AR PROPERTY'S SYSTEM

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project titled **"AR Property's System"**, submitted by **Md. Arif Hossain** and **Abu Sayed Rasel** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 2 February 2023 .

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We hereby declare that, this project has been done by **Md. Arif Hossain** and **Abu Sayed Rasel** under the supervision of **Tahmina Sultana Priya** Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

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ABSTRACT

Life is short and time is precious in today's fast moving life. The wastage of time finding a rent or home . Also it's a waste of our body energy. This project is a web-based finding home for rent and an owner who can rent his home. It's specifically designed for them with an online based payment system and secured. Also , it can find the best optimized search for a consumer compared to other websites. This “AR Property System” project is developed for making a better understanding system for consumers. This project is very optimized for renting a house to their consumers and also they have freedom to control their properties with their utilities bill and other expenses . They can search online and pay online and save their precious time . Although there is a computerized web based application system, it does not have that great productivity and usefulness with the help of data stored and generated due to implementation of this digitized system.

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CHAPTER 1
Introduction

1.1 Introduction

The project “ AR Property System ” is a major project for the future. It's a Web Based software that operates within a centralized system . This project has been developed to improve a solution and override the existing website or similar project .This system is the web application developed to manage the current house renting system easily keeping the house agency system up to date with recent developments. To use this application, you must have to authenticate using the application credentials and then an admin or user can create a managed “AR Property System” profile. To ensure security of losing a client's profile there is a recycle bin system in our web application. “ AR Property System ” is a powerful application . Its flexible, easy to use and design are designed for a user friendly environment.

1.2 Motivation

First of all the main reason of web application management is to save time, to give peace of mind to people, to be health conscious and of course our benefits from this project. Another reason here is to create a social platform between a landlord and a renter where they can communicate with each other easily. Through this project we will be able to provide a good service, also we will be able to generate a lot of money through this project .A lot of information will be shared and many people will be able to express their questions and interest through this project. Building a better relationship between a landlord and a tenant and reducing the problems a tenant may face when looking for a new home. AR Property’s System” is a web-based application that is a totally online system designed to deal with property owners and renters. House owners can rent their house , renters can choose a flat based on the size and rent. Property owners can manage all the documents of renter and can collect rent and utilities bills . If any tenant left the flat, the landlord can again add his house on the website for rent. This is also a feedback system where renters can discuss their problems with landlords. There is a notification system where renters are notified about their bills such as rent ,utilities bill every month. One of the advantages of our website is that landlords and renters both can tag and pay their bills through online.

1.3 Project Objective

- Our objective is to help the housing owner with our project
- Create dynamic system to purchase house or paying bills
- Promoting a rent service or owner service in online
- Our intention is to solve all housing problems which are house rent , collect the rent and collect the all information of renter by our project
- Ensure information and security transaction
- Time consume
- Efficiency rent a house in online

1.4 Expected Outcomes

Through this project to build a relationship between landlord and renter thus they can both be beneficial.

- Our project helps to find house for rent
- This system helps to save our time and energy
- Modern approach to maintain this system
- Best user friendly service
- Ease of use secure payment system

1.5 Project Management and Finance

In project Planning ,It's a schedule for planning and work. It includes the project’s milestones, activities, deliverables , basically with intended begin and end dates. How many times is spent on a section of the project model and other things including release date.

1.5.1 Gantt Chart

Gantt chart is a project time management or control tool . Its series of charts or lines shows the amount of work done in certain periods. It allows us to complete our assigned tasks and also helps to complete the whole project in a given time period.

Week	1	4	8	10	20	25	54
Project Proposal	🟩						
Planning		🟩					
Designing			🟩				
Codding			🟩	🟩	🟩	🟩	
Testing						🟩	
Delivery							🟩

Figure 1.5.1: Gantt Chart

1.5.2 Work Breakdown Structure (WBS)

Table1.5.2: Working breakdown

Scheme	Time duration in week	Total Time Period
Brainstorming ideas	W1	1W
Problem identification	W2,W3,W4,W5,W6	5W
Requirements	W7,W8	2W
Requirement analysis	W8	1W
Design specification	W8,W9,W10	3W
Database design	W8,W9,W10,W11,W12,W13	6W
Documentation	W49,W50,W51,W52,W53,W54	6W
Test case	W52,W53,W54	3W
Delivery	W55	1W

1.6 Report Layout

A report layout refers to the structure and organization of a report, including the way the information is presented and the design elements used. We can study a lot and put it to use in real life with the help of a graduation degree. Building this system will enable us to implement our ideas and use them to the advantage of humanity. Our idea is the system, and through implementation it is given life. This report follows all steps and guidelines of Daffodil International University.

CHAPTER 2
Background

2.1 Terminologies

There are three types of stakeholders in the project.

1. Owner (Admin)
2. Renter (consumer)

2.1.1 Project Background

In our area there is a owner of housing, he has a lot of houses and in those houses have 80 + flats. He faces many problems managing rents , utility bills , damage management, renters information, security etc. So he decided to make a better system or idea for housing activities . But it is so hard for him to maintain all activities at once . So, we have decided to build a web application for him to maintain and systematize their housing .

2.1.2 Project Goal

Our motivation is to build a relationship between landlord and renter thus they can both be beneficial. The first one, the address of the both owner and renter are kept thus they can set information of one another. People can seek accommodation very easily and the landlord rents their house in a very simple way of advertising his house on our web application.

- To improve relationship economic efficiency for consumer users
- To improve relationship economic efficiency for owners users
- To provide beneficial wider advertising and economic impacts

2.2 Related Work

In Bangladesh perspective , there are few web applications which provide house business to renters but there is no feature and facility to provide the service online payment. There is no way to create a social related account.

2.3 Comparative Analysis

We will be evaluating the features and functionalities of our web-application and " BD - PROPERTY SYSTEM " The two web-application's jobs are to find new vacant homes for rent to tenants and to provide homes to landlords from which they can make a profit. The interface of both the companies is user friendly but there are some minor changes. Although " BD - PROPERTY " has a booking process, they have no online payment system . On the other site , " AR Property System " has a booking process and also has an online payment system along with providing slightly different and better service. Through the " AR Property System " you can easily book flats online and make payments along with many other house rents.

2.4 Scope of the Problems

Some various types of issues that could flow in the system that we developed.

- This project has no domain.
- Remote services are not used.
- Less Safety.
- Sometimes , there is a risk of errors and data loss.
- There is no genuine collaboration between various web-application.

2.4.1 Problem Statements

In Bangladesh , especially Dhaka , in almost every area there is a owner of housing, he has a lot of houses and in those houses there are 80 plus flats or less of them He faces many problems managing rents , utility bills , damage management , renters information, security etc. It's very difficult to do by himself. and also doing the same task by other people is not trusted and secure. So he decided to make a better system or idea for housing activities . But it is so hard for him to maintain all activities at once .

2.4.2 Proposed Solution

In our web application which we are going to develop, there will be the most suitable solutions to all the above mentioned problems. Our motivation is to build a relationship between landlord and renter thus they can both be beneficial. The first one, the address of the both owner and renter are kept thus they can set information of one another. People can seek accommodation very easily and the landlord rents their house in a very simple way of advertising his house on our web application. They also receive payment and pay all bills through the online system. So, we have decided to build a web application for him to maintain and systematize their housing.

