House rental system

Submitted by

Tanuja Kharol [RA2111003011808]
Akula Lakshmi Nikitha [RA2111003011810]
Ishika Jain [RA2111003011813]

Under the Guidance of

Mr. U.M. Prakash

Assistant professor , Department of Computing Technologies

In partial satisfaction of the requirements for the degree of

BACHELOR OF TECHNOLOGY
in
COMPUTER SCIENCE ENGINEERING
of
FACULTY OF ENGINEERING AND TECHNOLOGY

SCHOOL OF COMPUTING

COLLEGE OF ENGINEERING AND TECHNOLOGY

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

KATTANKULATHUR - 603203

MAY 2023

COLLEGE OF ENGINEERING & TECHNOLOGY
SRM INSTITUTE OF SCIENCE & TECHNOLOGY
S.R.M. NAGAR, KATTANKULATHUE – 603 203
Chengalpattu District

BONAFIDE CERTIFICATE

RegisterNo. **RA211 1003011808,RA2111003011810,RA2111003011813**
Certified to be the bonafide work done by **Tanuja Kharol , Akula Lakshmi Nikitha , Ishika Jain** of II Year/IV Sem B.Tech Degree Course in the **Practical Software Software Engineering and Project Management 18CSC206J** in **SRM INSTITUTE OF SCIENCE AND TECHNOLOGY,**

Kattankulathur during the academic year 2022 – 2023.

LAB INCHARGE
Mr. U.M. Prakash
Assistant Professor
Department of Computing Technologies
SRMIST – KTR.
Date :

Department of Computing Technology Kattankulathur 603 203 SRM IST

M. Pushpalatha

Head of the Department
Dr. M. Pushpalatha
Professor and Head
Department of Computing Technology
SRMIST – KTR.

ABSTRACT

The House Rental System is an online platform designed to simplify the process of finding, renting, and managing a rental property. The system provides a user-friendly interface for both landlords and tenants, allowing them toeasily create and manage listings, search for available properties, communicate with each other, and complete rental transactions.Landlords can create detailed property listings, including descriptions, photos, and rental terms, and manage their rental properties through the platform. They can also communicate with potential tenants and accept rental applications online. Tenants can search for available rental properties based on their preferred location, price range, and other criteria. They can view detailed property information, including photos, amenities, and rental terms, andcommunicate with landlords through the platform. Tenants can also submit rental applications and make rental payments online. The House Rental System streamlines the rental process by providing a centralized platform for landlords and tenants to communicate, manage rental transactions, and maintain rental records. This system is secure, reliable, and easy to use, providing a convenient and efficient way for both landlords and tenants to manage their rental properties.

LIST OF EXPERIMENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS

1. E-R : ENTITY RELATIONSHIP
2. DBMS : DATA BASE MANAGEMENT SYSTEM
3. ISA : ENTITY RELATIONSHIP
4. SWOT : STRENGTH WEAKNESS OPPOURTUNITIES THREATS
5. RMMM : RISK MITIGATION, MONITORING AND MANAGEMENT
6. WBS : WORK BREAK DOWN STRUCTURE
7. DFD : DATA FLOW DIAGRAM

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	1
Title of Experiment	To identify the Software Project, Create Business Case, Arrive at a Problem Statement
Name of the candidate	Tanuja kharol
Team Members	Ishika Jain, Akula Lakshmi Nikitha
Register Number	RA2111003011808 , RA2111003011813 ,RA2111003011810
Date of Experiment	19.01.2023

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the <title of the project>

Team Members:

S. No	Register No	Name	Role
1	RA2111003011808	Tanuja Kharol	**Lead/Rep**
2	RA2111003011810	Akula Lakshmi Nikitha	**Member**
3	RA2111003011813	Ishika Jain	**Member**

Project Title : House Renting System .

Project Description :

We live in a digital age, and let's face it—there's almost nothing you can't do online. The system process based on the user's inputs and give the best match to the user . And so, the savvy renter also wants to organize their rent payments, maintenance requests, and sign rental leases online . Not only do they make rent collection more manageable, but they also streamline a whole list of other tasks.

BUSINESS CASE TEMPLATE

DATE	19.01.2023
SUBMITTED BY	Tanuja Kharol (RA2111003011808)/Leader Team Mates : Akula Lakshmi Nikitha (RA2111003011810)/member Ishika Jain (RA2111003011813)/member
TITLE / ROLE	**Project Title :** House.com **Role :** Helps to find house.

THE PROJECT

- Every person looks for the best house & good price before renting any apartment .
- One of the major factors which lead to renting of any apartment is rent or facilities.
- Some times its very difficult to find good apartment on a reasonable price.
- But since it is very difficult to visit each & every apartment for price comparison and facilities, there needs to be a solution to automate this process.
- The Price and facilities comparison website project proposed here gathers information on apartments .
- This site is extremely helpful for frequent students , people who works in different cities to check prices and facilities of all apartments.

THE HISTORY

- Nowadays before renting any apartment peoples do some online research of the area, rent , facilities on the internet.
- One of the major factors which lead to renting any apartment rent and facilities.
- The tenants tend to compare prices before renting any apartment.
- It is very difficult to visit each & every apartment for price comparison.

LIMITATIONS

- Visual effect of apartments during manually searching the apartment is different from viewing the apartment in your device.
- This application requires active internet connection.
- User need to put correct data or else it behaves abnormally.
- User must read the terms and conditions before making decision.
- Our web system must filter out the scam and fake apartments or else user might get cheated by getting fake details.

APPROACH

- **Data service:** Partner networks offer the possibility to import data directly from them and provide all the necessary tools for doing so.
- **Web scraping:** Special automated tools collect data from multiple target websites, filter it in a certain way if necessary, and add prices to the apartment renting service of the website. All website operations can be performed automatically with a predetermined regularity. That will allow providing the audience with accurate and up-to-date information at all times.

BENEFITS

The more detailed the search results, the better the user experience. Amenities, availability, car parking spots, location, number of rooms, price range, property type, square footage, and year of construction should be included in all search functions. It is strongly advised to conduct A/B research in order to assess the order of filters shown to users based on search patterns.

1. Collecting rent online is easier.
2. Online rental applications and leases.
3. Digitally sign documents.
4. Handle maintenance and repair requests.
5. List vacancies online with a digital app.
6. Digital apps can accept flexible rent payments.
7. Chat messaging makes life easier for tenants and landlords.
8. Virtual rental tours.

Result :

Thus, the project team formed, the project is described, the business case was prepared and the problem statement was arrived.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	2
Title of Experiment	Identification of Process Methodology and Stakeholder Description
Name of the candidate	Tanuja Kharol
Team Members	Tanuja Kharol,Ishika jain,Lakshmi Nikitha
Register Number	RA2111003011808, RA21110030813, RA2111003011810
Date of Experiment	27/01/23

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To identify the appropriate Process Model for the project and prepare Stakeholder and User Description.

Team Members:

Sl No	Register No	Name	Role
1	RA2111003011808	**Tanuja Kharol**	**Rep/Member**
2	RA2111003011810	**Lakshmi Nikitha**	**Member**
3	RA2111003011813	**Ishika Jain**	**Member**

Project Title: HOUSE RENTING SYSTEM

Selection of Methodology: AGILE MODEL

The Agile methodology is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stakeholders and continuous improvement at every stage. Once the work begins, teams cycle through a process of planning, executing, and evaluating. Continuous collaboration is vital, both with team members and project stakeholders.

Agile's four main values are:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Agile development is important because it helps to ensure that development teams complete projects on time and within budget. It also helps to improve communication between the development team and the product owner.

Incorporate information to below table regarding stakeholders of the project

Stakeholder Name	Activity/ Area /Phase	Interest	Influence	Priority (High/ Medium/ Low)
CEO/Project Owner	Top position in an organization and responsible for implementing existing plans and policies	High	High	1
Project manager/ Supervisor(LEADER)	Responsible for planning, organizing, and directing the completion of specific projects for the team so that the projects are on time, on budget, and within scope.	High	High	2
Project Team	and also consists the team of development of website like debugging and updates ,etc	High	High	3
Cybersecurity cell/anticheat team of engineers	Combatting and tackling cybercrime. which may include acts of online stalking, online banking or credit card scams, hacking and proliferating software viruses	High	High	4

Funders/Investors	Promoter of the investment, provides necessary financial resources by ad promotions of their product	High	med	5
Sponsors	Provides new market to expand ventures. Negotiate Funding for project environments	low	med	6
Customer	Customers are the people who purchase the product or use the service. They are the stakeholders who decide whether the business will be a success or not. Customers will show loyalty to a business they like	high	high	8
Supplier/Retailer	Ensuring feasible and realistic goods in every aspect. Manage divergent as per order and needs. They are basically the other websites like amazon,etc.	med	med	7
End Users	Provides reviews and feedbacks necessary for changes.	low	high	7

. Interest and Influence matrix

Interest	Influence
High	High
Low	Low
Low	High
High	Low

Stakeholder	Interests	Estimated Project Impact	Estimated Priority
Owner	Achieve targets, Increase sales margin	High	1
Sponsor	Provides new market to expand ventures Negotiate funding for project Reviews changes to project environments.	Med	3
Team members	Demand incentives Retain and upgrade skills New product excitement	High	2
Project Manager	Lead the team in every aspect. Accountable for entire project scope, team, success & failure	High	2
Investors	Promoter of the investment, Provides necessary financial resources	Low	5
Resource Manager	Resource planning and allocation. Ensuring adequate resource according to project needs and budget.	Med	4
Suppliers	Ensuring feasible and realistic in every aspect Managing divergence from budgeted cost.	Med	6
End Users	Provides feedback	Low	7

Result

Thus the Project Methodology was identified and the stakeholders were described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	System, Functional and Non-Functional Requirements of the Project
Name of the candidate	Tanuja Kharol
Team Members	ISHIKA JAIN,TANUJA KHAROL,A.LAKSHMI NIKHITA
Register Number	RA2111002011813,RA2111003011808,RA2111003011810
Date of Experiment	10/02/23

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To identify the system, functional and non-functional requirements for the project.

Team Members:

S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	Rep/Member
2	RA2111003011813	ISHIKA JAIN	Member
3	RA2111003011810	A.LAKSHMI NIKHITA	Member

Project Title: HOUSE RENTAL SYSTEM

System Requirements:

-OPERATING SYSTEM(WINDOWS,LINUX,MAC)
-PROCESSOR(INTEL i3 11TH GEN OR LATER)
-MEMORY(8GB RECOMMENDED)
-GRAPHICS CARD (GTX 1650 MINIMUM)

Functional Requirements:

-Administrator related requirementS:

The system should let the administrator:

View the user's accounts.

To delete the users' accounts. View reports about users

The administrator also views all products available for sale…

All products available for rent

-Renter related requirements:

The system should let the renter:

Register account. Login to the website.

To update his/her profile. Upload the desired product Delete the product Report spam.

-Customer-related requirements:

Register account. Login to the website.

To update his/her profile. Search the desired product Contact the owner.

Share his/her location.

Selected the number of days he/she needs that product. Report spam.

Non-Functional Requirements:

- Performance Requirements:

The database shall be able to accommodate a minimum of 1,000 records of renters. The database shall be able to accommodate a minimum of 1,000 records of rentee. The website shall support the use of multiple users at a time.

There are no other specific performance requirements that will affect development.

- Availability:

The website is available 24/7 anywhere, but the dealing can be done when both parties are available.

-Reliability:

The website would perform desired tasks as expected.

-Ease of Use

The proposed system be user-friendly and would provide a Graphical User Interface (GUI).

