(20)

OPD Patient

NAME	NULL?	TYPE
PATIENT ID	NOT NULL	NUMBER(30)
PATIENT NAME		VARCHAR(20)
ADDRESS		VARCHAR(20)
DATE OF BIRTH		NUMBER(30)
AGE		NUMBER(30)
BLOOD GROUP		VARCHAR(20)
DISEASE		VARCHAR(20)
DOA		NUMBER(30)
CONTACT NO		NUMBER(30)
GENDER		VARCHAR(20)

IPD Patient

NAME	NULL?	TYPE
PATIENT ID	NOT NULL	NUMBER(30)
PATIENT NAME		VARCHAR(20)
GENDER		VARCHAR(20)
AGE		NUMBER(30)
BLOOD GROUP		VARCHAR(20)
DOA		NUMBER(30)
DISEASE		VARCHAR(20)
ROOM NO		NUMBER(30)
DOSE		VARCHAR(20)
TIME 1		NUMBER(30)
TIME 2		NUMBER(30)
TIME 3		NUMBER(30)

Blood Bank

NAME	NULL?	TYPE
ID	NOT NULL	NUMBER(30)
DONOR NAME		VARCHAR(20)
ADDRESS		VARCHAR(20)
DOB		NUMBER(30)
GENDER		VARCHAR(20)
AGE		NUMBER(30)
BLOOD GROUP		VARCHAR(20)
PHONE NO		NUMBER(30)

Payment Info

NAME	NULL?	TYPE
SR NO	NOT NULL	VARCHAR(20)
NAME		VARCHAR(20)
ROOM TYPE		VARCHAR(20)
TOTAL FEE		NUMBER(30)
PAID FEE		NUMBER(30)
PAID FEE DATE		NUMBER(30)

SCREEN SHORT

LOGIN PAGE
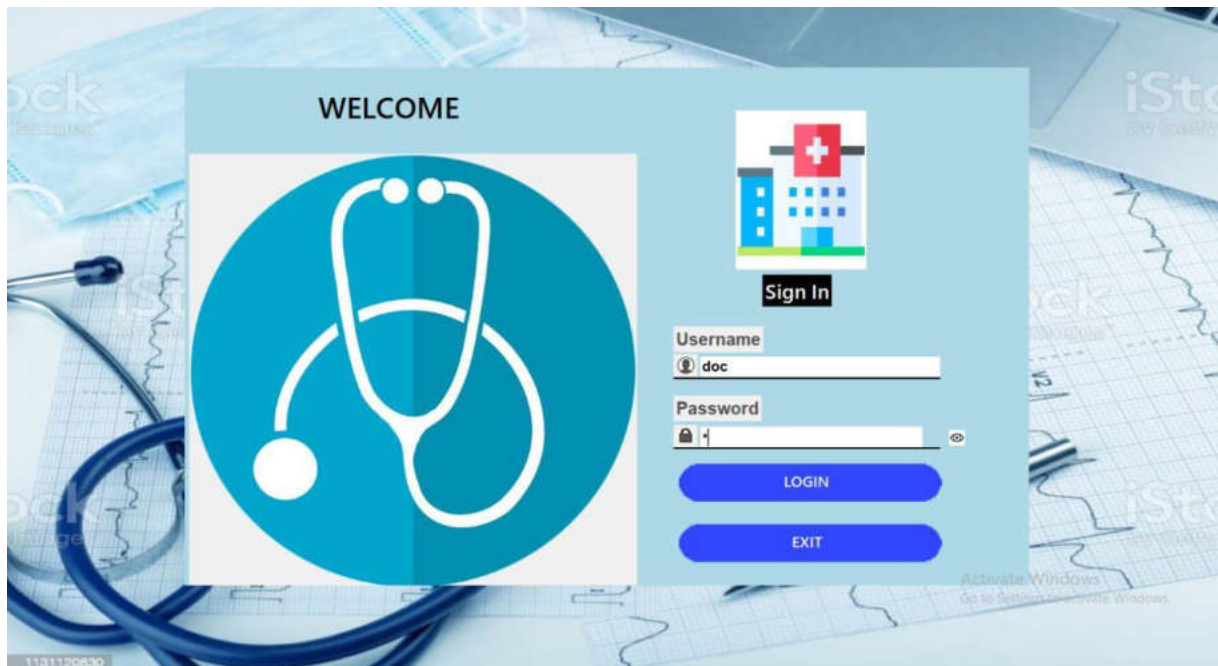
LOGIN PANNEL
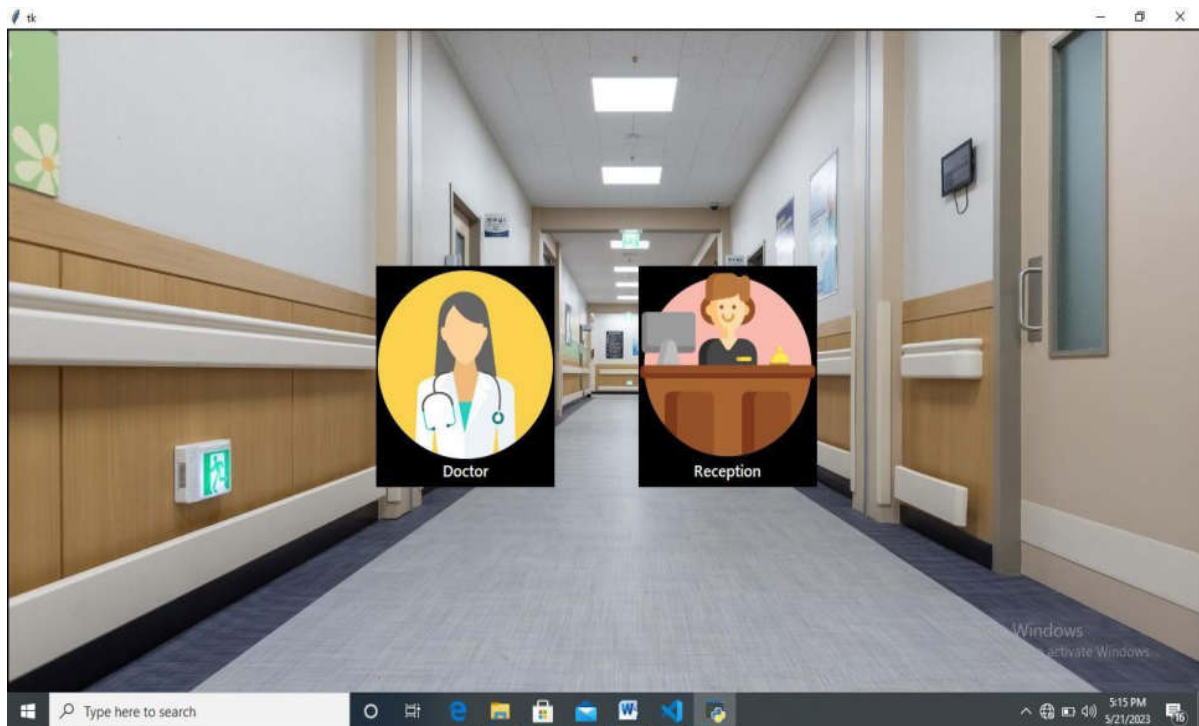
DOCTOR

RECEPTION

DOCTOR INFO

Add New Doctor

Doctor id	2		
Doctor Name	Sagar Sawant	**Degree**	MBBS
Contact No.	9370999387	**Specialization**	surgeon
Address	solapur	**Experience**	3 year
Age	31		
Gender	Male		