2.5 Challenges

Everyone’s faces all the challenges in our daily lives. So we all face multiple difficult challenges. In various situations , some tasks are the hard part but implementing a payment method is the hardest one. And also the main challenges are trust issues.

- This project goal ideates a plan from real life concerning issues.
- Concentrate on delivering working software frequently.
- At regular intervals, the team putted their concentration on how to become more effective, and they will adjust their behavior accordingly.

CHAPTER 3
Software Requirements Specification

3.1 Business Process Modeling

Its a graphical representation of a workflow and its related sub-processes. Process modeling generates comprehensive, quantitative activity diagrams etc.

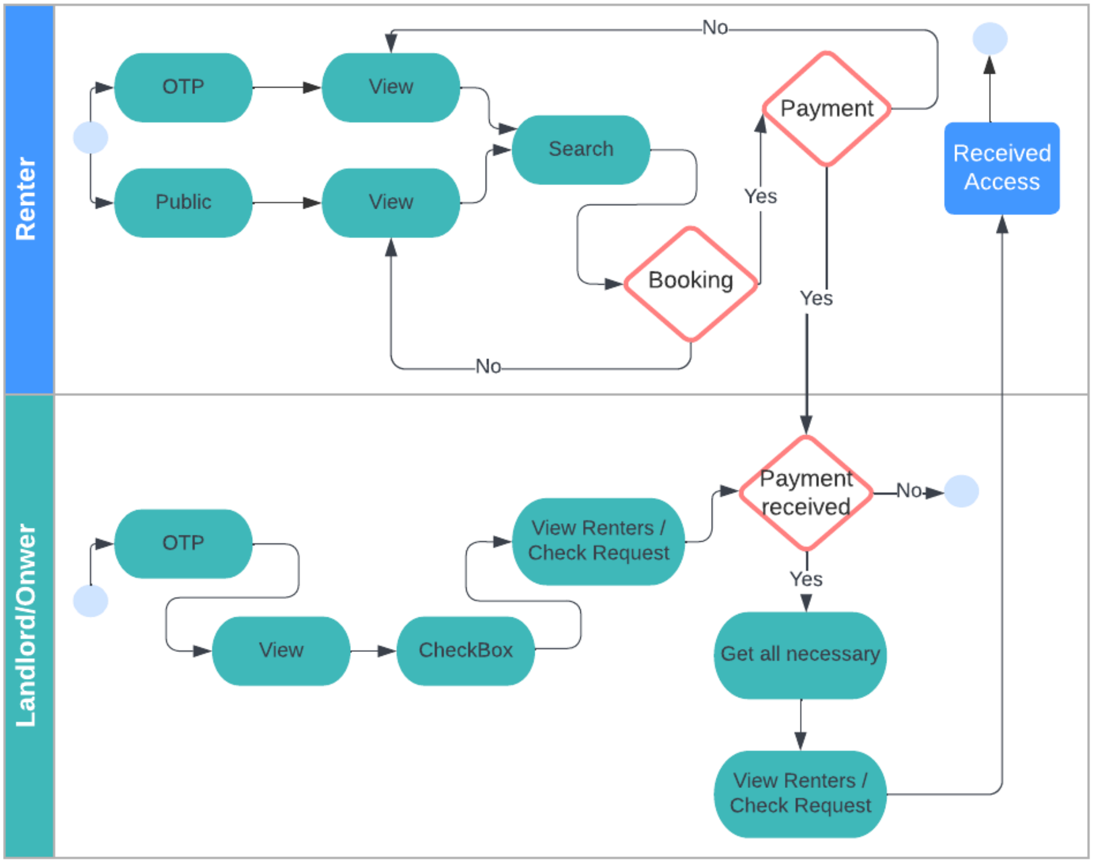


Figure 3.1:BPM

To begin with , A renter will get the required flat details from our website as per his requirement and rent a flat . Then If he wants to rent a flat, he will pay. Later these details and information will go to a homeowner as a request .After that, a landlord will provide the renter with the necessary items after receiving the necessary items , payment and documents .And here the work of the admin is that everything can be managed so that there is no fraud here.

3.1.1 Proposed System Model

Proposed system model mainly describes what developers are going to do with this project. It's an approach that prioritizes quick delivery, adapting to change, and collaboration rather than top down management and following a set plan. Describing details below figure [3.1.1]

3.1.2 Why and How did we use this Waterfall Model ?

Why :

- Requirements are very clear and fixed.
- The project is short.
- It is good to use this model because the technology is well understood.

How:

- This project goal ideates a plan from real life concerning issues.
- Concentrate on delivering working software frequently.
- At regular intervals, the team putted their concentration on how to become more effective, and they will adjust their behavior accordingly.

Waterfall Model

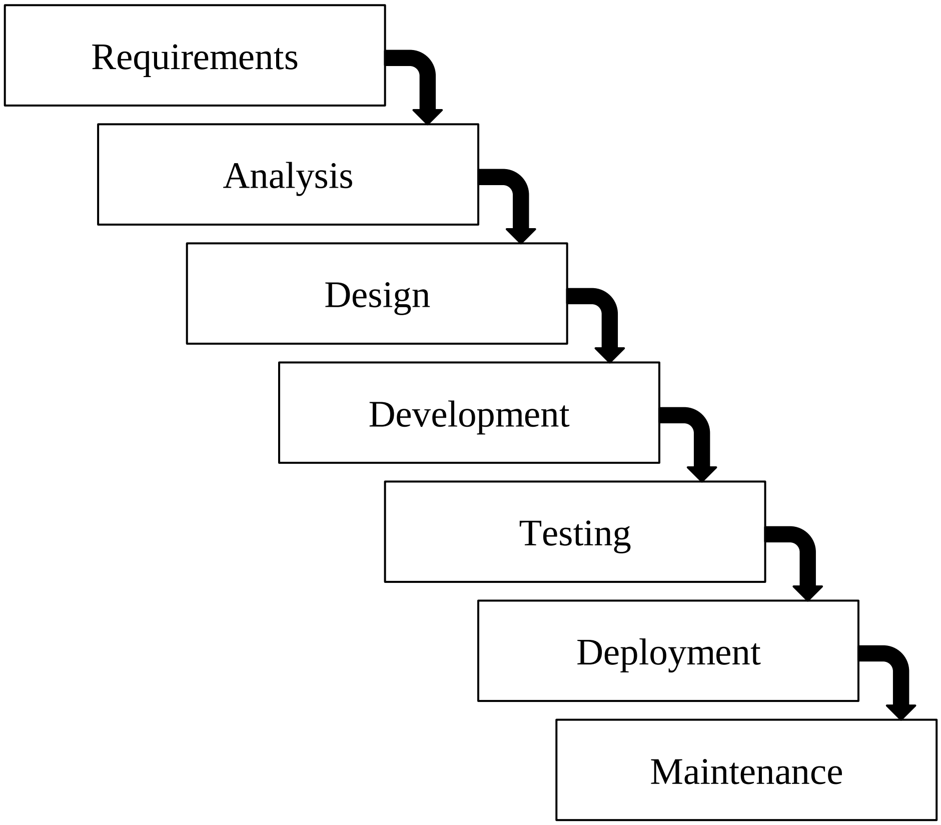


Figure 3.1.1: Project Proposed Model (Waterfall)

3.2 Use Case Diagram

Here a full overview, which features are available for a renters and owner. Some feathers available for both.