RESULT

Thus the requirements were identified and accordingly described.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	4
Title of Experiment	Prepare Project Plan based on scope, Calculate Project effort based on resources and Job roles and responsibilities
Name of the candidate	Tanuja kharol
Team Members	Tanuja kharol,Akula Lakshmi Nikhita, Ishika jain
Register Number	RA2111003011808, RA2111003011810, RA2111003011813
Date of Experiment	

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To Prepare Project Plan based on scope, Calculate Project effort based on resources, Find Job roles and responsibilities

Team Members:

Sl No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	Leader
2	RA2111003011810	A.LAKSHMI NIKHITA	Member
3	RA2111003011813	ISHIKA JAIN	Member

Requirements

<Incorporate the Project plan template>

1. Project Management Plan

Describe the key issues driving the project. **[Min 3 Focus Areas]**

Focus Area	Details
Integration Management	Governance Framework Project Team Structure Roles & Responsibilities of Team Change Management (Change Control, Issue Management) Project Closure
Scope Management	Scope Statement Requirement Management (Gathering, Control, Assumption, Constraint Stakeholder) Define Deliverable Requirement Change Control Activities and Sub-Tasks
Schedule Management	Define Milestones Schedule Control
Cost Management	Estimate Effort

	Assign Team Budget Control
Quality Management	Quality Assurance: Quality assurance will be managed including governance, roles and responsibilities, tools and techniques and reporting Quality Control: Specify the mechanisms to be used to measure and control the quality of the work products
Resource Management	Estimate and Manage the need People: People & Skills Required Finance: Budget Required Physical: Facilities, IT Infrastructure
Stakeholder	Identifying, Analyzing, Engaging Stakeholders
Communication Management	Determine communication requirements, roles and responsibilities, tools and techniques. [Type of Communication, Schedule, Mechanism Recipient]
Risk Management	Identifying, analysing, and prioritizing project risks
Procurement Management	Adhering to organization procurement process

2. Estimation

2.1. Effort and Cost Estimation

Activity Description	Sub-Task	Sub-Task Description	Effort (in hours)	Cost in INR
Design the user screen	E1R1A1T1 (Effort-Requirement-Activity-Task)	Confirm the user requirements (acceptance criteria)	3	1500
	E1R1A1T2		1	500
	E1R1A1T3		15	7500
Identify Data Source for displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	5	2500
		Document	4	2000

Effort (hr)	Cost (INR)
1	500

2.2. Infrastructure/Resource Cost [CapEx]

< OneTime Infra requirements >

Infrastructure Requirement	Qty	Cost per qty	Cost per item
IR1	5	1000	200
IR2	5	1000	200

2.3 Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin Developer , Support Consultant	3	2,000,000	6,000,000
License	Operating System Database Middleware IDE	10	10000	100,000
Infrastructures	Server, Storage and Network	20	20000	400,000

3. Project Team Formation

3.1. Identification Team members

Name	Role	Responsibilities
Srinivasa	Key Business User (Product Owner)	Provide clear business and user requirements
Tanuja Kharol	Project Manager	Manage the project
Paras pal	Business Analyst	Discuss and Document Requirements
A.lakshmi Nikhita	Technical Lead	Design the end-to-end architecture
Ishika jain	UX Designer	Design the user experience
Anisha Kumari	Frontend Developer	Develop user interface
Sarthak singh	Backend Developer	Design, Develop and Unit Test Services/API/DB
Akansha singh	Cloud Architect	Design the cost effective, highly available and scalable architecture
Waseem riaz	Cloud Operations	Provision required Services
Rahul jain	Tester	Define Test Cases and Perform Testing

3.2. Responsibility Assignment Matrix

RACI Matrix	Team Members			
Activity	**Name (BA)**	**Name (Developer)**	**Name (Project Manager)**	**Key Business User**
User Requirement Documentation	Paras pal	Sarthak singh	Tanuja kharol	Ishika jain

A	Accountable
R	Responsible
C	Consult
I	Inform

Result:

Thus, the Project Plan was documented successfully.

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School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	5
Title of Experiment	Prepare Work breakdown structure, Timeline chart, Risk identification table
Name of the candidate	A.LAKSHMI NIKITHA
Team Members	TANUJA KHAROL,ISHIKA JAIN
Register Number	RA2111003011810
Date of Experiment	24/02/23

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

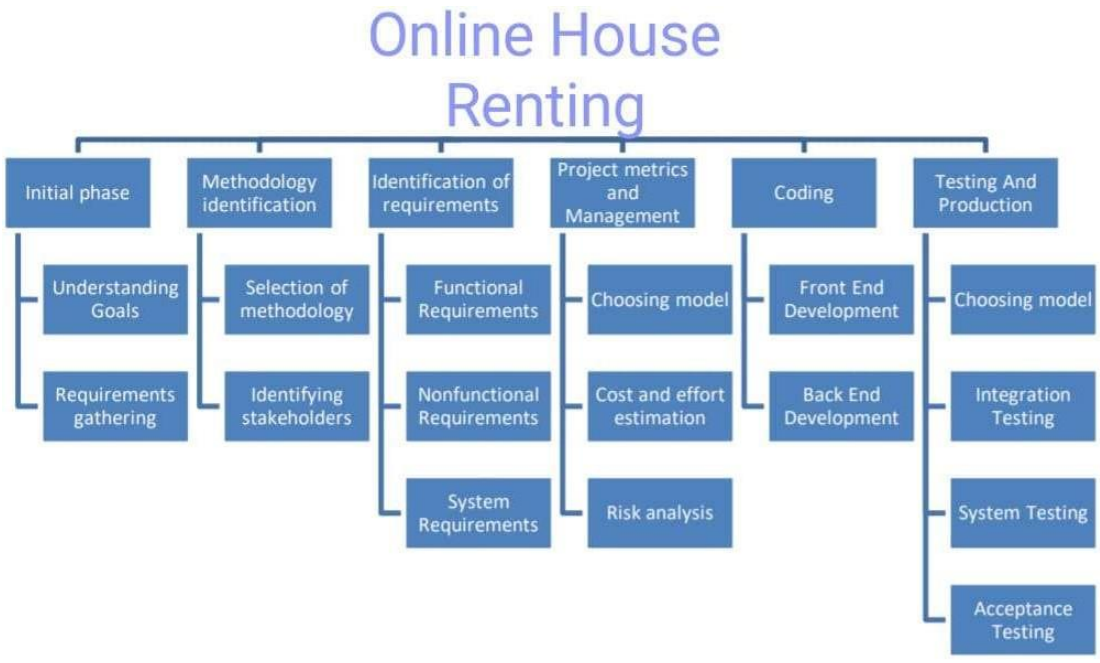
Aim

To Prepare Work breakdown structure, Timeline chart and Risk identification table

Team Members:

Sl No	Register No	Name	Role
1	RA2111003011808	TANUJA	Rep
2	RA2111003011810	LAKSHMI NIKITHA	Member
3	RA2111003011813	ISHIKA	Member