Save   **Clear**   **Back**

PATIENT REGISTRATION

NEW PATIENT / APPOINTMENT

Patient id	4	**Date of Addmition**	5/21/23
Patient Name	mukta gidde	**Contact No.**	4567897225
Address	pune	**Gender**	Female
Date of birth	5/6/05		
Age	19		
Blood Group	B+		
Diseas	gfhjtiytu		

Save   **Clear**   **Back**

OPD PATIENT

Hospital Management System

Patient Information

Patient Id	2	Contact No	897456789
Patient Name	Kadambari Gajare	Gender	Female
Address	Akluj	Alergies	
DOB	4/20/06	Symptoms	
Age	18	Name of tablet	
Blood grup	AB+	Referance name	
Disease	fever	Side effect	
Date of Addmition	5/20/23		

Prescription

Id	Patient Name	Age	BloodGroup	Diseas	DOA	Gender	Alergies	Symptoms	Name
1	Rajnandini Latkar	20	Rajnandini Latk	cold	5/16/23	Female	gyuyghj	gjhyu	trt
2	Kadambari Gajare	18	Kadambari Gaja	fever	5/20/23	Female	sdgdgf	fgdgf	gt

Delete	Prescription	Save Prescription Data	Clear	Exit

Activate Windows
Go to Settings to activate Windows.

IPD PATIENT

NEW PATIENT / APPOINTMENT

Patient id	11	Room no.	4
Patient Name	Akash shinde	Dose	vnvgbj
Gender	Male	Time1	9:30
Age	18	Time2	1:15
Blood Group	B+	Time3	8:00
DOA	5/20/05		
Diseas	fhjygkh		

Save	Clear	Back

Activate Windows
Go to Settings to activate Windows.

BL0OD BANK

Add New Donor

Donor id	11	Gender	Male
Donor Name	kim joshi	Age	28
Address	latur	Blood Group	B-
Date of birth	5/15/98	Contact No.	8080303160

Save   Clear   Back

PAYMENT

Payment info

SrNo 3

Name Atul phade

Room IPD

Total_Fee 40000

Paid_fee 40000

Paid_Fee_Date 22/5/2023

SrNo	Name	Room	Total_Fee	Paid_fee	Paid_fee_Date
1	kadambari	215	845917	55980	21-3-2023
1	shardh mane	IPD	30000	30000	15/5/2023
2	shardh mane	IPD	30000	30000	15/5/2023

add detail   Reset   Back

LIMITATIONS:

Heavy software development , Implementation and upgrade costs . Difficulty switching from manual processes

Because both the staff and patient are accustomed to manual processes and are therefore unable to deal with the new method quickly.

CONCLUSION :

This can be a powerful tool to help health care organization improve their processes and streamline their operations. It can provide an integrated comprehensive solution to managing patient records, billing and scheduling ,as well as provide real – time insights in to hospital performance.