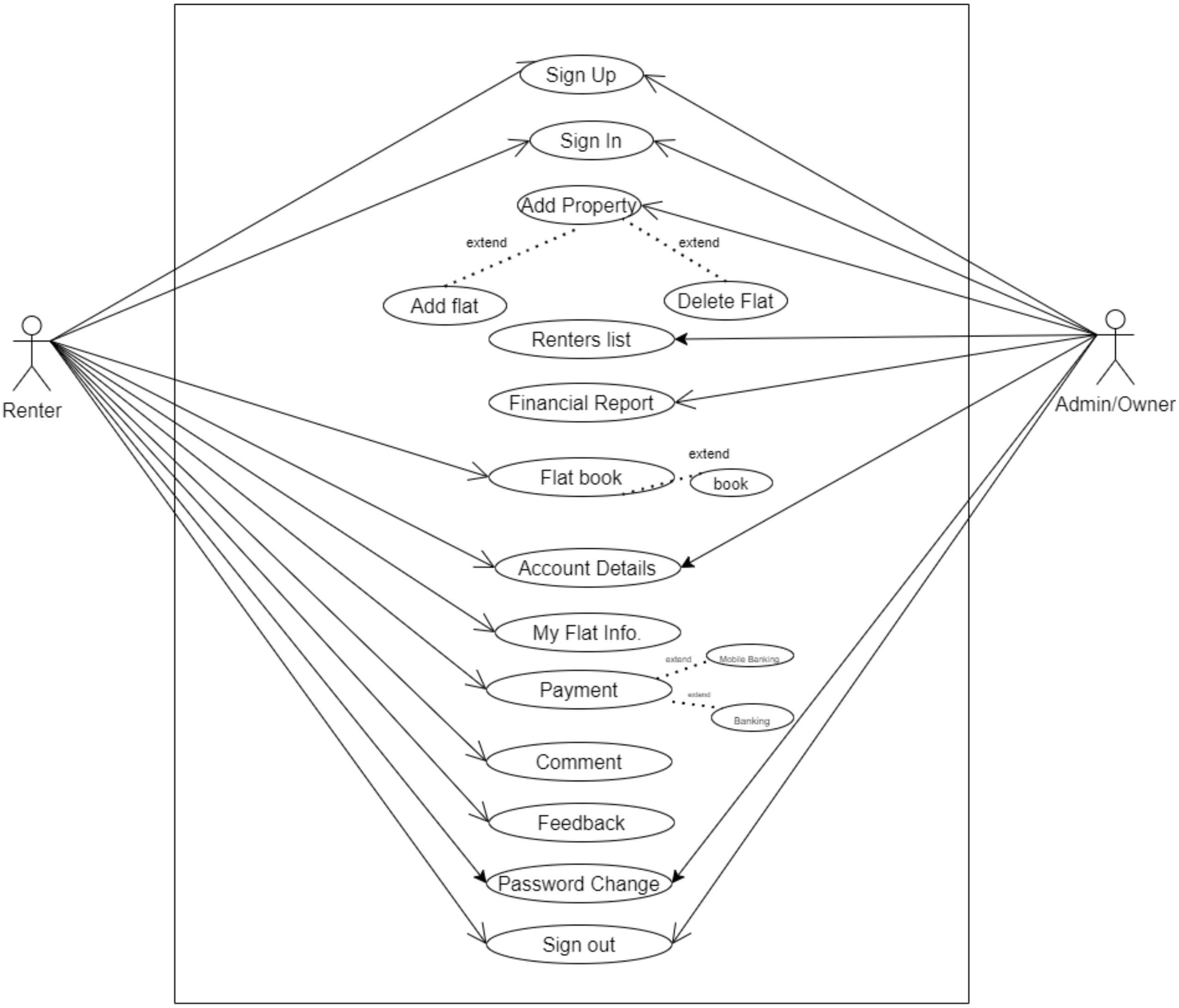


Figure 3.2: Use Case Diagram

Here stockholders are two type renter and admin/owner. In this use case diagram we can see all the functionality . Which function are available for renter and a owner. Some function has a sub-function which are extended.

3.3 Activity Diagram

Activity diagram is another important behavioral diagram in UML diagram to describe dynamic aspects of the system. Activity diagram is essentially an advanced version of flow chart that modeling the flow from one activity to another activity.

3.3.1 Login Activity

Here figure user can enter email and password , then after verification. Then user successfully login.

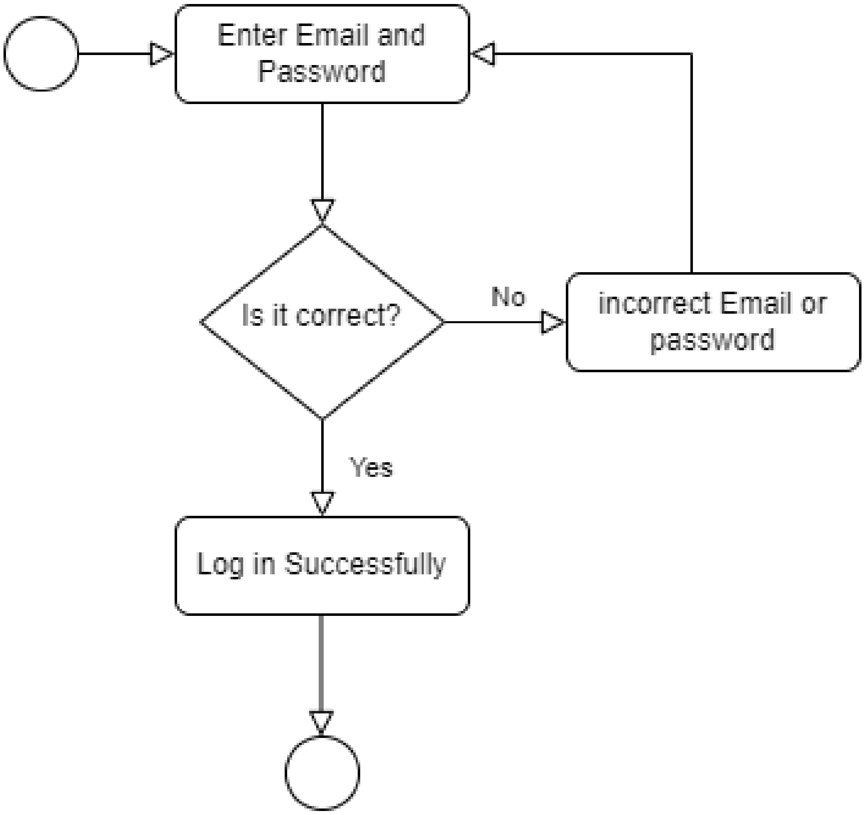


Figure 3.3.1: Login Activity Diagram

3.3.2 Registration

Here figure a registration from then after verification. Then user has successfully user profile.