WBS-WORK BREAKDOWN STRUCTURE



ONLINE HOUSE RENTING

1. Initial Phase

1.1 Understanding goals

1.2 Requirements gathering

2. Methodology identification

2.1 Selection of methodology

2.2 Identifying stakeholders

3. Identification of requirements

3.1 Functional Requirements

3.2 Nonfunctional Requirements

3.3 System Requirements

4. Project metrics and management

4.1 Choosing model

4.2 Cost and effort estimation

4.3 Risk analysis

5. Coding

5.1 Front End Development

5.2 Back End Development

6. Testing and Production

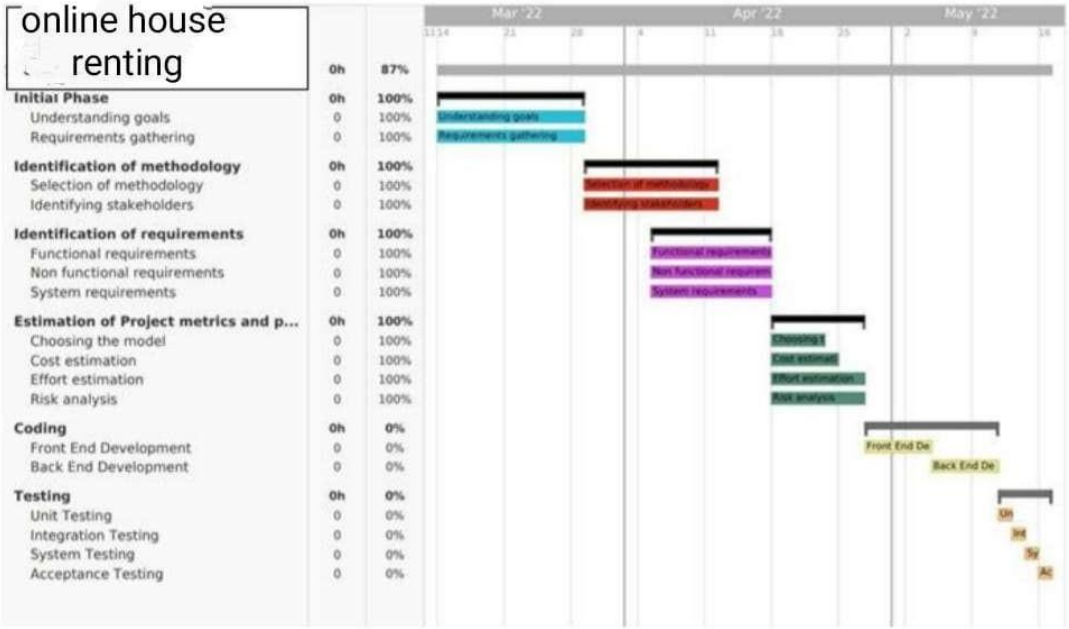
6.1 Unit Testing

6.2 Integration Testing

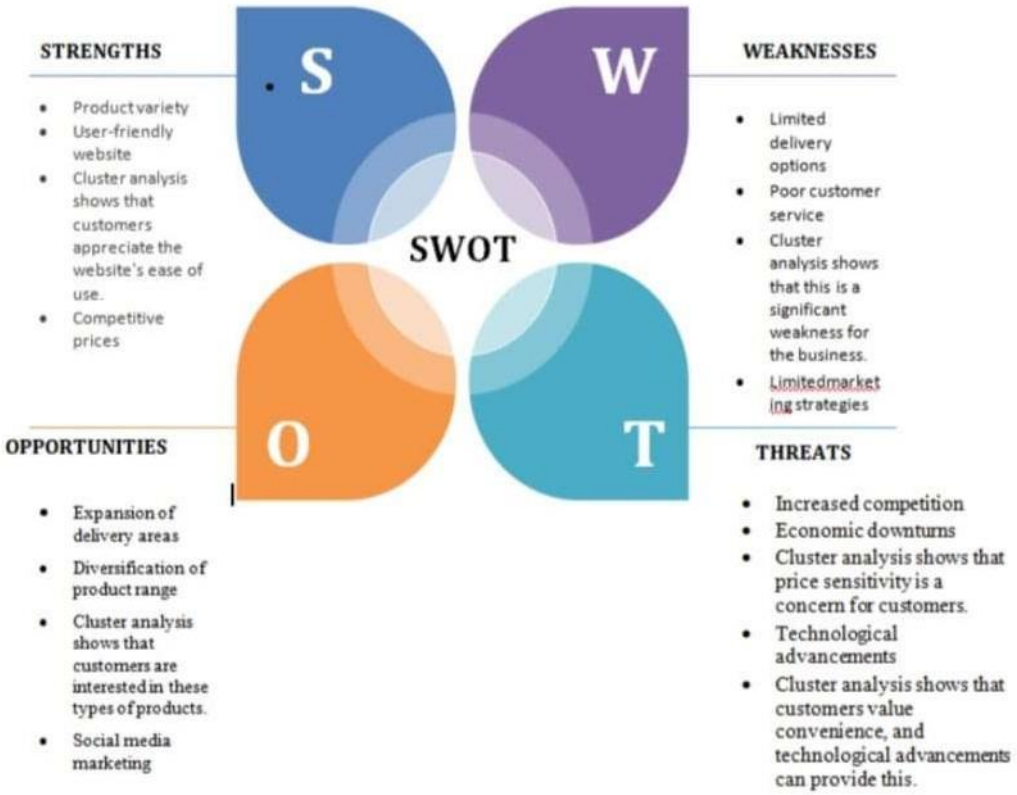
6.3 System Testing

6.4 Acceptance Testing

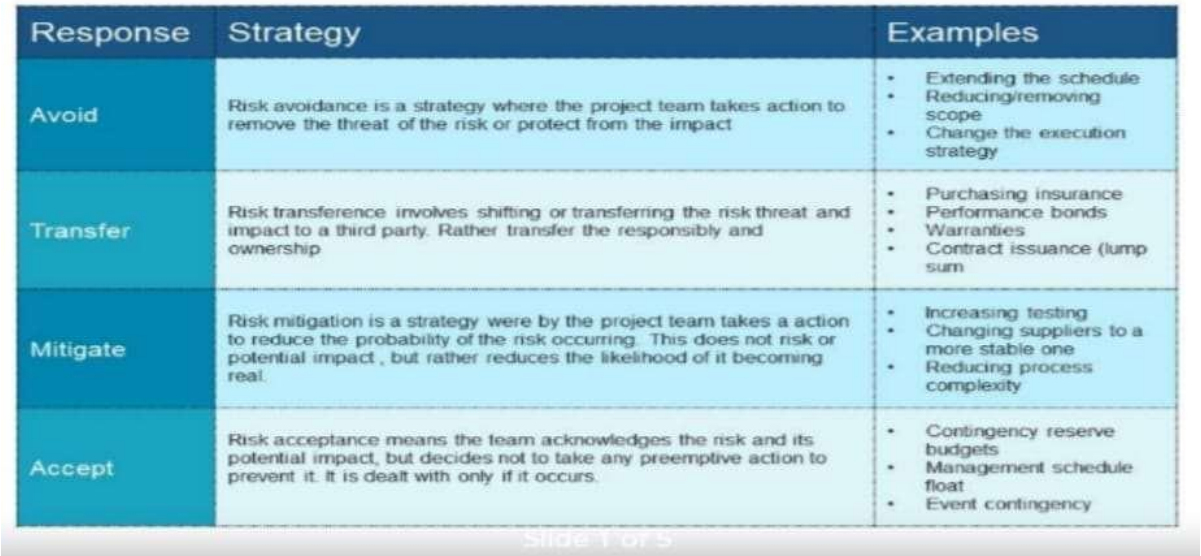
TIMELINE – GANTT CHART



RISK ANALYSIS – SWOT & RMMM



Risk Management Framework



Response	Strategy	Examples
Avoid	Risk avoidance is a strategy where the project team takes action to remove the threat of the risk or protect from the impact	• Extending the schedule • Reducing/removing scope • Change the execution strategy
Transfer	Risk transference involves shifting or transferring the risk threat and impact to a third party. Rather transfer the responsibly and ownership	• Purchasing insurance • Performance bonds • Warranties • Contract issuance (lump sum
Mitigate	Risk mitigation is a strategy were by the project team takes a action to reduce the probability of the risk occurring. This does not risk or potential impact , but rather reduces the likelihood of it becoming real.	• Increasing testing • Changing suppliers to a more stable one • Reducing process complexity
Accept	Risk acceptance means the team acknowledges the risk and its potential impact, but decides not to take any preemptive action to prevent it. It is dealt with only if it occurs.	• Contingency reserve budgets • Management schedule float • Event contingency

Result:

Thus, the work breakdown structure with timeline chart and risk table were formulated successfully.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	6
Title of Experiment	Design a System Architecture, Use Case and Class Diagram
Name of the candidate	ISHIKA JAIN
Team Members	ISHIKA JAIN,TANUJA KHAROL,A.LAKSHMI NIKHITA
Register Number	RA2111003011813,RA2111003011808,RA2111003011810
Date of Experiment	3/3/23

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

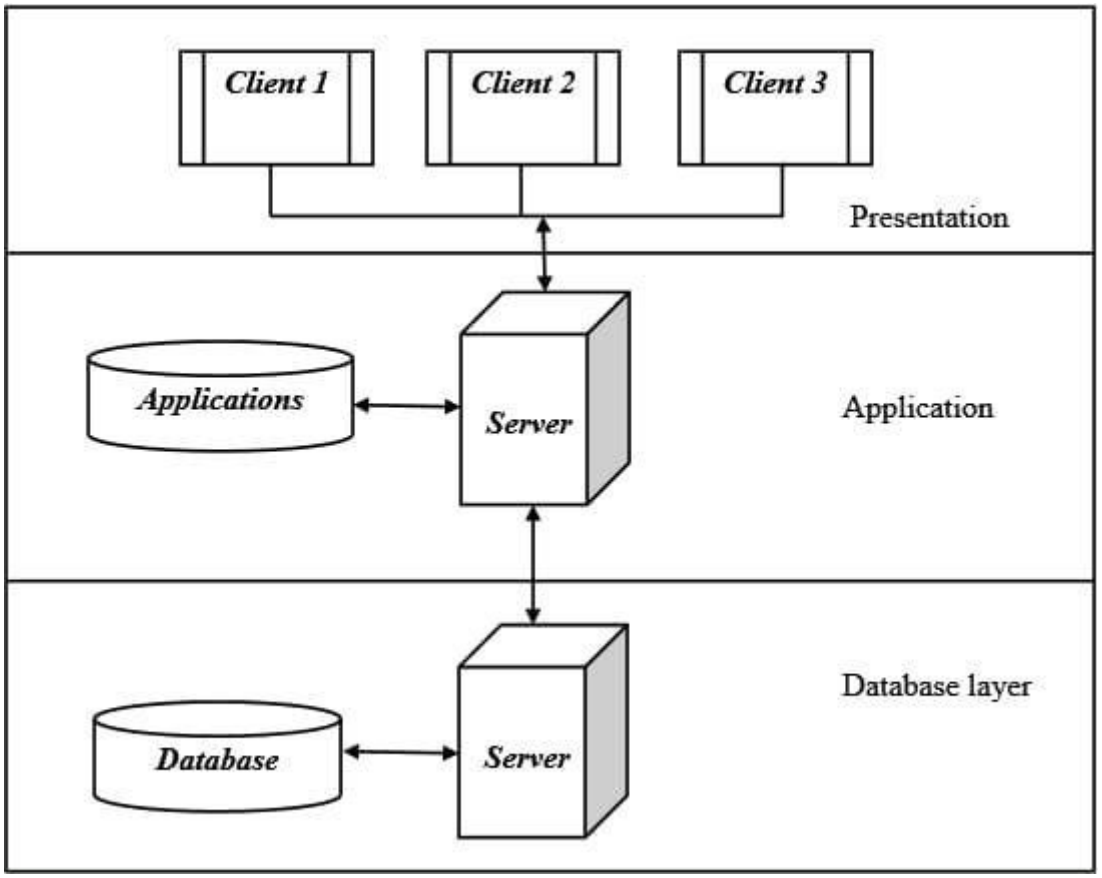
Aim

To Design a System Architecture, Use case and Class Diagram

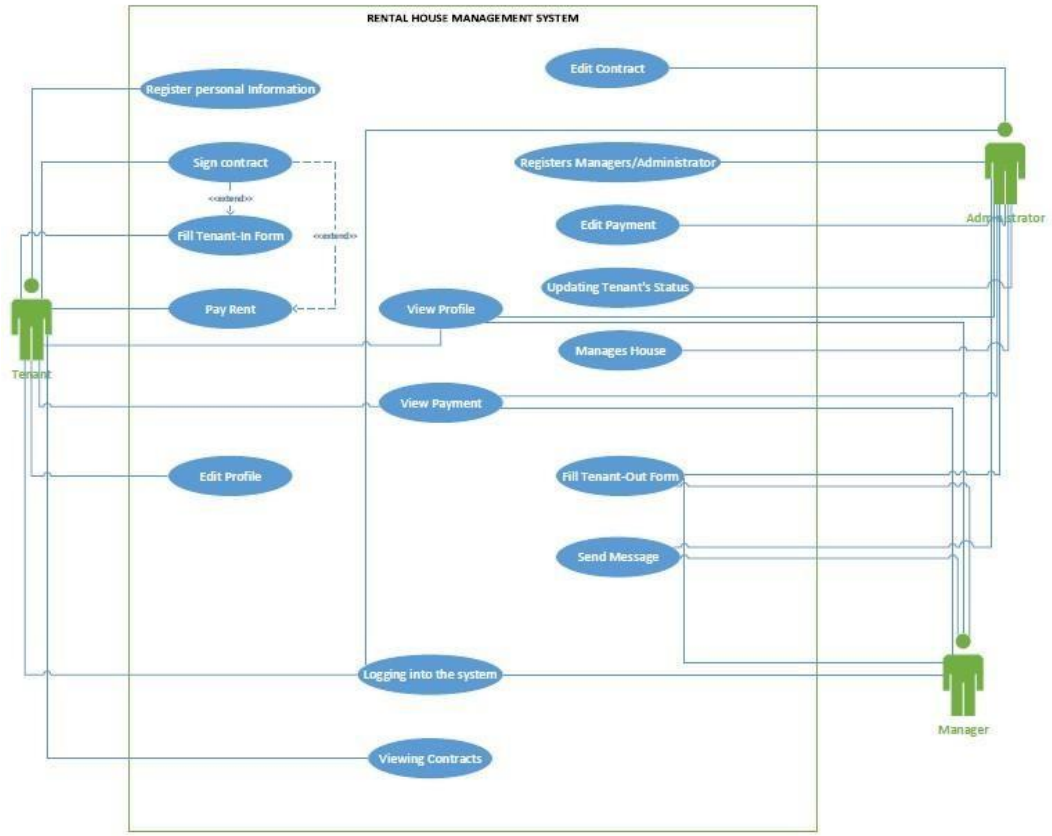
Team Members:

Sl No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	Rep
2	RA2111003011813	ISHIKA JAIN	Member
3	RA2111003011810	A.LAKSHMI NIKHITA	Member

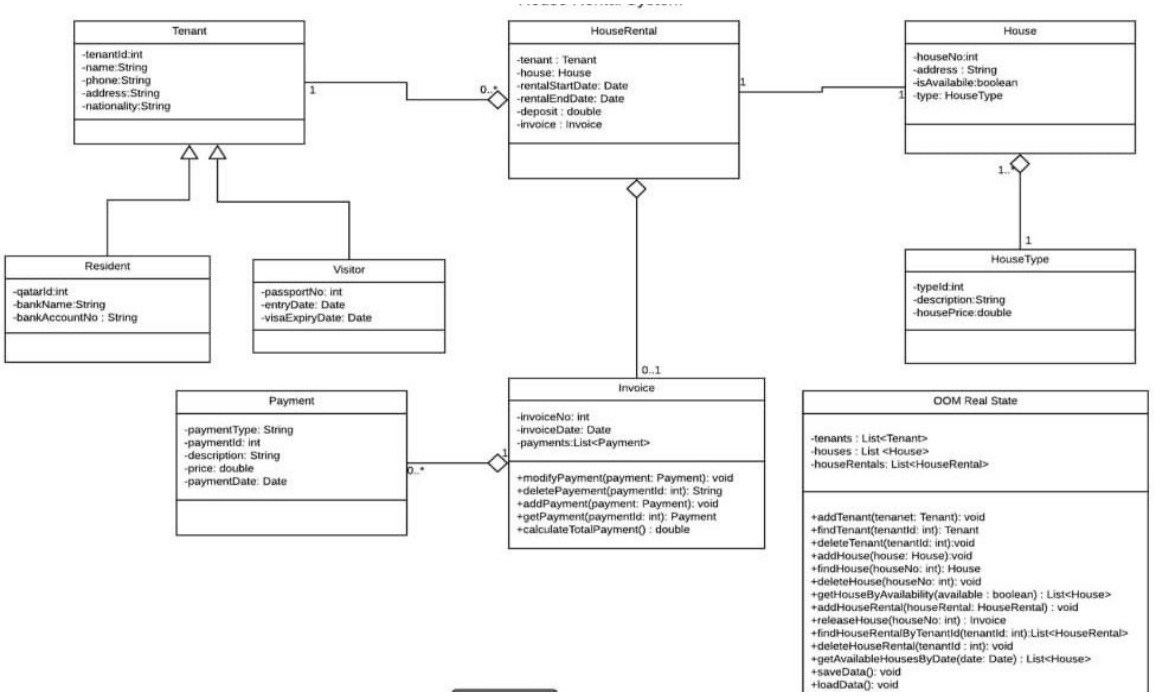
SYSTEM ARCHITECTURE :



USE CASE DIAGRAM :



CLASS DIAGRAM :



Result:

Thus, the system architecture, use case and class diagram created successfully.