THANK YOU

SOURCE CODE :-

BLOOD BANK

```
FROM TKINTER IMPORT *

FROM SUBPROCESS IMPORT CALL

FROM TKINTER IMPORT MESSAGEBOX

FROM TKINTER IMPORT TTK

# FROM TKCALENDAR IMPORT DATEENTRY

IMPORT SQLITE3


R=TK()

R.GEOMETRY("900X500")

R.OVERRIDEREDIRECT(1)

R.STATE('ZOOMED')


CON=SQLITE3.CONNECT('HM')

CONN=CON.CURSOR()

CON.EXECUTE('CREATE TABLE IF NOT EXISTS BB(ID INT,NAME
VARCHAR(20),ADDRESS VARCHAR(20),DOB VARCHAR(25),GENDER
VARCHAR(20),AGE INT,BLOODGROUP VARCHAR(20),CONTACTNO INT)')

# CON.EXECUTE('DROP TABLE TEMP BB')


DEF SAVE():

    A1=INT(E1.GET())

    A2=E2.GET()

    A3=E3.GET()

    A4=E4.GET()
```

```
    A5=G1.GET()

    A6=E6.GET()

    A7=BG.GET()

    A8=E8.GET()




    IF NOT A1 OR NOT A2 OR NOT A3 OR NOT E4 OR NOT A5 OR NOT A6 OR NOT A7
OR NOT A8 :

        MESSAGEBOX.SHOWERROR ('ERROR',"PLEASE FILL ALL THE MISSING
FIELDS!!")

    ELSE:

        TRY:

            CONN.EXECUTE('INSERT INTO BB VALUES
(?,?,?,?,?,?,?,?)',(A1,A2,A3,A4,A5,A6,A7,A8))

            CON.COMMIT()

            MESSAGEBOX.SHOWINFO('MSG',"RECORD OF {} WAS SUCCESSFULLY
ADDED".FORMAT(A2))

            CON.CLOSE()

            # R.DESTROY()

        EXCEPT:

            MESSAGEBOX.SHOWERROR("ERROR","PLEASE ENTER CORRECT
INFORMATION!!")

            R.DESTROY()


F=FRAME(R,HEIGHT=800,WIDTH=1500,BG='#FF6A6A')

F.PLACE(X=0,Y=0)


# CANVAS LINE
```

```
'''LINE=CANVAS(F,HEIGHT=10,WIDTH=1366,BG="#00008B")

LINE.CREATE_LINE(20,63,45,78,40,78)

LINE.PLACE(X=0,Y=570)'''


# SAVE BUTTON

SUB_BTN=BUTTON(F,TEXT="SAVE",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,

ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',WIDTH=7,COMMAND=SAVE)

SUB_BTN.PLACE(X=300,Y=600)




#RESET BUTTON FUNCTION

DEF RESET():

    CALL(["PYTHON","BLOODBANK.PY"])

    R.DESTROY()


RE_BTN=BUTTON(F,TEXT="CLEAR",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,

ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=RESET,WIDTH=7)

RE_BTN.PLACE(X=500,Y=600)


# LOGOUT BUTTON

DEF LOG():

    CALL(["PYTHON","DONORLIST.PY"])

    R.DESTROY()
```

```
LG_BTN=BUTTON(F,TEXT="BACK",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,

        ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=LOG,WIDTH=7)

LG_BTN.PLACE(X=700,Y=600)




# HEADING LABEL

LABEL=LABEL(F,TEXT="ADD NEW
DONOR",BG='#EE0000',FG="WHITE",FONT=("ROBOTO 20 BOLD"),BORDER=5)

LABEL.PLACE(X=550,Y=50)


# LABEL FOR PATIENT INFORMATION


L_D=LABEL(F,TEXT="DONOR ID",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_D.PLACE(X=230,Y=170)

CONN.EXECUTE('SELECT MAX(ID) FROM BB')

ID3=CONN.FETCHALL()

FOR I IN ID3:

  FOR J IN I:


    IF (J>=1):

        A0=J+1


    ELSE:

      A0=1
```

```
E1=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E1.PLACE(X=400,Y=170,WIDTH=300,HEIGHT=30)

E1.INSERT(0,A0)


L_P=LABEL(F,TEXT="DONOR NAME",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_P.PLACE(X=230,Y=240)

E2=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E2.PLACE(X=400,Y=240,WIDTH=300,HEIGHT=30)


L_ADD=LABEL(F,TEXT="ADDRESS",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_ADD.PLACE(X=230,Y=310)

E3=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E3.PLACE(X=400,Y=310,WIDTH=300,HEIGHT=30)



L_DOB=LABEL(F,TEXT="DATE OF BIRTH",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_DOB.PLACE(X=230,Y=380)

# E4=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

#  E4.PLACE(X=400,Y=280,WIDTH=200,HEIGHT=30)

E4=DATEEN

#(F,FONT=("ROBOTO 20"))

E4.PLACE(X=400,Y=380FROM TKINTER IMPORT *

FROM TKINTER IMPORT TTK

IMPORT TKINTER AS TK

FROM TKINTER IMPORT MESSAGEBOX

FROM SUBPROCESS IMPORT CALL

FROM PIL IMPORT IMAGE,IMAGETK

IMPORT MYSQL.CONNECTOR AS MY
```

```
IMPORT SQLITE3
# IMPORT DONOR_REGISTRATION AS DR


DEF INFO():


    INFO=TK()
    INFO.GEOMETRY("800X900")
    INFO.TITLE("DONOR INFO")
    INFO.STATE('ZOOMED')
    INFO.OVERRIDEREDIRECT(1)



    DEF DISPLAY_RECORDS():
        TREE.DELETE(*TREE.GET_CHILDREN())
        #
CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST="
LOCALHOST")
        CON=SQLITE3.CONNECT('HM')
        CONN=CON.CURSOR()
        CONN.EXECUTE('SELECT * FROM CA')
        DATA = CONN.FETCHALL()
        FOR RECORDS IN DATA:
            TREE.INSERT('', END, VALUES=RECORDS)



    DEF DELE():
```

```
    CON=SQLITE3.CONNECT('HM')



#CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST=
"LOCALHOST")

    CONN=CON.CURSOR()

    #CONN.EXECUTE('SELECT * FROM DONORR')

    #DATA = CONN.FETCHALL()

    #FOR RECORDS IN DATA:

     #TREE.INSERT('', END, VALUES=RECORDS)

    IF NOT TREE.SELECTION():

        MESSAGEBOX.SHOWERROR('ERROR!', 'PLEASE SELECT AN ITEM FROM
THE DATABASE')

    ELSE:

        CURRENT_ITEM = TREE.FOCUS()

        VALUES = TREE.ITEM(CURRENT_ITEM)

        SELECTION = VALUES["VALUES"]

        TREE.DELETE(CURRENT_ITEM)

        CONN.EXECUTE('DELETE FROM CA WHERE ID=%D' % SELECTION[0])

        CON.COMMIT()

        CONN.CLOSE()

        MESSAGEBOX.SHOWINFO('DONE', 'THE RECORD YOU WANTED DELETED
WAS SUCCESSFULLY DELETED.')

        DISPLAY_RECORDS()



    F1=FRAME(INFO,WIDTH=1366,HEIGHT=50,BG="#000088")

    F1.PLACE(X=0,Y=0)
```

```
F2=FRAME(INFO,WIDTH=1366,HEIGHT=900,BG="#000088")

F2.PLACE(X=0,Y=50)


#RESET BUTTON FUNCTION

DEF RESET():

  CALL(["PYTHON","RECEPTION.PY"])

  INFO.DESTROY()



BACK_BTN=BUTTON(F1,TEXT="BACK",BG='RED',FG='WHITE',FONT=("ROBOTO",15,"
BOLD"),BD=2,

        ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=RESET)

  BACK_BTN.PLACE(X=1270,Y=10)



DEL_BTN=BUTTON(F1,TEXT="DELETE",BG='RED',FG='WHITE',FONT=("ROBOTO",15,"
BOLD"),BD=2,

        ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=DELE)

  DEL_BTN.PLACE(X=1190,Y=10)

  CON=SQLITE3.CONNECT('HM')



#CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST=
"LOCALHOST")

  CONN=CON.CURSOR()

  CONN.EXECUTE('SELECT COUNT(ID) FROM CA')

  ID3=CONN.FETCHALL()

  FOR I IN ID3:

    FOR J IN I:

    TOTAL=J
```

```python
    T_LABEL=LABEL(F1,TEXT="TOTAL",FONT=("ROBOT 15
BOLD"),BG='#00008B',FG='RED')

    T_LABEL.PLACE(X=700,Y=10)

    T=ENTRY(F1,FONT=('ROBOTO 10 BOLD'))

    T.PLACE(X=760,Y=10,HEIGHT=25,WIDTH=56)

    T.INSERT(0,TOTAL)


    # NEWPATIENT BUTTON********************************************************


    # DEF NEW():

    #       CALL(["PYTHON","REGISTRATION FORM.PY"])

    #       INFO.DESTROY()


    # NEW_BTN=BUTTON(F1,TEXT="NEW
PTIENT",BG='GREEN',FG='WHITE',FONT=("ROBOTO",15,"BOLD"),BD=2,

    #          ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=NEW)

    # NEW_BTN.PLACE(X=970,Y=10)


    #
NEW_BTN=BUTTON(F1,TEXT="UPDATE",BG='RED',FG='WHITE',FONT=("ROBOTO",15,
"BOLD"),BD=2,

    #          ACTIVEBACKGROUND='WHITE',CURSOR='HAND2')

    # NEW_BTN.PLACE(X=1100,Y=10)