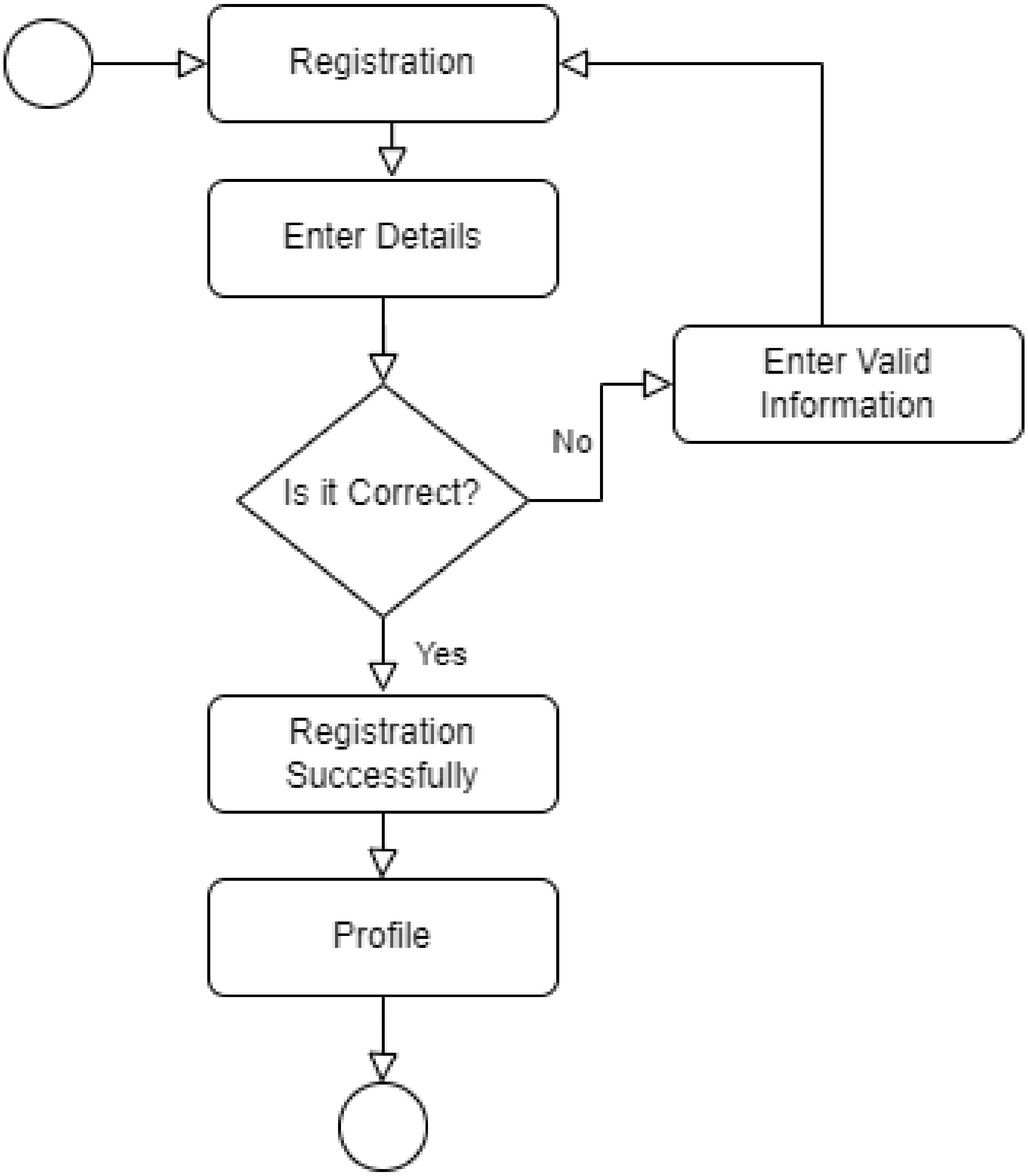


Figure 3.3.2: Registration Activity Diagram

3.3.3 Add Flat

Here figure owner can add new flat or property , then after verification. Then user successfully add flat .

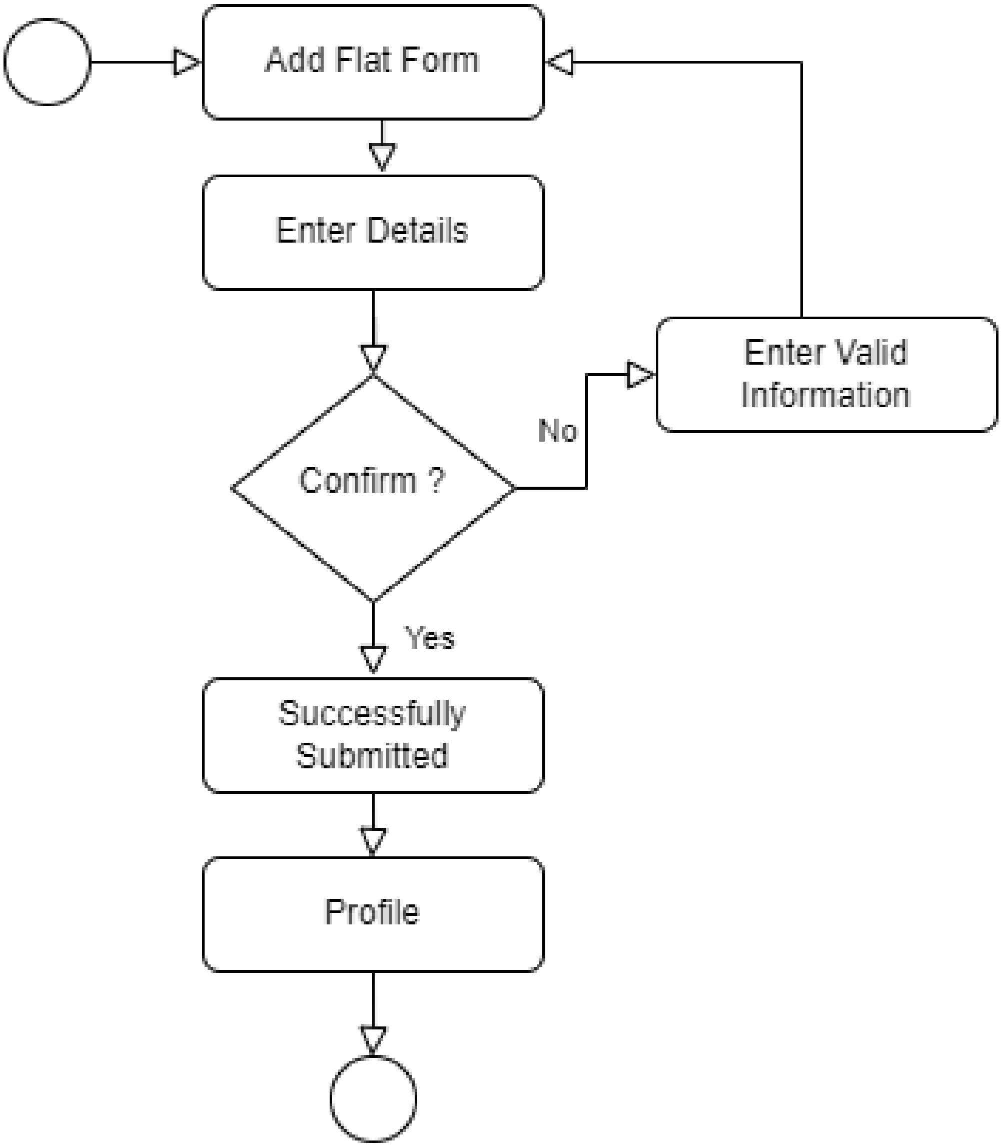


Figure 3.3.3: Add Flat Activity Diagram

3.3.4 Delete Flat

Here figure help to understand how a owner can delete a flat.