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SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	7
Title of Experiment	Design a Entity relationship diagram
Name of the candidate	A.LAKSHMI NIKITHA
Team Members	TANUJA,LAKSHMI NIKITHA,ISHIKA
Register Number	RA2111003011810
Date of Experiment	28/03/23

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

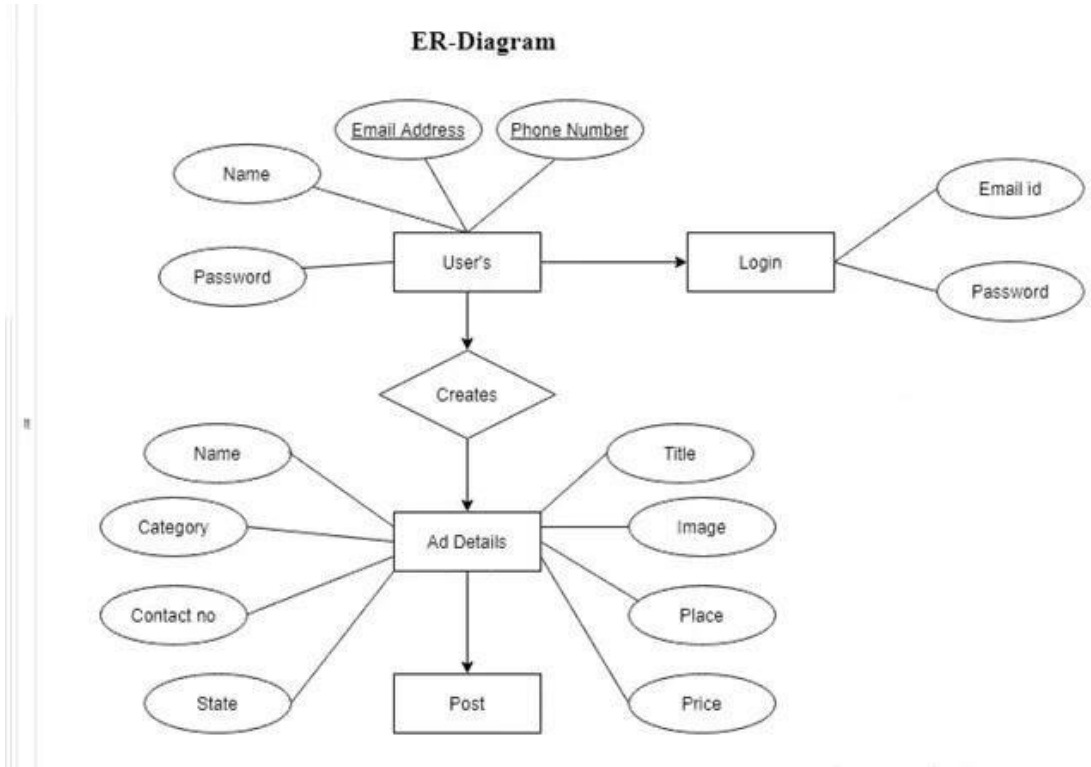
Aim

To create the Entity Relationship Diagram

Team Members:

S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	**Rep**
2	RA2111003011810	LAKSHMI NIKITHA	**Member**
3	RA2111003011813	ISHIKA	**Member**

Entity relationship diagram



Result: Thus, the entity relationship diagram was created successfully.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	8
Title of Experiment	Develop a Data Flow Diagram (Process-Up to Level 1)
Name of the candidate	A.LAKSHMI NIKITHA
Team Members	TANUJA KHAROL,ISHIKA,LAKSHMI NIKITHA
Register Number	RA2111003011810
Date of Experiment	12/04/23

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

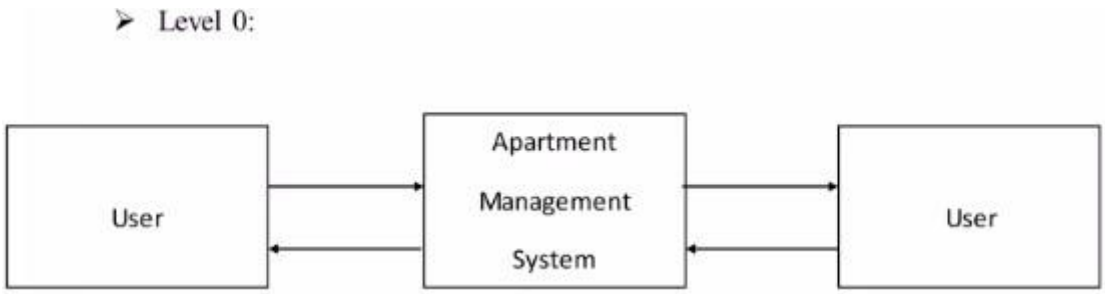
To develop the data flow diagram up to level 1 for the online house rental system.

Team Members:

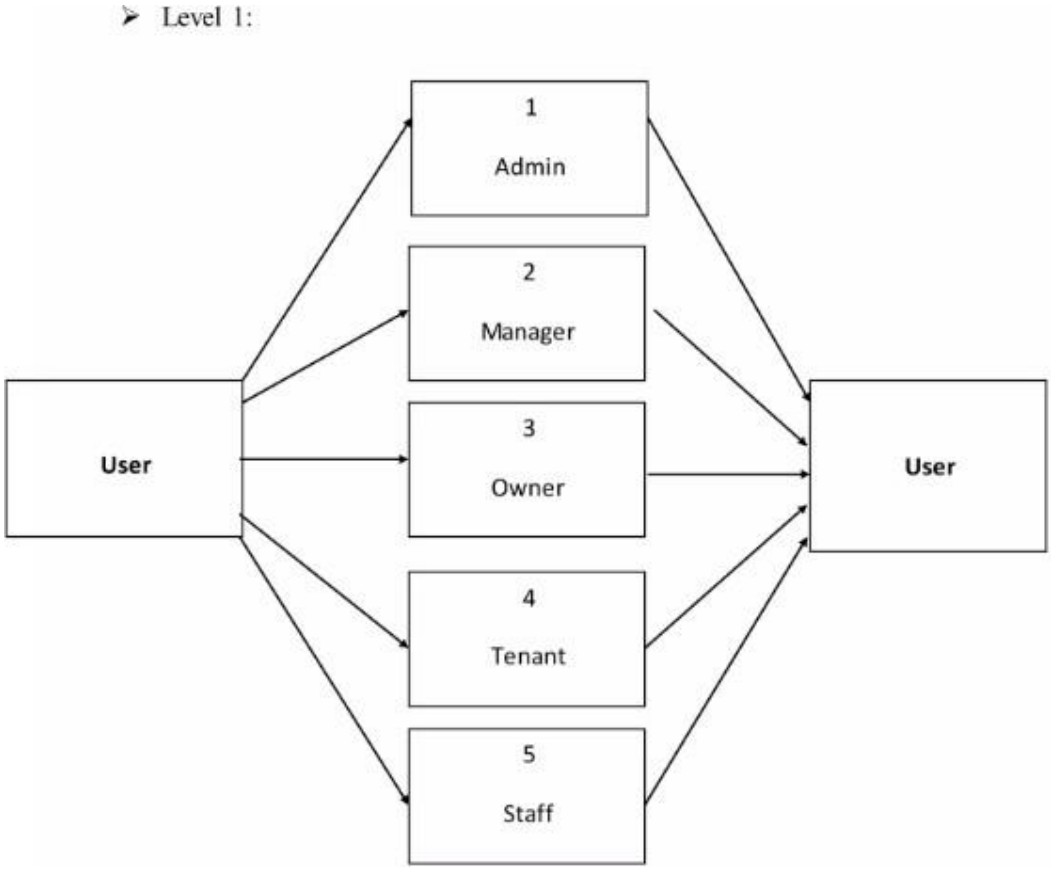
S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	**Rep**
2	RA2111003011810	LAKSHMI NIKITHA	**Member**
3	RA2111003011813	ISHIKA JAIN	**Member**

Data Flow Diagram

DFD Level 0



DFD Level 1



Result:

Thus, the data flow diagrams have been created for the online house rental system.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	9
Title of Experiment	Design a Sequence and Collaboration Diagram
Name of the candidate	Ishika jain
Team Members	ISHIKA JAIN,TANUJA KHAROL,A.LAKSHMI NIKHITA
Register Number	RA2111002011813,RA2111003011808,RA2111003011810
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

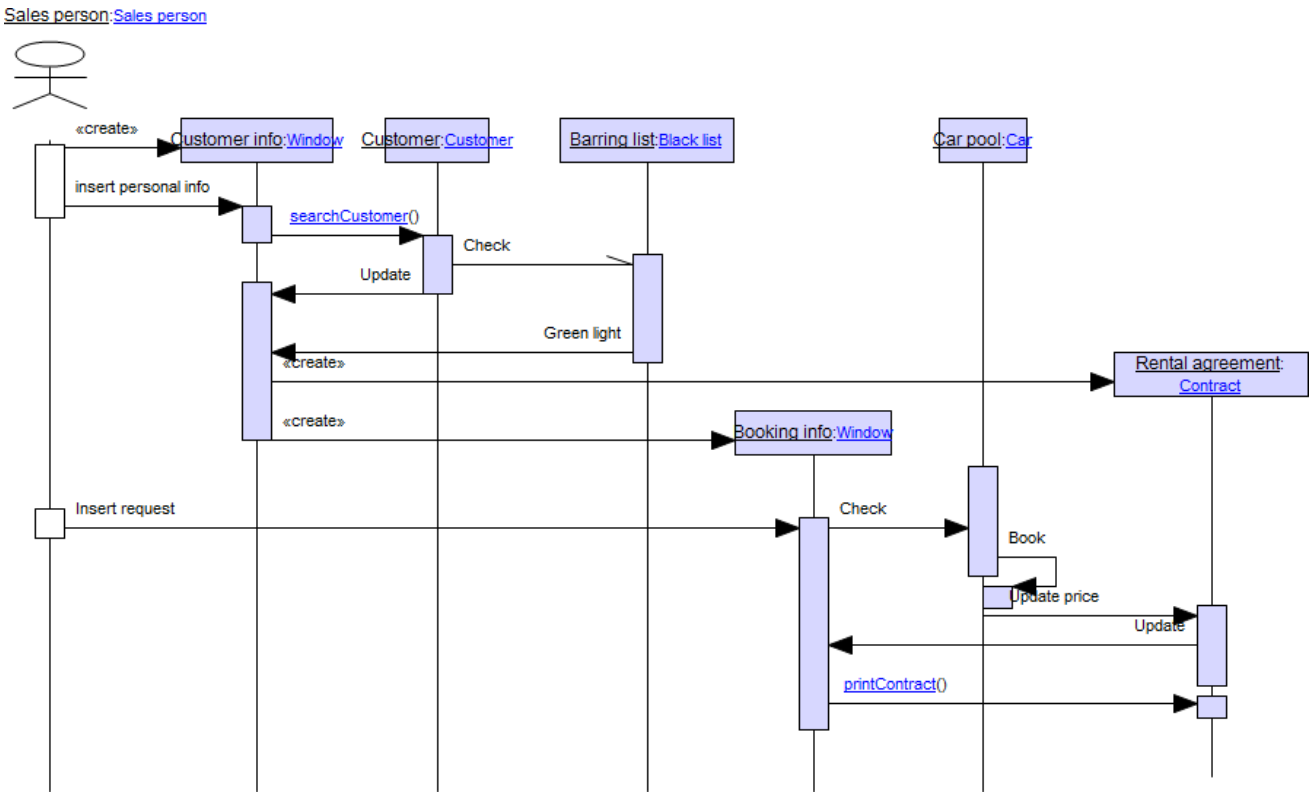
Aim

To create the sequence and collaboration diagram for the online house rental system.