    # LABEL************************************************************************
```

```
    L=LABEL(F1,TEXT="CURRENT
ADDMITION",BG="#000088",FG="WHITE",BD=5,FONT=("ROBOTO 20 BOLD"))

    L.PLACE(X=0,Y=5)


    #
CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST="
LOCALHOST")

    # C/ONN=CON.CURSOR()

    # CONN.EXECUTE('SELECT * FROM DONORR')

    TREE = TTK.TREEVIEW(F2, HEIGHT=100, SELECTMODE=BROWSE,
COLUMNS=( "ID", "PATIENT NAME", "ADDRESS", "DOB",
"AGE","BLOODGROUP","DISEAS","DOA","PHONE NO.","GENDER"))


    X_SCROLLER = SCROLLBAR(TREE, ORIENT=HORIZONTAL,
COMMAND=TREE.XVIEW)

    Y_SCROLLER = SCROLLBAR(TREE, ORIENT=VERTICAL,
COMMAND=TREE.YVIEW)

    X_SCROLLER.PACK(SIDE=BOTTOM, FILL=X)

    Y_SCROLLER.PACK(SIDE=RIGHT, FILL=Y)

    TREE.CONFIG(YSCROLLCOMMAND=Y_SCROLLER.SET,
XSCROLLCOMMAND=X_SCROLLER.SET)

    TREE.HEADING('ID', TEXT='ID', ANCHOR=CENTER)

    TREE.HEADING('PATIENT NAME', TEXT='PATIENT NAME', ANCHOR=CENTER)

    TREE.HEADING('ADDRESS', TEXT='ADDRESS', ANCHOR=CENTER)

    TREE.HEADING('DOB', TEXT='DOB', ANCHOR=CENTER)


    TREE.HEADING('AGE', TEXT='AGE', ANCHOR=CENTER)

    TREE.HEADING('BLOODGROUP', TEXT='BLOODGROUP', ANCHOR=CENTER)
```

```
        TREE.HEADING('DISEAS', TEXT='DISEAS', ANCHOR=CENTER)

        TREE.HEADING('DOA', TEXT='DOA', ANCHOR=CENTER)

        TREE.HEADING('PHONE NO.', TEXT='PHONE NO.', ANCHOR=CENTER)

        TREE.HEADING('GENDER', TEXT='GENDER', ANCHOR=CENTER)


        TREE.COLUMN('#0', WIDTH=2, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#1', WIDTH=50, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#2', WIDTH=300, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#3', WIDTH=100, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#4', WIDTH=90, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#5', WIDTH=80, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#6', WIDTH=90, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#7', WIDTH=160, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#8', WIDTH=160, STRETCH=NO,ANCHOR='CENTER')

        TREE.COLUMN('#9', WIDTH=190, STRETCH=NO,ANCHOR='CENTER')

        TREE.PLACE(Y=30, RELWIDTH=1, RELHEIGHT=0.9, RELX=0)

        DISPLAY_RECORDS()



        INFO.MAINLOOP()

INFO())FROM SUBPROCESS IMPORT CALL

FROM TKINTER IMPORT MESSAGEBOX

FROM TKINTER IMPORT TTK

FROM TKCALENDAR IMPORT DATEENTRY

IMPORT SQLITE3



R=TK()
```

```
R.GEOMETRY("900X500")

R.OVERRIDEREDIRECT(1)

R.STATE('ZOOMED')


CON=SQLITE3.CONNECT('HM')

CONN=CON.CURSOR()

CON.EXECUTE('CREATE TABLE IF NOT EXISTS DOC(ID INT,NAME
VARCHAR(20),CONTACTNO INT,ADDRESS VARCHAR(20),AGE INT,GENDER
VARCHAR(20),DEGREE VARCHAR(20),SPECIALIZATION
VARCHAR(20),EXPERIANCE VARCHAR(20))')

# CON.EXECUTE('DROP TABLE TEMP CA')


DEF SAVE():


    A1=E1.GET()

    A2=E2.GET()

    A3=E3.GET()

    A4=E4.GET()

    A5=E5.GET()

    A6=G1.GET()

    A7=E7.GET()

    A8=E8.GET()

    A9=E9.GET()




    IF NOT A1 OR NOT A2 OR NOT A3 OR NOT A4 OR NOT A5 OR NOT A6 OR NOT A7
OR NOT A8 OR NOT A9:
```

```
    MESSAGEBOX.SHOWERROR ('ERROR',"PLEASE FILL ALL THE MISSING
FIELDS!!")

  ELSE:

    TRY:

        CONN.EXECUTE('INSERT INTO DOC VALUES
(?,?,?,?,?,?,?,?,?)',(A1,A2,A3,A4,A5,A6,A7,A8,A9))

        CON.COMMIT()

        MESSAGEBOX.SHOWINFO('MSG',"RECORD OF {} WAS SUCCESSFULLY
ADDED".FORMAT(A2))

        CON.CLOSE()

        # R.DESTROY()

    EXCEPT:

        MESSAGEBOX.SHOWERROR("ERROR","PLEASE ENTER CORRECT
INFORMATION!!")

        # R.DESTROY()




F=FRAME(R,HEIGHT=800,WIDTH=1500,BG='#ADD8E6')

F.PLACE(X=0,Y=0)


LABEL=LABEL(F,TEXT=" ADD NEW
DOCTOR",BG='#00008B',FG="WHITE",FONT=("ROBOTO 20 BOLD"),BORDER=5)

LABEL.PLACE(X=0,Y=0)




L_D=LABEL(F,TEXT="DOCTOR ID",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_D.PLACE(X=230,Y=70)

CONN.EXECUTE('SELECT MAX(ID) FROM DOC')
```

```
ID3=CONN.FETCHALL()
FOR I IN ID3:
   FOR J IN I:


      IF (J>=1):
          A0=J+1


      ELSE:
        A0=1


E1=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))
E1.PLACE(X=400,Y=70,WIDTH=300,HEIGHT=30)
E1.INSERT(0,A0)



L_P=LABEL(F,TEXT="DOCTOR NAME",FG="BLACK",FONT=("ROBOTO 15 BOLD"))
L_P.PLACE(X=230,Y=140)
E2=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))
E2.PLACE(X=400,Y=140,WIDTH=300,HEIGHT=30)


L_ADD=LABEL(F,TEXT="CONTACT NO.",FG="BLACK",FONT=("ROBOTO 15 BOLD"))
L_ADD.PLACE(X=230,Y=210)
E3=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))
E3.PLACE(X=400,Y=210,WIDTH=300,HEIGHT=30)



L_DOB=LABEL(F,TEXT="ADDRESS",FG="BLACK",FONT=("ROBOTO 15 BOLD"))
L_DOB.PLACE(X=230,Y=280)
```

```
E4=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E4.PLACE(X=400,Y=280,WIDTH=300,HEIGHT=30)


L_AGE=LABEL(F,TEXT="AGE",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_AGE.PLACE(X=230,Y=350)

E5=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E5.PLACE(X=400,Y=350,WIDTH=300,HEIGHT=30)


L_GENDER=LABEL(F,TEXT="GENDER",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

L_GENDER.PLACE(X=230,Y=420)


G1=TTK.COMBOBOX(F,FONT=("ROBOTO 10 BOLD"))


G1['VALUES']=('MALE','FEMALE','OTHER')

G1.PLACE(X=400,Y=420,WIDTH=300,HEIGHT=30)


LP=LABEL(F,TEXT="DEGREE",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

LP.PLACE(X=730,Y=140)

E7=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E7.PLACE(X=940,Y=140,WIDTH=300,HEIGHT=30)


LP=LABEL(F,TEXT="SPECIALIZATION",FG="BLACK",FONT=("ROBOTO 15 BOLD"))

LP.PLACE(X=730,Y=210)

E8=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E8.PLACE(X=940,Y=210,WIDTH=300,HEIGHT=30)


LP=LABEL(F,TEXT="EXPERIENCE",FG="BLACK",FONT=("ROBOTO 15 BOLD"))
```

```
LP.PLACE(X=730,Y=280)

E9=ENTRY(F,BD=4,FONT=("ROBOTO 10 BOLD"))

E9.PLACE(X=940,Y=280,WIDTH=300,HEIGHT=30)


SUB_BTN=BUTTON(F,TEXT="SAVE",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,


ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',WIDTH=7,COMMAND=SAVE)

SUB_BTN.PLACE(X=300,Y=600)


#RESET BUTTON FUNCTION

DEF RESET():

    CALL(["PYTHON","DOCTORS.PY"])

    R.DESTROY()


RE_BTN=BUTTON(F,TEXT="CLEAR",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,


ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=RESET,WIDTH=7)

RE_BTN.PLACE(X=500,Y=600)


# LOGOUT BUTTON

DEF LOG():

    CALL(["PYTHON","RECEPTION.PY"])

    R.DESTROY()

LG_BTN=BUTTON(F,TEXT="BACK",BG='#00008B',FG='WHITE',FONT=("ROBOTO",20,
"BOLD"),BD=2,

            ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=LOG,WIDTH=7)

LG_BTN.PLACE(X=700,Y=600)
```

```
R.MAINLOOP()FROM TKINTER IMPORT *

FROM TKINTER IMPORT TTK

IMPORT TKINTER AS TK

FROM TKINTER IMPORT MESSAGEBOX

FROM SUBPROCESS IMPORT CALL

FROM PIL IMPORT IMAGE,IMAGETK

IMPORT MYSQL.CONNECTOR AS MY

IMPORT SQLITE3

# IMPORT DONOR_REGISTRATION AS DR


DEF INFO():

    INFO=TK()
    INFO.GEOMETRY("800X900")
    INFO.TITLE("DONOR INFO")
    INFO.STATE('ZOOMED')
    INFO.OVERRIDEREDIRECT(1)