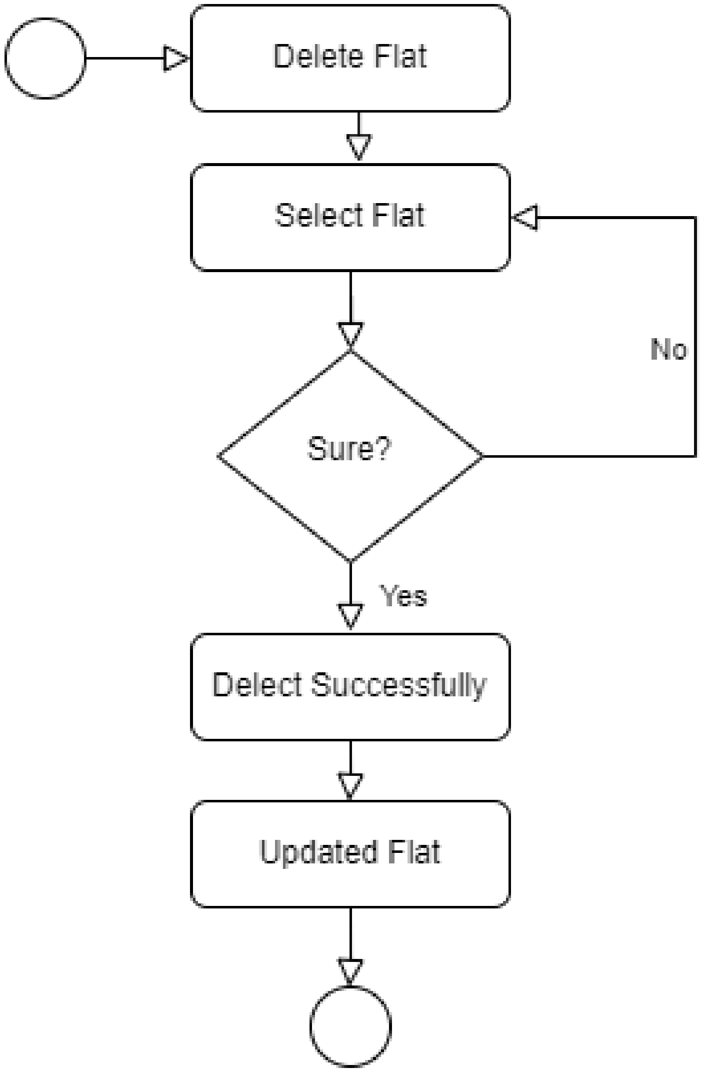


Figure 3.3.4:Delete Flat Activity Diagram

3.3.5 Renter Delete

Here figure help to understand how a owner can renter a flat.

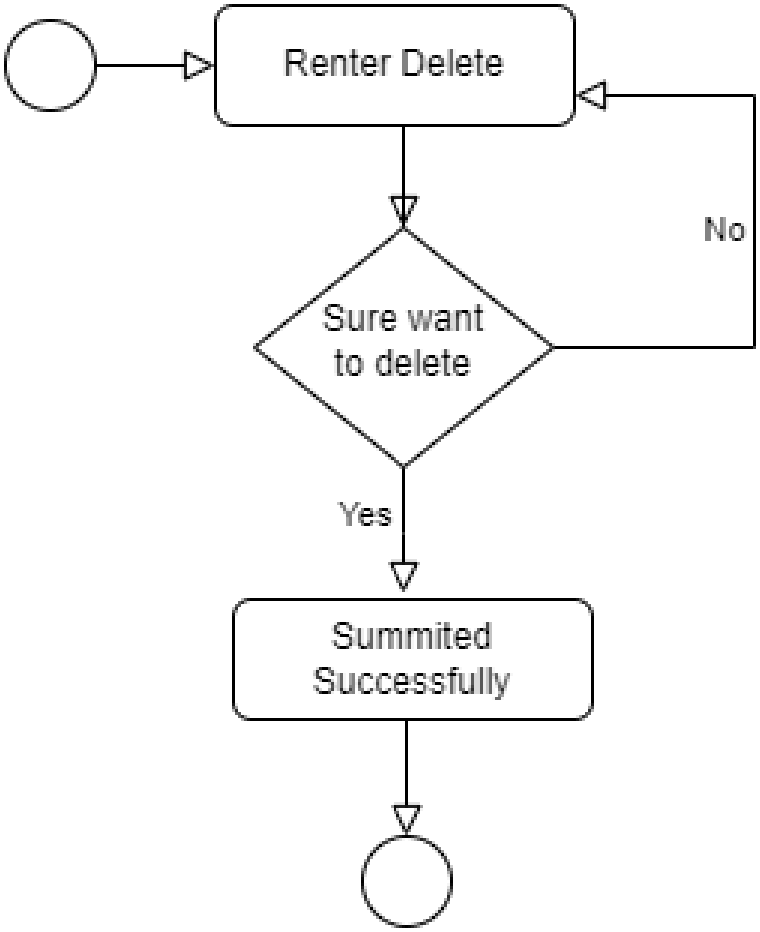


Figure 3.3.5: Renter Delete Activity Diagram

3.3.6 Payment

Here figure help to understand how a consumer can complete here online payment.

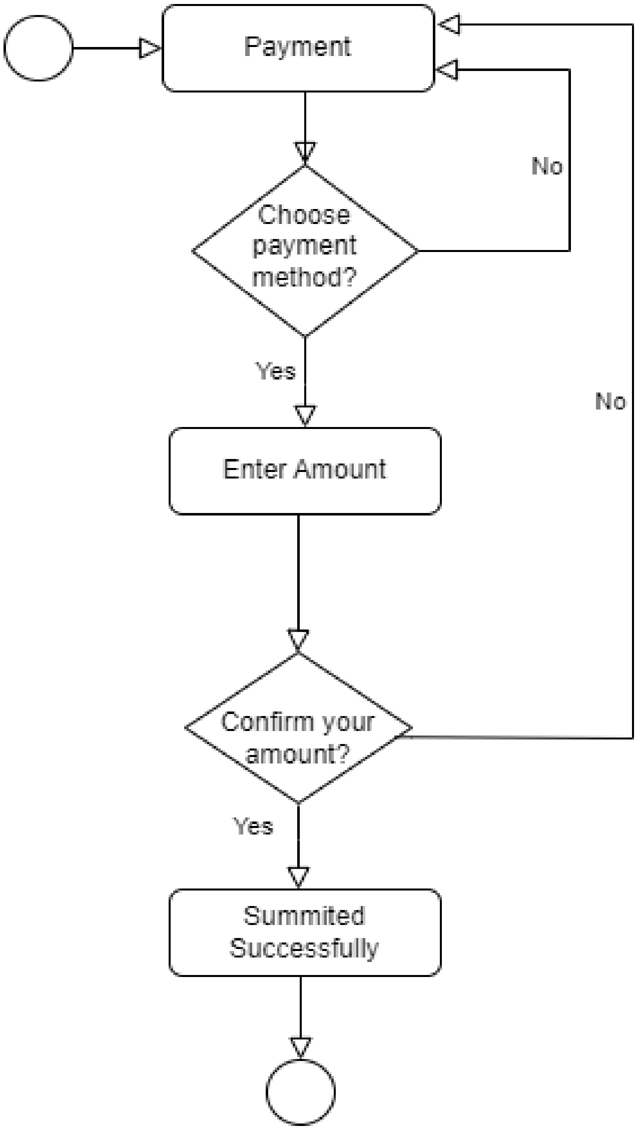


Figure 3.3.6: Payment Activity Diagram

3.4 Sequence Diagram

A sequence diagram is a Unified Modeling Language (UML) diagram that illustrates the sequence of messages between objects in an interaction. A sequence diagram consists of a group of objects that are represented by lifelines, and the messages that they exchange over time during the interaction.