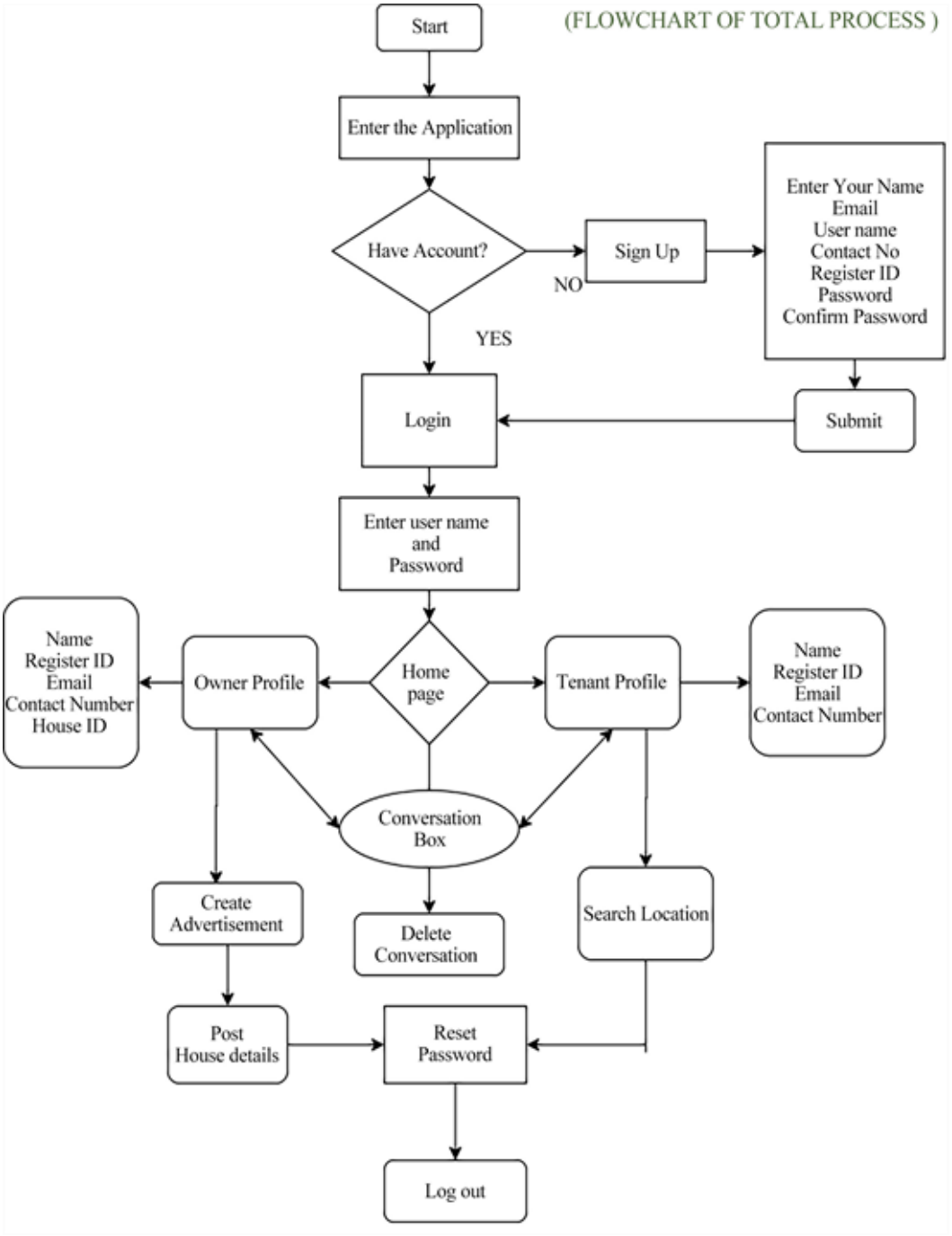
Team Members:

S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	Rep/Member
2	RA2111003011813	ISHIKA JAIN	Member
3	RA2111003011810	A.LAKSHMI NIKHITA	Member

Sequence Diagram



Collaboration Diagram



Result:
Thus, the sequence and collaboration diagrams were created for the Online House Rental system.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	10
Title of Experiment	Develop a Testing Framework/User Interface
Name of the candidate	TANUJA KHAROL
Team Members	TANUJA KHAROL, ISHIKA JAIN, LAKSHMI NIKITHA
Register Number	RA2111003011808. RA2111003011813, RA2111003011810
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To develop the testing framework and/or user interface framework for the House Renting system.

Team Members:

S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	**Rep/Member**
2	RA2111003011810	LAKSHMI NIKITHA	**Member**
3	RA2111003011813	ISHIKA JAIN	**Member**

Scope of Testing

House rental portal is a webpage where house owners, clients, customers can exchange information effectively and inexpensively. Provides user-friendly interface, satisfying the needs of the consumers.

Approach to test the software application:

It is very important to test the application before its launch. Testing is very important to give user good experience which leads in gaining more loyal customers for the software or application. Testing plays an It is very important to test the software making the product successful. We will be testing the software on mainly two approaches:-

1. functional testing approach
2. Non - functional testing approach

Executive Summary

We are developing a testing framework and user interface for online house rental system. The goal is to ensure that the system meets the requirements and performs as expected. The testing framework will include unit testing, integration testing, and user acceptance testing, while the user interface will allow users to interact with the system and view the results. We will use tools such as Selenium, JUnit, TestNG, Python, D3.js, React, and Node.js to develop the testing framework and user interface.

Test Plan:

Scope of Testing:

● Functional testing: To ensure that the system meets the functional requirements, such as data input, processing, and output.
● Performance testing: To measure the system's response time, throughput, and resource utilization under different load conditions.
● Cloud-Based testing: To evaluate the user interface's ease of use, learnability, and effectiveness in achieving the user's goals.
● Security testing: To identify and mitigate security vulnerabilities that can compromise the system's confidentiality, integrity, and availability

Types of Testing

1. Unit testing: This type of testing involves testing individual units of code, such as functions or methods, to ensure that they work as expected.
2. Integration testing: This type of testing involves testing how different units of code work together to ensure that they function correctly.
3. User acceptance testing: This type of testing involves testing the application with a small group of end users to ensure that it meets their needs and expectations.

Functional:

Functional testing is a type of software testing that focuses on verifying the functionality of an application.

TEST ITEM	DESCRIPTION
Use interface testing	The testing of this particular module code will consist of checking if the application displays all the required buttons and check if the settings panel is inthe main screen. The border line case of this module would be to check how theUI responds when the keyboard or the touch screen doesn't work or the user provides or gives too many stimuli to the software.
Platform Testing	We ensure that your E-learning domains are flawless and readily accessible, irrespective of the operating software, mobile device browser used. We makesure the application works conveniently across all platforms.
Database testing	the purpose of database testing is to verify that the data is valid, reliable,and secure, and that the database management system (DBMS) is functioning correctly.
Content validation	Content validation is a type of database testing that focuses on ensuring that the data stored in the database is accurate, complete, and consistent.the purpose of content validation is to verify that the data meets the expected business rules and requirements

Non-Functional:

NON-FUNCTIONAL TESTING is defined as a type of Software testing to checknon-functional aspects (performance, usability, reliability, etc) of a software
application. It is designed to test the readiness of a system as per nonfunctional parameters which are never addressed by functional testing.

s.no	TEST ITEM	DESCRIPTION
1	Performance testing	This type of testing involves testing the performance of the applicationunder different loads and conditions to ensure that it can handle the expected traffic. Performance tests are usually automated and involve simulating large numbers of users or requests.
2	Securitytesting	This type of testing involves testing the security of the application to ensure that it is protected against common security threats such as SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF). Security tests are usually manual and automated, and involve testing the application from the perspective ofan attacker.
3	Cloud-Based testing	It platforms include Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). These platforms offer a range of services for cloud-basedtesting, including virtual machines, containerization, and serverless computing.

Types of Testing, Methodology, Tools

Methodology:

We will follow an agile testing methodology that emphasizes collaboration, flexibility, and continuous improvement. We will work in sprints and use tools such as JMetei and Confluence to manage the testing process. We will involve stakeholders, including users, developers, and testers, in the testing process to ensure that the system meets their needs and expectations.

Type of testing	tool
Automated functional testing	Selenium
Cloud-based testing	Browser Stack
Performance testing	JMeteí
Application Programming Interface testing	Postman, SoapUI
Security testing	Burp Suite

Result:

Thus, the testing framework/user interface framework has been created for the House renting system.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	11
Title of Experiment	Test Cases
Name of the candidate	LAKSHMI NIKITHA
Team Members	LAKSHMI NIKITHA,TANUJA KHAROL,ISHIKA JAIN
Register Number	RA2111003011810,RA2111003011808,RA2111003011813
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To develop the test cases manual for the HOUSE RENTING.

Team Members:

S No	Register No	Name	Role
1	RA2111003011808	TANUJA KHAROL	**Rep**
2	RA2111003011810	LAKSHMI NIKITHA	**Member**
3	RA2111003011813	ISHIKA JAIN	**Member**

Functional Testing:

Functional testing is a type of testing which verifies that each function of the software application operates in conformance with the requirement specification. This testing mainly involves black box testing, and it is not concerned about the source code of the application.

Every functionality of the system is tested by providing appropriate input, verifying the output and comparing the actual results with the expected results. This testing involves checking of User Interface, APIs, Database, security, client/ server applications and functionality of the Application under Test. The testing can be done either manually or using automation.

Non-Functional Testing:

Non-functional testing is a type of testing to check non-functional aspects (performance, usability, reliability, etc.) of a software application. It is explicitly designed to test the readiness of a system as per non-functional parameters which are never addressed by functional testing.

A good example of non-functional test would be to check how many people can simultaneously login into software.