    DEF DISPLAY_RECORDS():
        TREE.DELETE(*TREE.GET_CHILDREN())
```

```
        #
CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST="
LOCALHOST")

        CON=SQLITE3.CONNECT('HM')

        CONN=CON.CURSOR()

        CONN.EXECUTE('SELECT * FROM BB')

        DATA = CONN.FETCHALL()

        FOR RECORDS IN DATA:

            TREE.INSERT(", END, VALUES=RECORDS)




    DEF DELE():

        CON=SQLITE3.CONNECT('HM')

        CONN=CON.CURSOR()

        #CONN.EXECUTE('SELECT * FROM DONORR')

        #DATA = CONN.FETCHALL()

        #FOR RECORDS IN DATA:

         #TREE.INSERT(", END, VALUES=RECORDS)

        IF NOT TREE.SELECTION():

            MESSAGEBOX.SHOWERROR('ERROR!', 'PLEASE SELECT AN ITEM FROM
THE DATABASE')

        ELSE:

            CURRENT_ITEM = TREE.FOCUS()

            VALUES = TREE.ITEM(CURRENT_ITEM)

            SELECTION = VALUES["VALUES"]

            TREE.DELETE(CURRENT_ITEM)

            CONN.EXECUTE('DELETE FROM BB WHERE ID=%D' % SELECTION[0])

            CON.COMMIT()
```

```
        MESSAGEBOX.SHOWINFO('DONE', 'THE RECORD YOU WANTED DELETED
WAS SUCCESSFULLY DELETED.')

        DISPLAY_RECORDS()



    F1=FRAME(INFO,WIDTH=1366,HEIGHT=50,BG="#EE0000")

    F1.PLACE(X=0,Y=0)

    F2=FRAME(INFO,WIDTH=1366,HEIGHT=900,BG="#EE0000")

    F2.PLACE(X=0,Y=50)


    #RESET BUTTON FUNCTION

    DEF RESET():

        CALL(["PYTHON","RECEPTION.PY"])FROM TKINTER IMPORT *

FROM TKINTER IMPORT TTK

IMPORT TKINTER AS TK

FROM TKINTER IMPORT MESSAGEBOX

FROM SUBPROCESS IMPORT CALL

FROM PIL IMPORT IMAGE,IMAGETK

IMPORT MYSQL.CONNECTOR AS MY

IMPORT SQLITE3

# IMPORT DONOR_REGISTRATION AS DR


DEF INFO():

    INFO=TK()

    INFO.GEOMETRY("800X900")

    INFO.TITLE("DONOR INFO")
```

```
    INFO.STATE('ZOOMED')

    INFO.OVERRIDEREDIRECT(1)



    DEF DISPLAY_RECORDS():

      TREE.DELETE(*TREE.GET_CHILDREN())

      #
CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST="
LOCALHOST")

      CON=SQLITE3.CONNECT('HM')

      CONN=CON.CURSOR()

      CONN.EXECUTE('SELECT * FROM CA')

      DATA = CONN.FETCHALL()

      FOR RECORDS IN DATA:

        TREE.INSERT(", END, VALUES=RECORDS)



    DEF DELE():

      CON=SQLITE3.CONNECT('HM')


#CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST=
"LOCALHOST")

      CONN=CON.CURSOR()

      #CONN.EXECUTE('SELECT * FROM DONORR')

      #DATA = CONN.FETCHALL()

      #FOR RECORDS IN DATA:
```

```
        #TREE.INSERT(", END, VALUES=RECORDS)

    IF NOT TREE.SELECTION():

        MESSAGEBOX.SHOWERROR('ERROR!', 'PLEASE SELECT AN ITEM FROM
THE DATABASE')

    ELSE:

        CURRENT_ITEM = TREE.FOCUS()

        VALUES = TREE.ITEM(CURRENT_ITEM)

        SELECTION = VALUES["VALUES"]

        TREE.DELETE(CURRENT_ITEM)

        CONN.EXECUTE('DELETE FROM CA WHERE ID=%D' % SELECTION[0])

        CON.COMMIT()

        CONN.CLOSE()

        MESSAGEBOX.SHOWINFO('DONE', 'THE RECORD YOU WANTED DELETED
WAS SUCCESSFULLY DELETED.')

        DISPLAY_RECORDS()




    F1=FRAME(INFO,WIDTH=1366,HEIGHT=50,BG="#000088")

    F1.PLACE(X=0,Y=0)

    F2=FRAME(INFO,WIDTH=1366,HEIGHT=900,BG="#000088")

    F2.PLACE(X=0,Y=50)


    #RESET BUTTON FUNCTION

    DEF RESET():

      CALL(["PYTHON","HOMEPAGE.PY"])

      INFO.DESTROY()
```

```
BACK_BTN=BUTTON(F1,TEXT="BACK",BG='RED',FG='WHITE',FONT=("ROBOTO",15,"
BOLD"),BD=2,
        ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=RESET)
    BACK_BTN.PLACE(X=1270,Y=10)


DEL_BTN=BUTTON(F1,TEXT="DELETE",BG='RED',FG='WHITE',FONT=("ROBOTO",15,"
BOLD"),BD=2,
        ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=DELE)
    DEL_BTN.PLACE(X=1190,Y=10)
    CON=SQLITE3.CONNECT('HM')


#CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST=
"LOCALHOST")
    CONN=CON.CURSOR()
    CONN.EXECUTE('SELECT COUNT(ID) FROM CA')
    ID3=CONN.FETCHALL()
    FOR I IN ID3:
      FOR J IN I:
        TOTAL=J


    T_LABEL=LABEL(F1,TEXT="TOTAL",FONT=("ROBOT 15
BOLD"),BG='#00008B',FG='RED')
    T_LABEL.PLACE(X=700,Y=10)
    T=ENTRY(F1,FONT=('ROBOTO 10 BOLD'))
    T.PLACE(X=760,Y=10,HEIGHT=25,WIDTH=56)
    T.INSERT(0,TOTAL)
```

```
    # NEWPATIENT BUTTON*********************************************************


   # DEF NEW():

   #      CALL(["PYTHON","REGISTRATION FORM.PY"])

   #      INFO.DESTROY()



   # NEW_BTN=BUTTON(F1,TEXT="NEW
PTIENT",BG='GREEN',FG='WHITE',FONT=("ROBOTO",15,"BOLD"),BD=2,
   #           ACTIVEBACKGROUND='WHITE',CURSOR='HAND2',COMMAND=NEW)

   # NEW_BTN.PLACE(X=970,Y=10)




   #
NEW_BTN=BUTTON(F1,TEXT="UPDATE",BG='RED',FG='WHITE',FONT=("ROBOTO",15,
"BOLD"),BD=2,
   #           ACTIVEBACKGROUND='WHITE',CURSOR='HAND2')

   # NEW_BTN.PLACE(X=1100,Y=10)



    #  LABEL***********************************************************************


   L=LABEL(F1,TEXT="CURRENT
ADDMITION",BG="#000088",FG="WHITE",BD=5,FONT=("ROBOTO 20 BOLD"))

   L.PLACE(X=0,Y=5)



   #
CON=MY.CONNECT(DATABASE="BLOOD",USER="ROOT",PASSWORD="1234",HOST="
LOCALHOST")

   # C/ONN=CON.CURSOR()

   # CONN.EXECUTE('SELECT * FROM DONORR')
```

```
TREE = TTK.TREEVIEW(F2, HEIGHT=100, SELECTMODE=BROWSE,
COLUMNS=( "ID", "PATIENT NAME", "ADDRESS", "DOB",
"AGE","BLOODGROUP","DISEAS","DOA","PHONE NO.","GENDER"))


X_SCROLLER = SCROLLBAR(TREE, ORIENT=HORIZONTAL,
COMMAND=TREE.XVIEW)

Y_SCROLLER = SCROLLBAR(TREE, ORIENT=VERTICAL,
COMMAND=TREE.YVIEW)

X_SCROLLER.PACK(SIDE=BOTTOM, FILL=X)

Y_SCROLLER.PACK(SIDE=RIGHT, FILL=Y)

TREE.CONFIG(YSCROLLCOMMAND=Y_SCROLLER.SET,
XSCROLLCOMMAND=X_SCROLLER.SET)

TREE.HEADING('ID', TEXT='ID', ANCHOR=CENTER)

TREE.HEADING('PATIENT NAME', TEXT='PATIENT NAME', ANCHOR=CENTER)

TREE.HEADING('ADDRESS', TEXT='ADDRESS', ANCHOR=CENTER)

TREE.HEADING('DOB', TEXT='DOB', ANCHOR=CENTER)



TREE.HEADING('AGE', TEXT='AGE', ANCHOR=CENTER)

TREE.HEADING('BLOODGROUP', TEXT='BLOODGROUP', ANCHOR=CENTER)


TREE.HEADING('DISEAS', TEXT='DISEAS', ANCHOR=CENTER)

TREE.HEADING('DOA', TEXT='DOA', ANCHOR=CENTER)

TREE.HEADING('PHONE NO.', TEXT='PHONE NO.', ANCHOR=CENTER)

TREE.HEADING('GENDER', TEXT='GENDER', ANCHOR=CENTER)


TREE.COLUMN('#0', WIDTH=2, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#1', WIDTH=50, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#2', WIDTH=300, STRETCH=NO,ANCHOR='CENTER')
```

```
TREE.COLUMN('#3', WIDTH=100, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#4', WIDTH=90, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#5', WIDTH=80, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#6', WIDTH=90, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#7', WIDTH=160, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#8', WIDTH=160, STRETCH=NO,ANCHOR='CENTER')

TREE.COLUMN('#9', WIDTH=190, STRETCH=NO,ANCHOR='CENTER')

TREE.PLACE(Y=30, RELWIDTH=1, RELHEIGHT=0.9, RELX=0)

DISPLAY_RECORDS()


INFO.MAINLOOP()
INFO()
```