3.4.1 Login Sequence Diagram

Here figure user can enter email and password , then after verification. Then user successfully login.

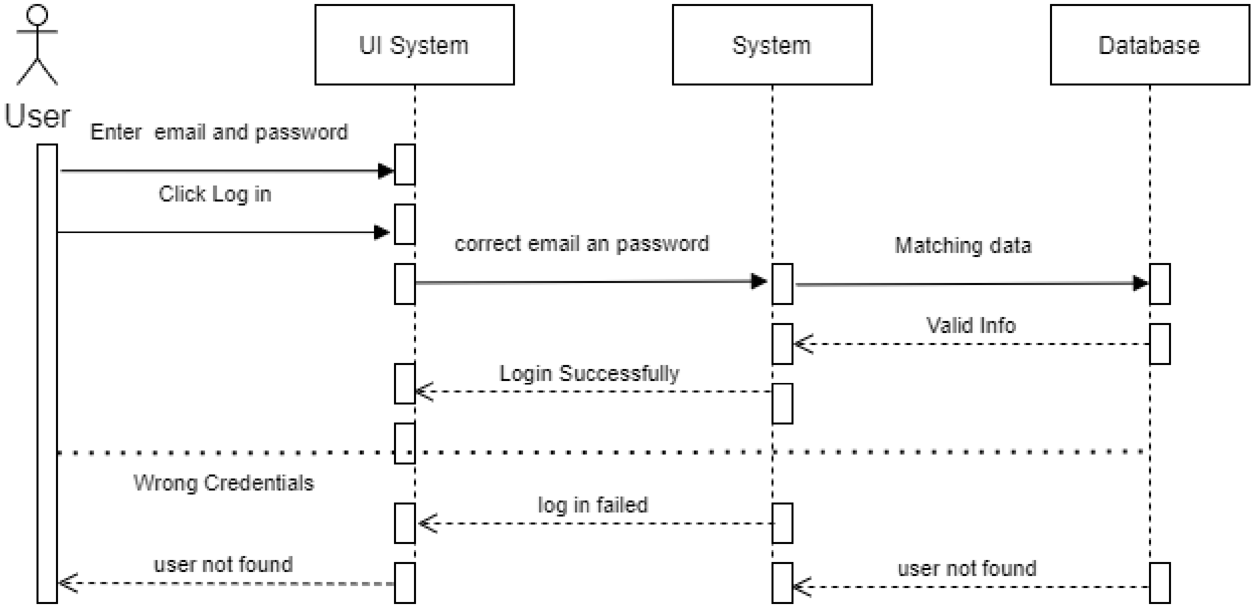


Figure 3.4.1: Login Sequence Diagram

3.4.2 Registration Sequence Diagram

Here in this, figure user or a owner can register their user ids . Then user successfully login.

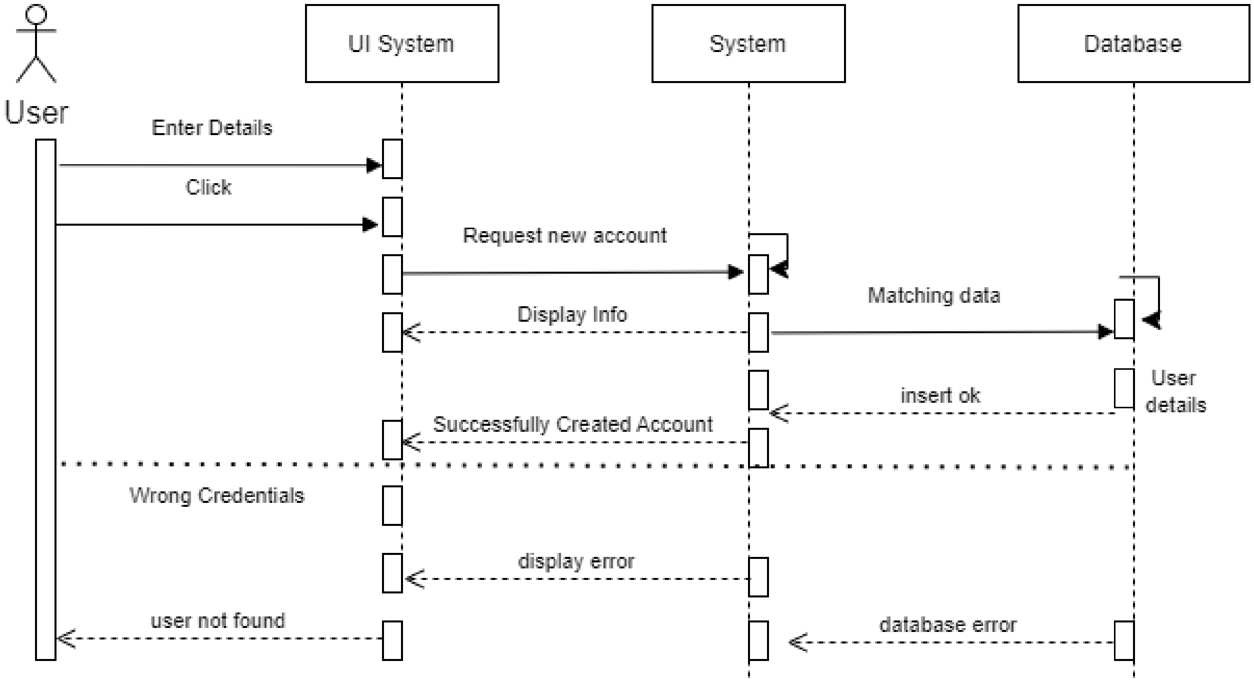


Figure 3.4.2: Registration Sequence Diagram

3.4.3 Add flat Sequence Diagram

In this figure owner can add flat . here a user is owner and landlord.