Non-functional testing is equally important as functional testing and affects client satisfaction

Test Case

Functional Test Cases

Test ID	Test Case	Test Condition	Expected Result	Actual Result	Result (P/F)
TC1	For validating admin user, and restriction to fill every credential required in form (Admin Login Form)	1. Visit the Login Page 2. Enter the correct Login Id 3. Enter the correct Password 4. Click Login	The admin user should be able to login	Admin logged in successfully.	P
TC2	Adding a new entry for house in the Houses table	1. Visit the Houses tab 2. Enter the House Number 3. Enter the Category of house from the given dropdown 4. Type the description 5. Enter the appropriate price for the house	A new entry in the house table should be visible	A new entry is visible.	P
TC3	Editing an already existing entry in the tenant table (Increasing monthly rate)	1. Visit the tenant's tab 2. Click the Edit button 3. Increasing the 4. Monthly rate by 2000 5. Click save	The Monthly rate should be incremented by 2000	The Monthly Rent is Incremented successfully.	P
TC4	Editing the payment of the tenant	1. Visit the Payments tab 2. Click on Edit button 3. Adding appropriate amount in the amount column 4. Click Save	New edited amount should be displayed in the List of Payments table	New edited amount is displayed in table.	P
TC5	Adding a new entry in category of houses table	1. Visit the House type tab 2. Enter the Type of House name in the category form 3. Click Save	New House type should be visible in the Category List table	New House type is visible successfully.	P

Non-Functional Test Cases

Test ID (#)	Test Scenario	Test Case	Execution Steps	Expected Outcome	Actual Outcome	Status	Remarks
1	Perfomance testing	Test if the Github action is able to make commit within 30s	1. Commit code 2. Run action 3. Check the speed of Github action	To make commit code within 30s	10s	Pass	Success
2	User acceblity	Ease of formatting the code	1. Commit code 2. Run action 3. Pull formatted code	User should be able to get formatted code with ease	User should be able to get formatted code with ease	Pass	Success

Result:

Thus, the test case manual has been created for the HOUSE RENTING.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	12
Title of Experiment	Manual Test Case Reporting
Name of the candidate	Ishika jain
Team Members	Tanuja kharol , A.Lakshmi Nikhita
Register Number	RA2111003011813
Date of Experiment	

Mark Split Up

S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

Staff Signature with date

Aim

To prepare the manual test case report for the House Rental system.

Team Members:

S No	Register No	Name	Role
1	RA2111003011808	Tanuja kharol	Rep/Member
2	RA2111003011813	Ishika jain	Member
3	RA2111003011810	A.LAKSHMI NIKHITA	Member

Test Case Report: House Rental System

Introduction

House Rental System is a web-based platform where property owners can list their properties for rent, and tenants can search and rent properties according to their preferences. This report provides a manual test case report on the House Rental System to ensure the system's functionality and performance.

Test Environment

The testing environment for the House Rental System includes the following:

- Operating System: Windows 10
- Browser: Google Chrome Version 90.0.4430.93 (Official Build) (64-bit)
- Test Management Tool: JIRA

Test Scenarios

The test scenarios for the House Rental System are based on the system's requirements and user stories.

1. Registration

- Verify that users can register with valid information.
- Verify that the system prompts users to enter required fields.

- Verify that the system rejects the registration if any of the required fields are missing or invalid.

2. Login

- Verify that registered users can log in with valid credentials.
- Verify that the system rejects the login attempt if the username or password is incorrect.

3. Property Listing

- Verify that property owners can list their properties for rent with valid information.
- Verify that the system prompts property owners to enter required fields.
- Verify that the system rejects the listing if any of the required fields are missing or invalid.

4. Property Search

- Verify that tenants can search for properties based on their preferences.
- Verify that the system displays properties that match the search criteria.
- Verify that the system displays accurate information about the properties.

5. Property Booking

- Verify that tenants can book a property with valid information.
- Verify that the system prompts tenants to enter required fields.
- Verify that the system rejects the booking if any of the required fields are missing or invalid.

6. Payment

- Verify that the system calculates the correct rental amount.
- Verify that the system provides payment options to tenants.
- Verify that the system updates the property owner and tenant on the payment status.

7. Cancellation

- Verify that tenants can cancel a booking with valid information.
- Verify that the system prompts tenants to enter required fields.
- Verify that the system updates the property owner and tenant on the cancellation status.

Test Cases

Test Case 1: Registration

Scenario: Verify that users can register with valid information.

Steps:

1. Navigate to the House Rental System's homepage.
2. Click on the "Register" button.
3. Enter valid information in all required fields.
4. Click on the "Register" button.

Expected Result: The system displays a message that the registration was successful.

Test Case 2: Login

Scenario: Verify that registered users can log in with valid credentials.

Steps:

1. Navigate to the House Rental System's homepage.
2. Click on the "Login" button.
3. Enter valid username and password.
4. Click on the "Login" button.

Expected Result: The system displays the user's profile page.

Test Case 3: Property Listing

Scenario: Verify that property owners can list their properties for rent with valid information.

Steps:

1. Navigate to the House Rental System's homepage.
2. Click on the "List Property" button.
3. Enter valid information in all required fields.
4. Click on the "Submit" button.

Expected Result: The system displays a message that the property listing was successful.

Test Case 4: Property Search

Scenario: Verify that tenants can search for properties based on their preferences.

Steps:

1. Navigate to the House Rental System's homepage.
2. Click on the "Search Property" button.
3. Enter search criteria.
4. Click on the "Search" button.

Expected Result: The system displays a list of properties that match the search criteria.

Test Case 5: Property Booking

Scenario: Verify that tenants can book a property with valid information.

Steps:

1. Navigate to the House Rental System's homepage.
2. Search for a property using the search functionality.
3. Click on the "Book Now" button for the desired property.
4. Enter valid information in all required fields.
5. Click on the "Book" button.

Expected Result: The system displays a message that the booking was successful and updates the property owner and tenant on the booking status.

Test Case 6: Payment

Scenario: Verify that the system calculates the correct rental amount and provides payment options to tenants.

Steps:

1. Navigate to the House Rental System's homepage.
2. Book a property using the booking functionality.
3. Click on the "Pay Now" button for the booking.
4. Enter valid payment information.
5. Click on the "Pay" button.

Expected Result: The system displays a message that the payment was successful and updates the property owner and tenant on the payment status.

Test Case 7: Cancellation

Scenario: Verify that tenants can cancel a booking with valid information.

Steps:

1. Navigate to the House Rental System's homepage.
2. Click on the "My Bookings" button.
3. Click on the "Cancel" button for the desired booking.
4. Enter valid cancellation information.
5. Click on the "Cancel" button.

Expected Result: The system displays a message that the cancellation was successful and updates the property owner and tenant on the cancellation status.

Conclusion

The above manual test case report covers the critical functionalities of the House Rental System. These test cases ensure that the system is working as expected and meets the requirements. Performing these tests will help improve the system's quality and performance, providing a better user experience.

Result:

Thus, the test case report has been created for the House Rental System.

School of Computing

SRM IST, Kattankulathur – 603 203

Course Code: 18CSC206J

Course Name: Software Engineering and Project Management

Experiment No	13
Title of Experiment	Provide the details of Architecture Design/Framework/Implementation
Name of the candidate	Tanuja Kharol
Team Members	Tanuja Kharol,Lakshmi nikitha , Ishika Jain
Register Numbers	RA2111003011808, RA2111003011810, RA2111003011813
Date of Experiment	

Mark Split Up

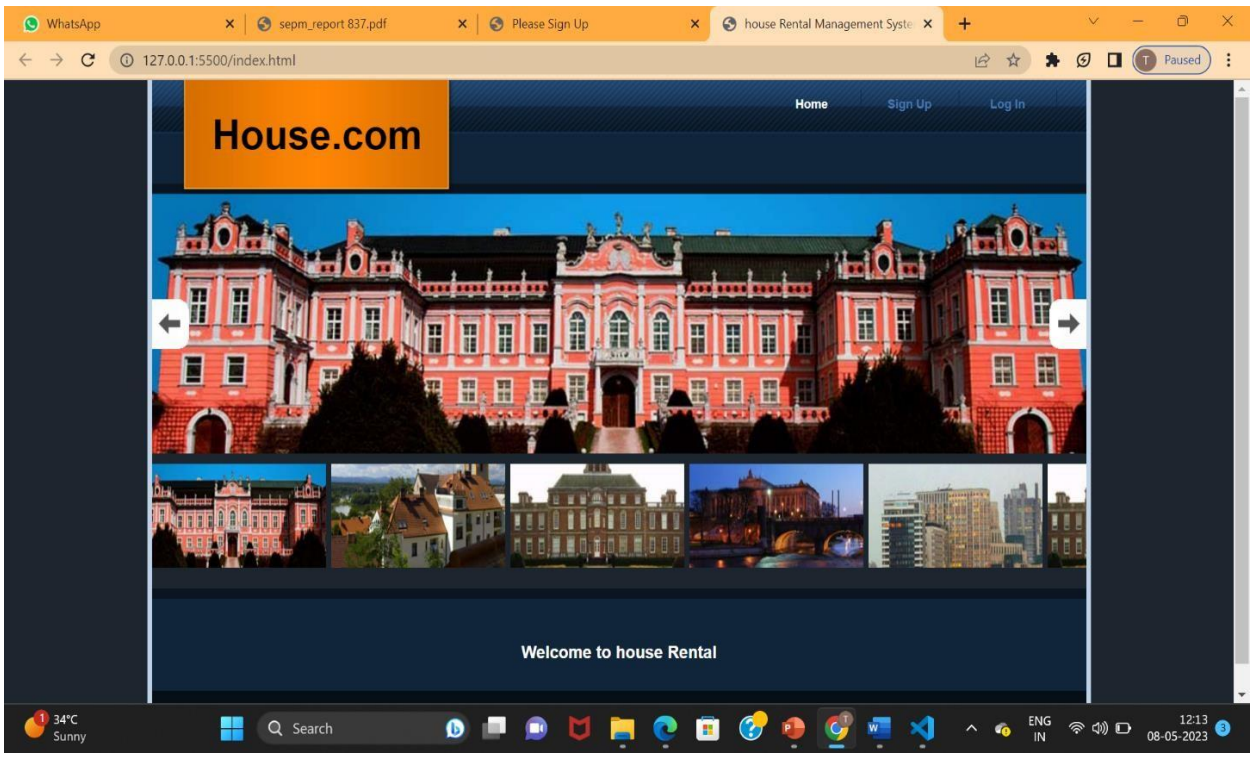
S. No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
	Total	**10**	