THANK YOU,

A
Project Report
On
Shanti Clinical Lab

Submitted to
Solapur University, Solapur

In Partial fulfillment
of
Department of computer science,
B.Sc(ECS)-III

By

Mr. Utkarsh Umesh Lokhande
Mr. Mangesh Suryakant Magar

Under the guidance ofProf.
Salunkhe S.S.

Greenfingers College of Computer and Technology, Akluj

Year: 2022-2023

Certificate
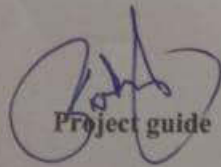
Greenfingers College of Computer and Technology Akluj, Dist:Solapur
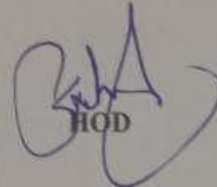
CERTIFICATE
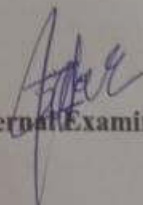
Certified that the project field work report titled *"Shanti Clinical Lab"* Has been completed satisfactorily in partial fulfillment of B.Sc(ECS)-III Semester–VI of the Solapur University Solapur . For the academic year 2022-2023.

Mr. Utkarsh Umesh Lokhande

Mr. Mangesh Suryakant Magar

Project guide

HOD

External Examiner:

Place: Akluj

Date: 04/06/2023

ACKNOWLEDGEMENT

The development of   system involves contribution of time & efforts of many peoples. We have to acknowledge their help individually by expressing my hearty gratitude to all of them.

This report would not be in your hands without the help of many besides of our self. We must express our gratitude towards our project guideProf. Mr.Salunkhe.S.S Sir for his guidance & giving us good direction while working on project.

We must express our sincere thanks Prof. Mr. Salunkhe.S.S H.O.D. of Computer Science & entire staff for their valuable guidance & support.

Our deep sense of gratitude also goes to all friends who help us for Successful completion of project.

INDEX

INTRODUCTION

We are trying to develop Software as "Shanti Clinical Lab". In this Software, every task is done without Internet. It means all work done computerized. So that the processing time gets reduce & get required proper output is done in the given time. Using this Software we can store all information related to Worker Work, Customer Records and Billing System etc.

We have designed our "Shanti Clinical Lab" on the basis of the facts & requirements collected from LABORATORY System. The manual system use in most of the LABORATORY System has the following problems:

- Difficulty in updating of records.
- Difficulty in keeping the LABORATORY information specifically about the sample etc.
- Difficulty in handling the register of the LABORATORY system.
- There is always chance of data redundancy & data inconsistency.
- The difficulty of deleting any particular record.
- There is always a chance of error.

To avoid above problems there should be a database for the LABORATORY System containing the information about their Sample Testing.

Declaration

DECLARATION

The Head of Department Computer Science,

Greenfingers College of Computer   and Technology   Akluj .

Respected Sir,

We understood here by declared that this project is entirely data collected by me we have not copied anything from any report submitted

by **Greenfingers College of Computer and Technology.**
or elsewhere we understood that such coming is liable to be punished in any way the authorities deem fit….

Greenfingers College of Computer and Technology , Akluj.

Thank you.

DETAILS:-

In this system the patient's information is taken from that person and keeps all the record of that person From that information system manages all information about patient his patient ID etc.

EXISTING SYSTEM

DETAILS OF EXISTING SYSTEM

We are Senior student of **Greenfingers College of Computer and Technology.**

The Sample testing process is very tedious & time consuming job to the organizer. In this system the petient get the order details form, fill it &
 submitted to the organizer with information such as personal detail & order details etc…
 Then the organizer also wants to consist the details about supplier,
 agent . More time require for calculation, less efficient result….

NEED OF NEW SYSTEM

NEED OF NEW SYSTEM

Saving of manpower and time:-

Computer saves organization manpower in the system.One should keep all updated information in different register.For one entry there are different items like Item master,issue etc. But in case of computerization once you give the command to generate,Item will be generated within a second.

Accuracy and efficiency:-

If the programs are reliable and operators give higher degree of accuracy in their work,the afficiency of work is improved.

Large data storage:-

Large amount of data can be stored for long duration,there is no need of maintains of heavy registers.

Early and correct decision making:-
Because of fast communication decision making procedure is simplified and fast.The complexity of the decision-making procedure is reduced.The latest information is available to the manager to take the decision.Not only latest information but all previous histories of the can be made available to the manager so that he could take early decision.

Objective Of Proposed System

❖ It should reduce the time required for processing.

❖ It should provide outputs with maximum accuracy.

❖ It should bring flexibility while working with the system

❖ It should easily come out with various kind of reports as per Requirement.