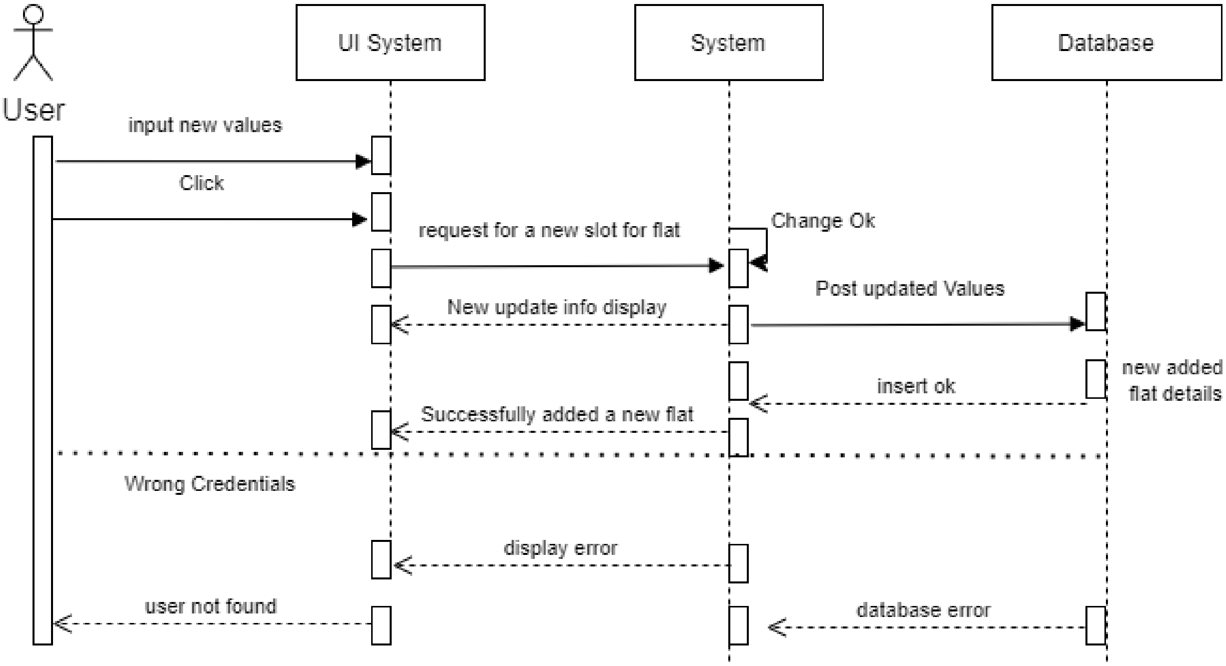


Figure 3.4.3: Add flat Sequence Diagram

3.4.4 Remove Flat Sequence Diagram

In this 3.4.5 figure a owner a can delete his unnecessary flats. Which flat are not useable for renter.

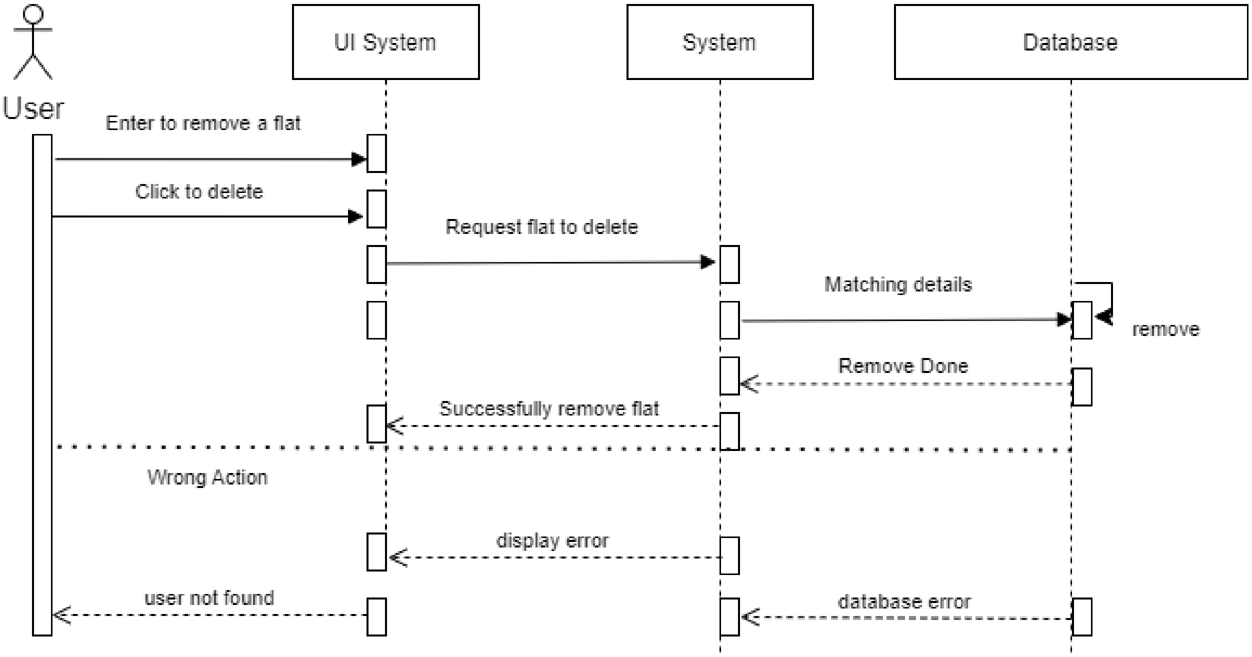


Figure 3.4.4: Remove Flat Sequence Diagram

3.4.5 Account Details Sequence Diagram

In this figure we can , user can see account details.

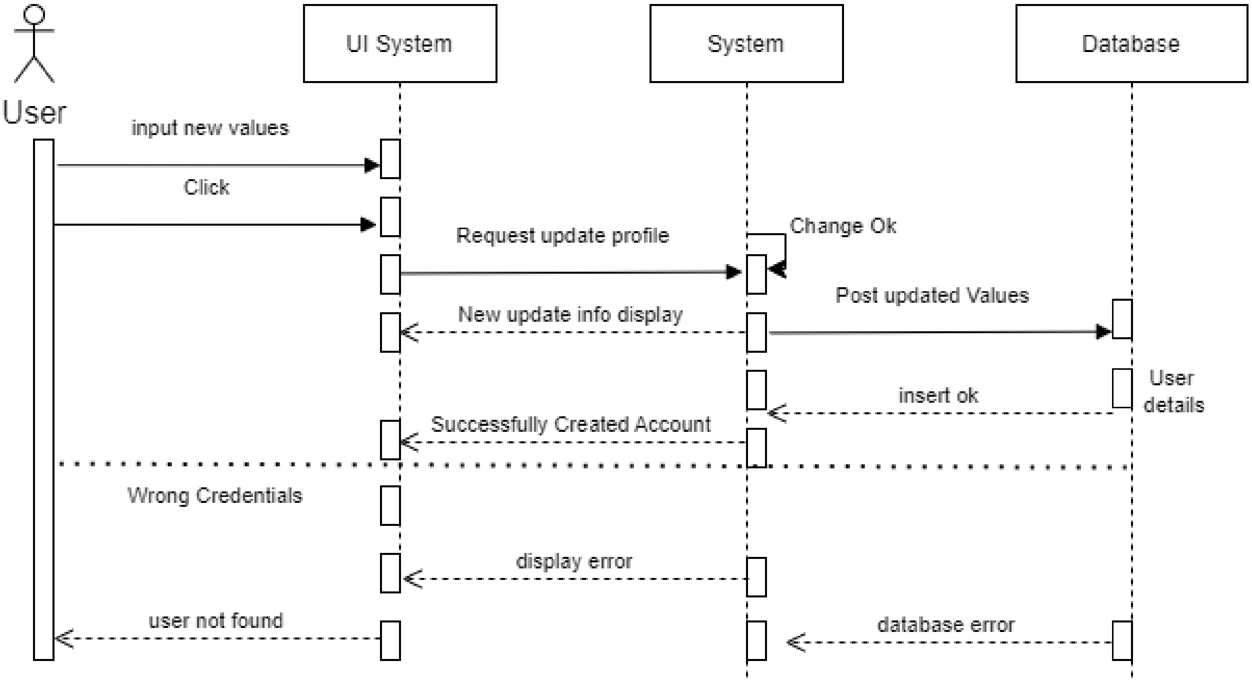


Figure 3.4.5: Account Details Sequence Diagram

3.4.6 Remove Renter Sequence Diagram

Here figure help to understand how a owner can renter a flat.