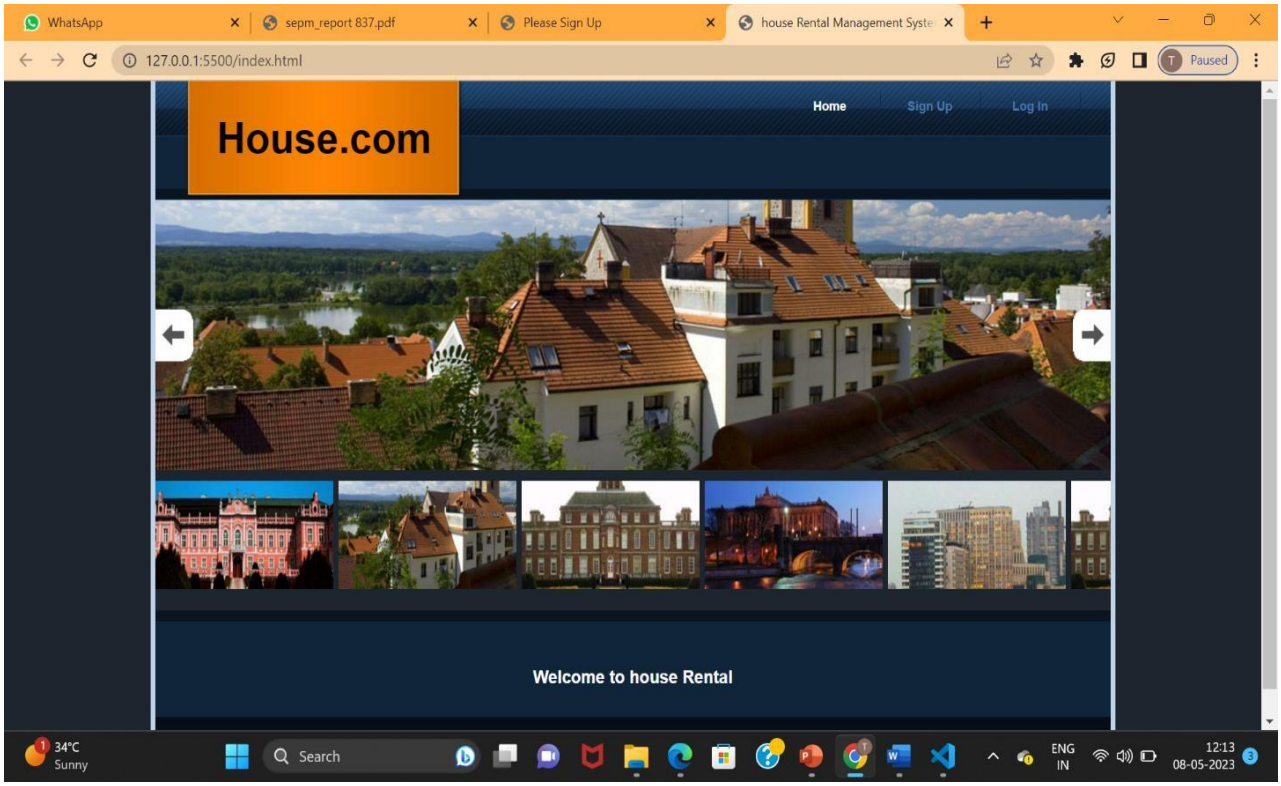
Staff Signature with date

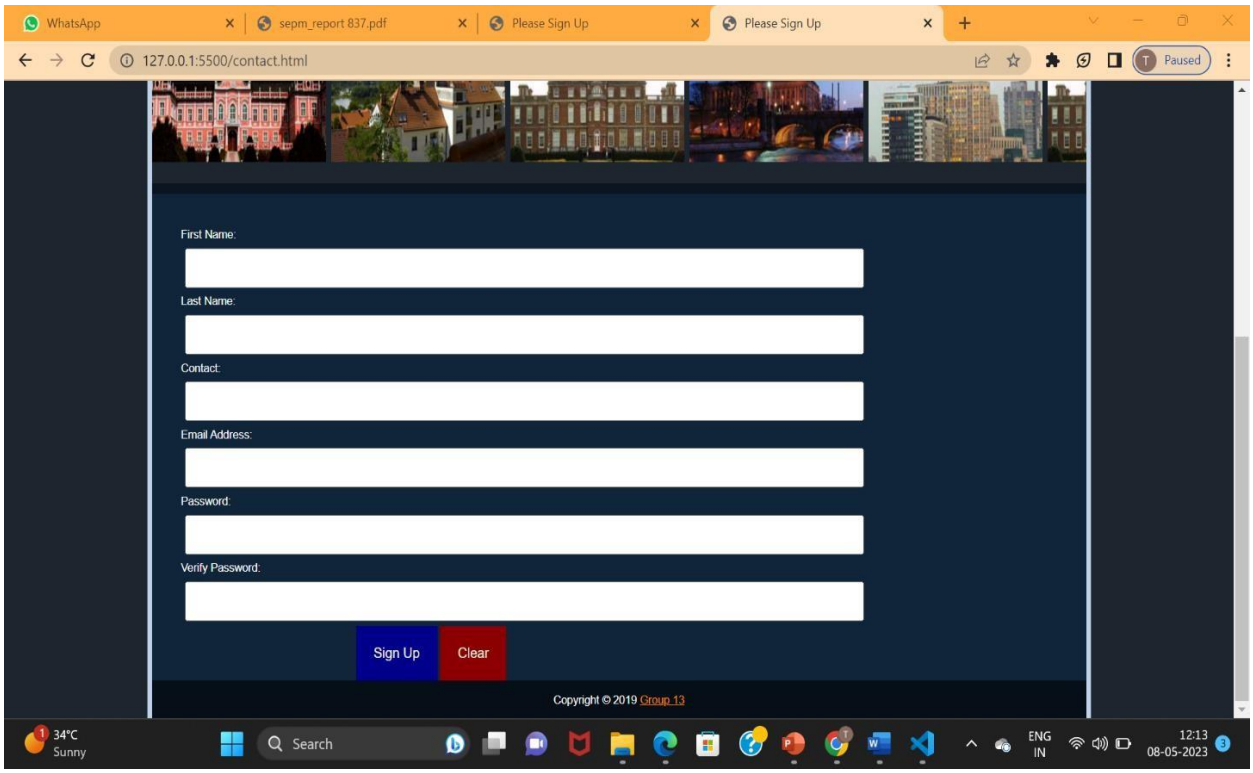
Aim: To provide the details of architectural design/framework/implementation

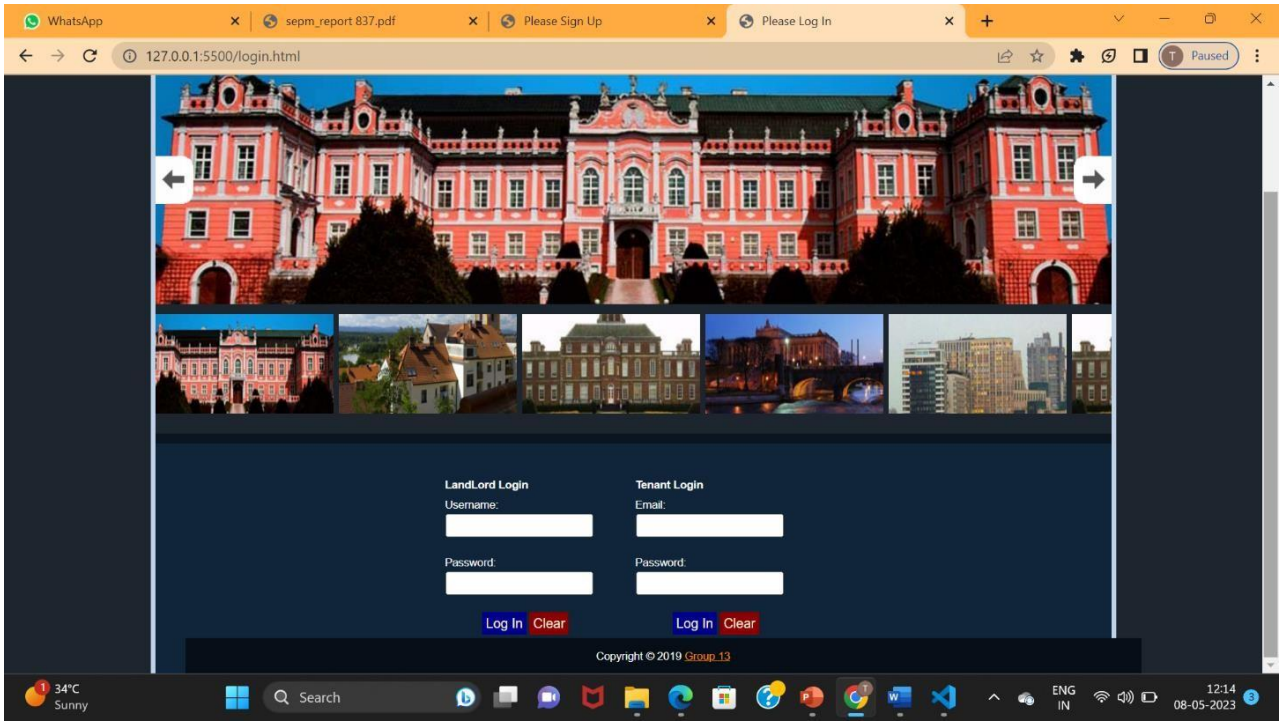
Team Members:

S No	Register No	Name	Role
1	RA2111003011808	Tanuja Kharol	**Rep/Member**
2	RA2111003011813	Ishika Jain	**Member**
3	RA2111003011810	Akula Lakshmi nikhita	**Member**




WhatsApp
sepm_report 837.pdf
Please Sign Up
house Rental Management Syste
127.0.0.1:5500/index.html
Paused
House.com
Home
Sign Up
Log In
Welcome to house Rental
34°C
Sunny
Search
ENG
IN
12:13
08-05-2023


WhatsApp
sepm_report 837.pdf
Please Sign Up
Please Sign Up
127.0.0.1:5500/contact.html
Paused
First Name:
Last Name:
Contact:
Email Address:
Password:
Verify Password:
Sign Up
Clear
Copyright © 2019 Group 13
34°C
Sunny
Search
ENG
IN
12:13
08-05-2023



Code :- contact.html

```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Please Sign Up</title>
<meta name="keywords" content="rental management system" />
<meta name="description" content="Rental Management Systemby Raz" />
<link href="templatemo_style.css" rel="stylesheet" type="text/css" />
<link rel="stylesheet" type="text/css" href="gallery_style.css" />
<script src="script1.js" defer></script>
</head>
<body>
<div id="templatemo_container">
<div id="templatemo_top_panel">
  <div id="templatemo_header_section">
    <div id="templatemo_header">
          Raz's Rental
        </div>
    </div> <!-- end of header section -->

    <div id="templatemo_menu_login_section">
      <div id="templatemo_menu_section">
          <div id="templatemo_menu_panel">
                <ul>
                    <li><a href="index.html">Home</a></li>
                    <li><a href="contact.html" class="current">Sign Up</a></li>
                    <li><a href="login.html">Log In</a></li>
                </ul>
            </div> <!-- end of menu -->
```

```
        </div>

    </div>
</div> <!-- end of top panel -->

<div id="templatemo_gallery_panel">
<div id="gallery">
  <div id="imagearea">
    <div id="image">
      <a href="javascript:slideShow.nav(-1)" class="imgnav " id="previmg"></a>
      <a href="javascript:slideShow.nav(1)" class="imgnav " id="nextimg"></a>
    </div>
  </div>
  <div id="thumbwrapper">
    <div id="thumbarea">
      <ul id="thumbs">
        <li value="1"><img src="images/thumbs/1.jpg" width="179" height="100"
alt="" /></li>
        <li value="2"><img src="images/thumbs/2.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
      </ul>
    </div>
  </div>
</div>

<script type="text/javascript">
var imgid = 'image';
var imgdir = 'images/fullsize';
var imgext = '.jpg';
var thumbid = 'thumbs';
var auto = true;
var autodelay = 5;
</script>
<script type="text/javascript" src="slide.js"></script>

</div>
<div></div>

<div id="templatemo_content_panel_1">
```

```
  <form method = "post" action="register.php" class="appear" class=>
        <p><label >First Name: <br>
            <input name="fname" type="text" size="10" required="true" >
        </label>
        <p><label>Last Name: <br>
            <input name="lname" type="text" size="10" required="true">
        </label></p>
        <p><label>Contact: <br>
            <input name="contact" type="tel" size="10" length="10"
required="true">
        </label></p>
        <p><label>Email Address: <br>
            <input name="email" type="email" required="true">
        </label></p>
        <p><label>Password: <br>
            <input name="password1" id="password1" type="password" size="15"
required="true">
        </label></p>
        <p><label>Verify Password: <br>
            <input name="password2" id="password2" type="password" size="15"
required="true" ondragleave="check_password();">
        </label></p>
        <input type="submit" value="Sign Up" onsubmit="check_password();">
        <input type="reset" value="Clear">
            </form>
            </div>
<div id="templatemo_footer_panel">
    Copyright © 2019 <a href="index.html">Group 13</a> </div>
</body>

</html>
```