SAILENT   FEATURES

➢ *Menu Driven Architecture:-*

The Laboratory management System application is completely Menu Driven and hence easy to use The short cut keys for the each menu items thus by helping user to easily interact with Laboratory Management system Application and Getting acquainted with it.

➢ *Use Of Toolbar:-*

Toolbar for frequently used menu items are provided for quick   reference for menu action user frequently.

➢ *User Friendly:-*

The screens are well designed and designed and self explanatory with information specified when ever required. Thus makes user interaction easy and fast.

➢ *Easy To Use:* The Medical System has been designed as such that user finds it easy to operate Short cut keys and its function are very simple to understand. So any user and understand easily.

The System is quite capable of giving response to the multiple asked by user as well as generating reports accurately But no system even complete.

LIMITATION AND DRAWBACKS

The following are some of flow in proposed Shanti
Clinical Lab System.

1. Details of application about the Laboratory
   Section.

2. This system not capable for regular reports.

3. The system is at present not installed of LAN
   which can
   Be further improved.

FUTURE ENHANCEMENT

➢ Implementation of validation is possible.

➢ Report generation can be possible.

SCOPE OF THE SYSTEM

<u>Scope Of The System</u>

1. There are several file is used.

2. Number of reports have to be generated.

3. Entire are stored in disk or in portable disk.

4. Numbers of queries are used.

FEASIBILITY STUDY

Prior the development through a study of system is carried out which involves.

1. Identification of organization or user needs.
2. Identification of how different task is carried out.
3. Identification of whether the proposed system can meet user need.
4. Providing technical feasibility of the proposed system.

FEASIBILITY STUDY HAS THREE TYPES

1. **Technical feasibility.**
2. **Operational feasibility.**
3. **Economical feasibility.**

1. TECHNICAL FEASIBILITY

1. System is developed using visual Studio 2010 as front end & Oracle 11g as a back end.

2. The system being user friendly, data entry & report generation is easy.

3. Back up & restore facility are provided for easy retrieval & access of data.

2. OPERATIONAL FEASIBILITY

The implementation of this system will not increase user load.This is usually depends upon the staff members who would mark operational feasible by using system.

3.ECONOMICAL FEASIBILIT

Looking at the available resources and advantages of the system the economical feasibility becomes a non-issue.As the system is developed using existing hardware and software.

ENTITY RELATIONSHIP DIAGRAM
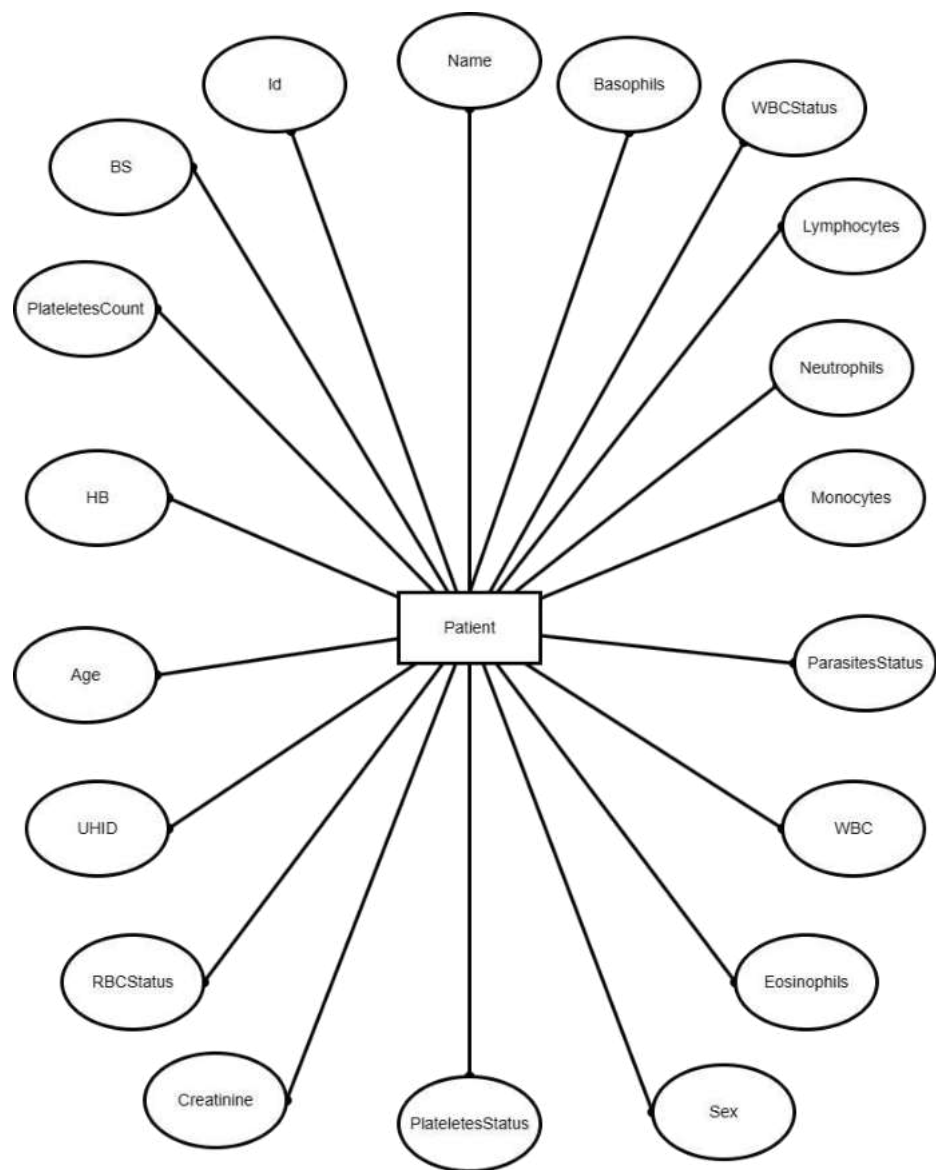
CONTROL FLOW DIAGRAM
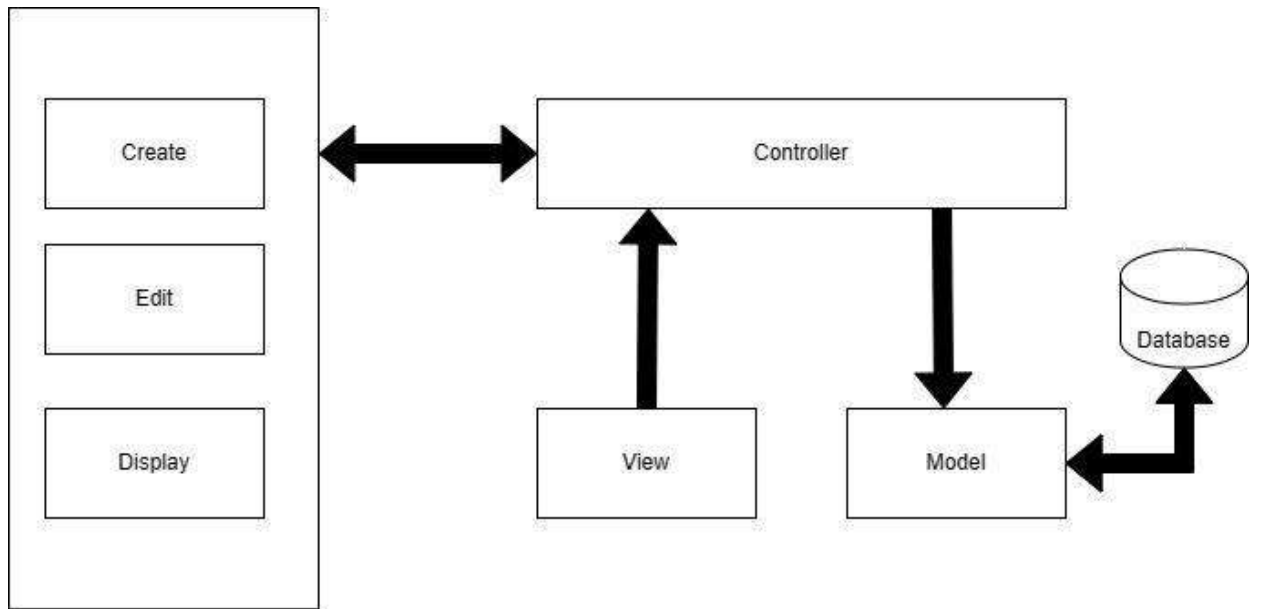
SCREEN

DESIGN

01) Home Page
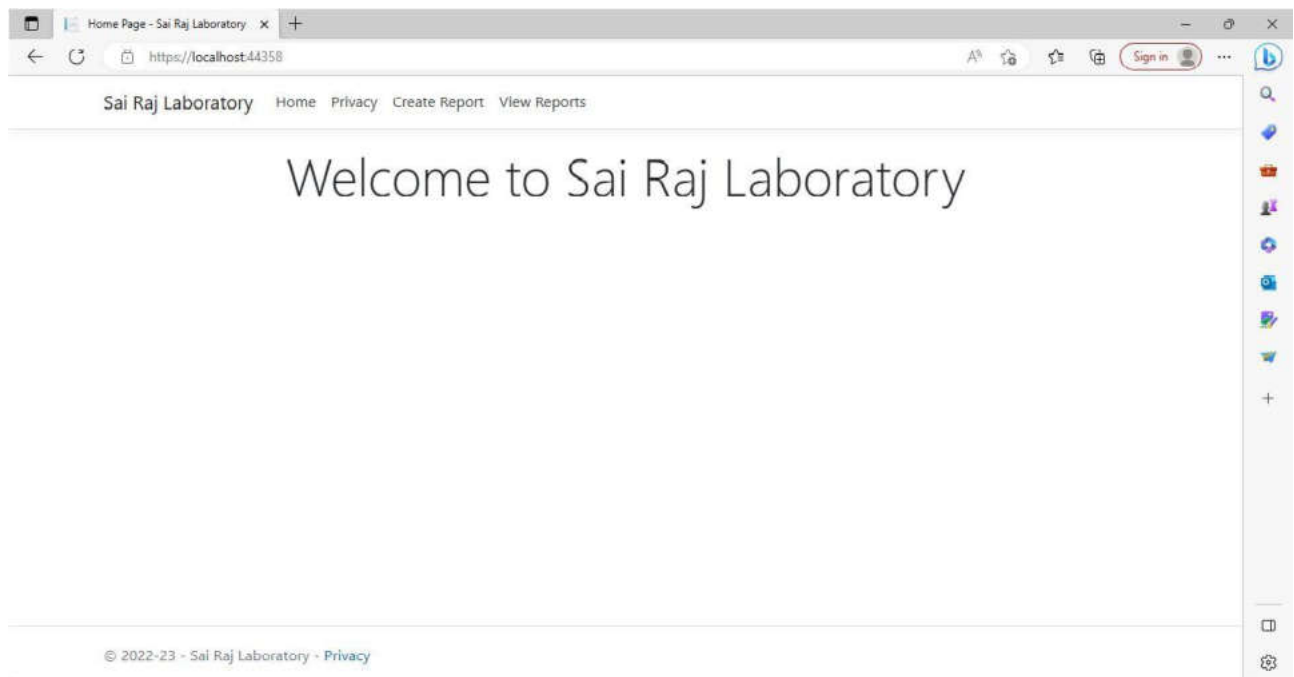
02) Privacy Policy Page

03) Create Report Page

04) View All Reports Page

05) Details View Page

Sai Raj Laboratory   Home   Privacy   Create Report   View Reports

Details
Report

PatientId	3
PatientName	Abhishek Sutar
UHID	7389438
PatientAge	26
PatientSex	Male
PatientHB	8923
PatientWBC	2388
PatientNeutrophils	989823
PateintLymphocytes	89823
PateintEosinophils	90923
PatientMonocytes	90293
PatientBasophils	902309
PatientPlateletesCount	9032
PatientWBCStatus	Normal
PatientRBCStatus	Normocytic-Normochromic
PatientPlateletesStatus	Inadequate
PatientParasitesStatus	Normal
PatientBS	23
PatientCreatinine	34

Back to List

© 2022-23 - Sai Raj Laboratory - Privacy

06) Edit Report Page

07) Final Print Page

PatientName:	Abhishek Sutar		Date: 27/05/2023
PatientAge: 26	PatientSex Male		UHID: 7389438
Ref. by: 1. Dr. ABC S. CDR M.B.B.S.D.Ortho			
2. Dr. NHS R. BIH B.H.M.S			

Test	Observed Value	Normal Range
Hemoglobin	8923	Male: 12-17 gm%
		Female: 11-15gm%
Total WBC Count	2388	4000-11000/cumm
Differential Count		
Neutrophils	989823	40-70%
Lymphocytes	89823	20-40%
Eosinophils	90923	2-6%
Monocytes	90295	1-5%
Basophils	902309	0-1%
Platelates Count	9032	1.50-4.50 Lakhs/cumm
Microscopic Examination:		
WBC	2388	
RBC	Normocytic Normochromic	
Platelates	Inadequate	
Parasites	Normal	
E.S.R.	mms at the end of 1Hr.	Male x 0-15mms
		Male x 0-20mms
Blood Sugar (R)	23 mg/dl	Upto 150 mg/dl
Sr. Creatinine	34 mg/dl	0.6 - 1.4 mg/dl

Medical Lab Technologist

TABLE DESIGN

1) CustomerDetails

Name	Data Type	Key
PatientId	INTEGER	
PatientName	TEXT	
PatientAge	INTEGER	
PatientSex	TEXT	
PatientHB	REAL	
PatientWBC	INTEGER	
PatientNeutrophils	INTEGER	
PateintLymphocytes	INTEGER	
PateintEosinophils	INTEGER	
PatientMonocytes	INTEGER	
PatientBasophils	INTEGER	
PatientPlateletesCount	INTEGER	
PatientWBCStatus	TEXT	
PatientRBCStatus	TEXT	
PatientPlateletesStatus	TEXT	
PatientParasitesStatus	TEXT	
UHID	TEXT	

PatientBS	REAL	
PatientCreatinine	REAL	

SYSTEM

REQUIREMENTS

❖ **Hardware Platform : -**

➢ Processor: - Min. intel i3 Processor.

➢ Hard Disk: - Minimum 256 MB Hard Disk Drive.

➢ RAM: - Minimum 2 GB RAM.

❖ **Software Platform : -**

➢ Windows10

➢ SQLite

➢ VISUAL STUDIO 2022

❖ **Front End : -** Asp.net Core MVC (.cshtml)

❖ **Back End : -** Asp.net Core MVC + SQLite

BIBLIOGRAPHY

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- Microsoft.com

- SQL.com