Index.html

```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>house Rental Management System</title>
<meta name="keywords" content="rental management system" />
<meta name="description" content="Rental Management Systemby Raz" />
<link href="templatemo_style.css" rel="stylesheet" type="text/css" />
<link rel="stylesheet" type="text/css" href="gallery_style.css" />
</head>
<body>
<div id="templatemo_container">
<div id="templatemo_top_panel">
  <div id="templatemo_header_section">
    <div id="templatemo_header">
          House.com
```

```
        </div>
    </div> <!-- end of header section -->

    <div id="templatemo_menu_login_section">
      <div id="templatemo_menu_section">
          <div id="templatemo_menu_panel">
                <ul>
                    <li><a href="index.html" class="current">Home</a></li>
                    <li><a href="contact.html">Sign Up</a></li>
                    <li><a href="login.html">Log In</a></li>

                </ul>
            </div> <!-- end of menu -->
        </div>

    </div>
</div> <!-- end of top panel -->

<div id="templatemo_gallery_panel">
<div id="gallery">
  <div id="imagearea">
    <div id="image">
      <a href="javascript:slideShow.nav(-1)" class="imgnav " id="previmg"></a>
      <a href="javascript:slideShow.nav(1)" class="imgnav " id="nextimg"></a>
    </div>
  </div>
  <div id="thumbwrapper">
    <div id="thumbarea">
      <ul id="thumbs">
        <li value="1"><img src="images/thumbs/1.jpg" width="179" height="100"
alt="" /></li>
        <li value="2"><img src="images/thumbs/2.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
      </ul>
    </div>
  </div>
</div>

<script type="text/javascript">
var imgid = 'image';
var imgdir = 'images/fullsize';
```

```
var imgext = '.jpg';
var thumbid = 'thumbs';
var auto = true;
var autodelay = 5;
</script>
<script type="text/javascript" src="slide.js"></script>

</div>

<div id="templatemo_content_panel_1">

    <h2 color= "white" align="center">Welcome to house Rental</h2>







<div class="cleaner_with_height"> </div>
</div>

<div id="templatemo_footer_panel">
    Copyright © 2019 <a href="index.html">Group 13</a> </div>
</body>
</html>
```

Login.html :-

```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Please Log In</title>
<meta name="keywords" content="rental management system" />
<meta name="description" content="Rental Management Systemby Raz" />
<link href="templatemo_style.css" rel="stylesheet" type="text/css" />
<link rel="stylesheet" type="text/css" href="gallery_style.css" />
</head>
<body>
<div id="templatemo_container">
<div id="templatemo_top_panel">
    <div id="templatemo_header_section">
        <div id="templatemo_header">
            Raz's Rental
        </div>
    </div> <!-- end of header section -->

    <div id="templatemo_menu_login_section">
        <div id="templatemo_menu_section">
            <div id="templatemo_menu_panel">
                <ul>
                    <li><a href="index.html">Home</a></li>
                    <li><a href="contact.html">Sign Up</a></li>
```

```
                    <li><a href="login.html" class="current">Log
In</a></li>
                </ul>
            </div> <!-- end of menu -->
        </div>
        <div id="templatemo_login_section">

        </div>
    </div>
</div> <!-- end of top panel -->

<div id="templatemo_gallery_panel">
<div id="gallery">
  <div id="imagearea">
    <div id="image">
      <a href="javascript:slideShow.nav(-1)" class="imgnav " id="previmg"></a>
      <a href="javascript:slideShow.nav(1)" class="imgnav " id="nextimg"></a>
    </div>
  </div>
  <div id="thumbwrapper">
    <div id="thumbarea">
      <ul id="thumbs">
        <li value="1"><img src="images/thumbs/1.jpg" width="179" height="100"
alt="" /></li>
        <li value="2"><img src="images/thumbs/2.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
      </ul>
    </div>
  </div>
</div>

<script type="text/javascript">
var imgid = 'image';
var imgdir = 'images/fullsize';
var imgext = '.jpg';
var thumbid = 'thumbs';
var auto = true;
var autodelay = 5;
</script>
<script type="text/javascript" src="slide.js"></script>
```

```
</div>
<div></div>

<div id="templatemo_content_panel_1">

    <table align="center">
        <tbody>
                <tr>
                    <td><strong>LandLord Login</strong></td>

                    <td><strong>Tenant Login</strong></td>

                </tr>
                <tr>
                    <td >
                        <form method = "post" action="admin.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Username:
                                <input name="username" type="text" size="10"
required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>
                    </td>

                    <td>
                        <form method = "post" action="login.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Email:<br>
                                <input name="email" type="email" required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>

                    </td>
                </tr>
            </tbody>

        </table>

<div id="templatemo_footer_panel">
    Copyright © 2019 <a href="index.html">Group 13</a> </div>
</body>
```

```
</html>
```

Java :-

```
function check_password()
{
    var pass1 = document.getElementById("password1");
    var pass2 = document.getElementById("password2");

    if(pass1.value == " "){
        alert("Password cannot be blank");

        return false;
    }

    if(pass1.value !== pass2.value){
        alert("The two passwords are not the same. Please enter the password
again.");
    }


}
```

Style:-

.css

```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Please Log In</title>
<meta name="keywords" content="rental management system" />
<meta name="description" content="Rental Management Systemby Raz" />
<link href="templatemo_style.css" rel="stylesheet" type="text/css" />
<link rel="stylesheet" type="text/css" href="gallery_style.css" />
</head>
<body>
<div id="templatemo_container">
<div id="templatemo_top_panel">
    <div id="templatemo_header_section">
        <div id="templatemo_header">
            House .com
        </div>
    </div> <!-- end of header section -->

    <div id="templatemo_menu_login_section">
        <div id="templatemo_menu_section">
            <div id="templatemo_menu_panel">
                <ul>
                    <li><a href="index.html">Home</a></li>
                    <li><a href="contact.html">Sign Up</a></li>
```

```
                    <li><a href="login.html" class="current">Log
In</a></li>
                </ul>
            </div> <!-- end of menu -->
        </div>
        <div id="templatemo_login_section">

        </div>
    </div>
</div> <!-- end of top panel -->

<div id="templatemo_gallery_panel">
<div id="gallery">
  <div id="imagearea">
    <div id="image">
      <a href="javascript:slideShow.nav(-1)" class="imgnav " id="previmg"></a>
      <a href="javascript:slideShow.nav(1)" class="imgnav " id="nextimg"></a>
    </div>
  </div>
  <div id="thumbwrapper">
    <div id="thumbarea">
      <ul id="thumbs">
        <li value="1"><img src="images/thumbs/1.jpg" width="179" height="100"
alt="" /></li>
        <li value="2"><img src="images/thumbs/2.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
      </ul>
    </div>
  </div>
</div>

<script type="text/javascript">
var imgid = 'image';
var imgdir = 'images/fullsize';
var imgext = '.jpg';
var thumbid = 'thumbs';
var auto = true;
var autodelay = 5;
</script>
<script type="text/javascript" src="slide.js"></script>
```

```
</div>
<div></div>

<div id="templatemo_content_panel_1">

    <table align="center">
        <tbody>
                <tr>
                    <td><strong>LandLord Login</strong></td>

                    <td><strong>Tenant Login</strong></td>

                </tr>
                <tr>
                    <td >
                        <form method = "post" action="admin.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Username:
                                <input name="username" type="text" size="10"
required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>
                    </td>

                    <td>
                        <form method = "post" action="login.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Email:<br>
                                <input name="email" type="email" required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>

                    </td>
                </tr>
            </tbody>

        </table>

<div id="templatemo_footer_panel">
    Copyright © 2019 <a href="index.html">Group 13</a> </div>
</body>
```

```
</html><!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Please Log In</title>
<meta name="keywords" content="rental management system" />
<meta name="description" content="Rental Management Systemby Raz" />
<link href="templatemo_style.css" rel="stylesheet" type="text/css" />
<link rel="stylesheet" type="text/css" href="gallery_style.css" />
</head>
<body>
<div id="templatemo_container">
<div id="templatemo_top_panel">
    <div id="templatemo_header_section">
        <div id="templatemo_header">
            Raz's Rental
        </div>
    </div> <!-- end of header section -->

    <div id="templatemo_menu_login_section">
        <div id="templatemo_menu_section">
            <div id="templatemo_menu_panel">
                <ul>
                    <li><a href="index.html">Home</a></li>
                    <li><a href="contact.html">Sign Up</a></li>
                    <li><a href="login.html" class="current">Log
In</a></li>
                </ul>
            </div> <!-- end of menu -->
        </div>
        <div id="templatemo_login_section">

        </div>
    </div>
</div> <!-- end of top panel -->

<div id="templatemo_gallery_panel">
<div id="gallery">
  <div id="imagearea">
    <div id="image">
      <a href="javascript:slideShow.nav(-1)" class="imgnav " id="previmg"></a>
      <a href="javascript:slideShow.nav(1)" class="imgnav " id="nextimg"></a>
    </div>
  </div>
  <div id="thumbwrapper">
    <div id="thumbarea">
      <ul id="thumbs">
        <li value="1"><img src="images/thumbs/1.jpg" width="179" height="100"
alt="" /></li>
        <li value="2"><img src="images/thumbs/2.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
```

```
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
        <li value="3"><img src="images/thumbs/3.jpg" width="179" height="100"
alt="" /></li>
        <li value="4"><img src="images/thumbs/4.jpg" width="179" height="100"
alt="" /></li>
        <li value="5"><img src="images/thumbs/5.jpg" width="179" height="100"
alt="" /></li>
      </ul>
    </div>
  </div>
</div>

<script type="text/javascript">
var imgid = 'image';
var imgdir = 'images/fullsize';
var imgext = '.jpg';
var thumbid = 'thumbs';
var auto = true;
var autodelay = 5;
</script>
<script type="text/javascript" src="slide.js"></script>

</div>
<div></div>

<div id="templatemo_content_panel_1">

    <table align="center">
        <tbody>
                <tr>
                    <td><strong>LandLord Login</strong></td>

                    <td><strong>Tenant Login</strong></td>

                </tr>
                <tr>
                    <td >
                        <form method = "post" action="admin.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Username:
                                <input name="username" type="text" size="10"
required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>
```

```
                    </td>

                    <td>
                        <form method = "post" action="login.php" class="appear"
class="templatemo_menu_login_section">
                            <p><label>Email:<br>
                                <input name="email" type="email" required="true">
                            </label></p><br>
                            <p><label>Password:
                                <input name="password" type="password" size="15"
required="true">
                            </label></p><br>
                            <input type="submit" value="Log In">
                            <input type="reset" value="Clear">
                        </form>

                    </td>
                </tr>
            </tbody>

        </table>

<div id="templatemo_footer_panel">
    Copyright © 2019 <a href="index.html">Group 13</a> </div>
</body>
</html>
```

Result:

Thus, the details of architectural design/framework/implementation along with the screenshots were provided.

Conclusion:

Based on the project's analysis and development, it can be concluded that the house rental system software is a feasible solution for managing therental process. The system offers several benefits, including automating rental transactions, providing tenants and landlords with a user-friendly interface, and enhancing the overall rental experience.

The software's development process included identifying user requirements, designing a user-friendly interface, implementing keyfeatures such as rental agreement creation, payment processing, andmaintenance management, and conducting testing to ensure system functionality.

Further, the project's evaluation and feedback from users have shown thatthe system is efficient and reliable. However, there is still room for improvement in terms of incorporating additional features such as inventory management, expense tracking, and data analytics.

Overall, the house rental system software is a practical solution that can benefit landlords, tenants, and property managers by streamlining the rentalprocess and enhancing the user experience. The project's success underscores the importance of understanding user requirements, designing a user-friendly interface, and conducting rigorous testing to ensure system functionality.