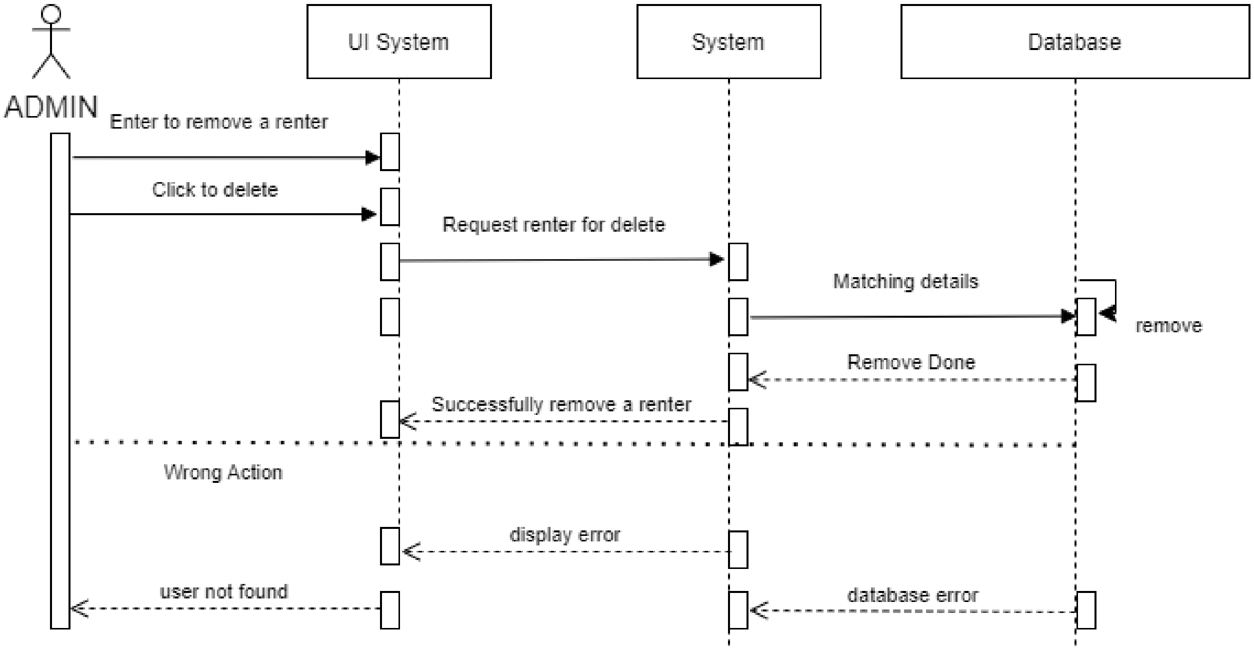


Figure 3.4.6: Remove Renter Sequence Diagram

3.4.7 Payment Sequence Diagram

Here in this figure payment simple method are shown**.**

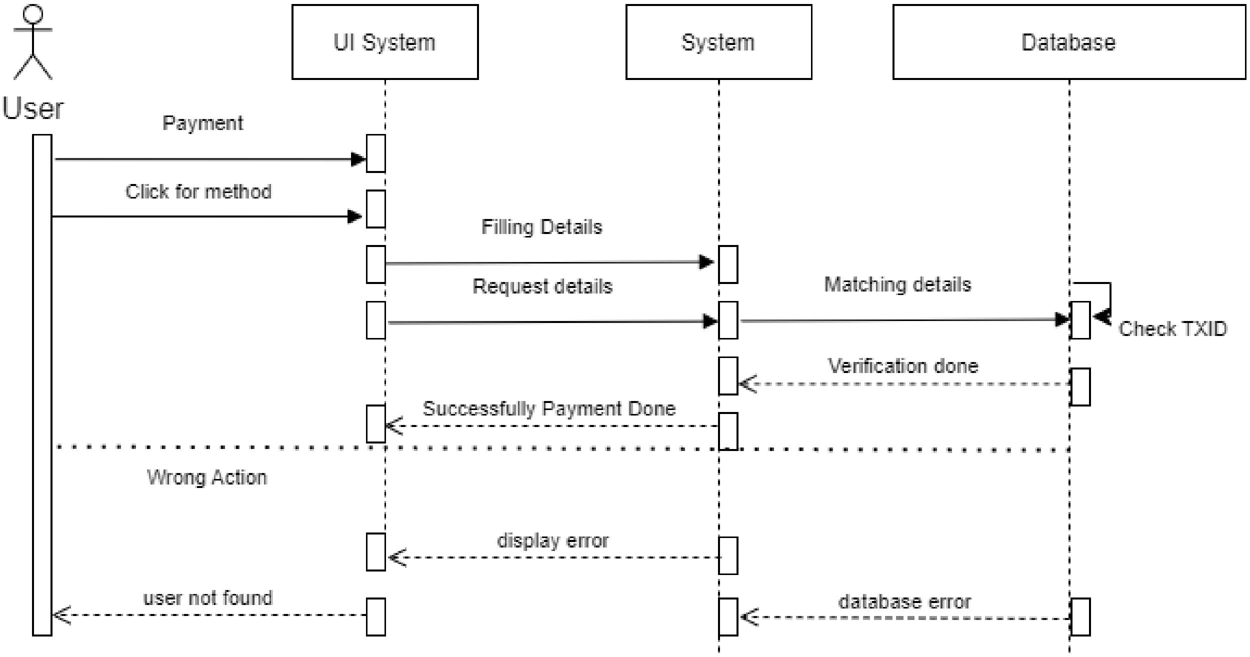


Figure 3.4.7: Payment Sequence Diagram

3.5 Requirement Specification and Analysis

This software requirement specification section explains the general purpose, requirements and nature of software to be developed. This section describes the project's goal , its interface , hardware , software , functional , non-functional , descriptions and requirements .

3.5.1 Performance Requirements

This stage define how well the software system accomplishes certain functions under specific conditions.

3.5.2 Speed and Latency Requirements

- Data should update in database within 2 second.
- Query should bring result within 3 seconds.
- UI/UX design should load within 10 seconds.
- Validation error should show within 1 second.

3.5.3 Precision or Accuracy Requirements

- After login, its show the accuracy data for specific user.
- Documentation should show and perfectly data store in database
- Upload files should upload correctly in database.

3.5.4 Capacity Requirements

- For testing purpose now its, not more than 100 users to be registered .
- Not more than 100 users can login at the same time.

3.6 Logical Data Model

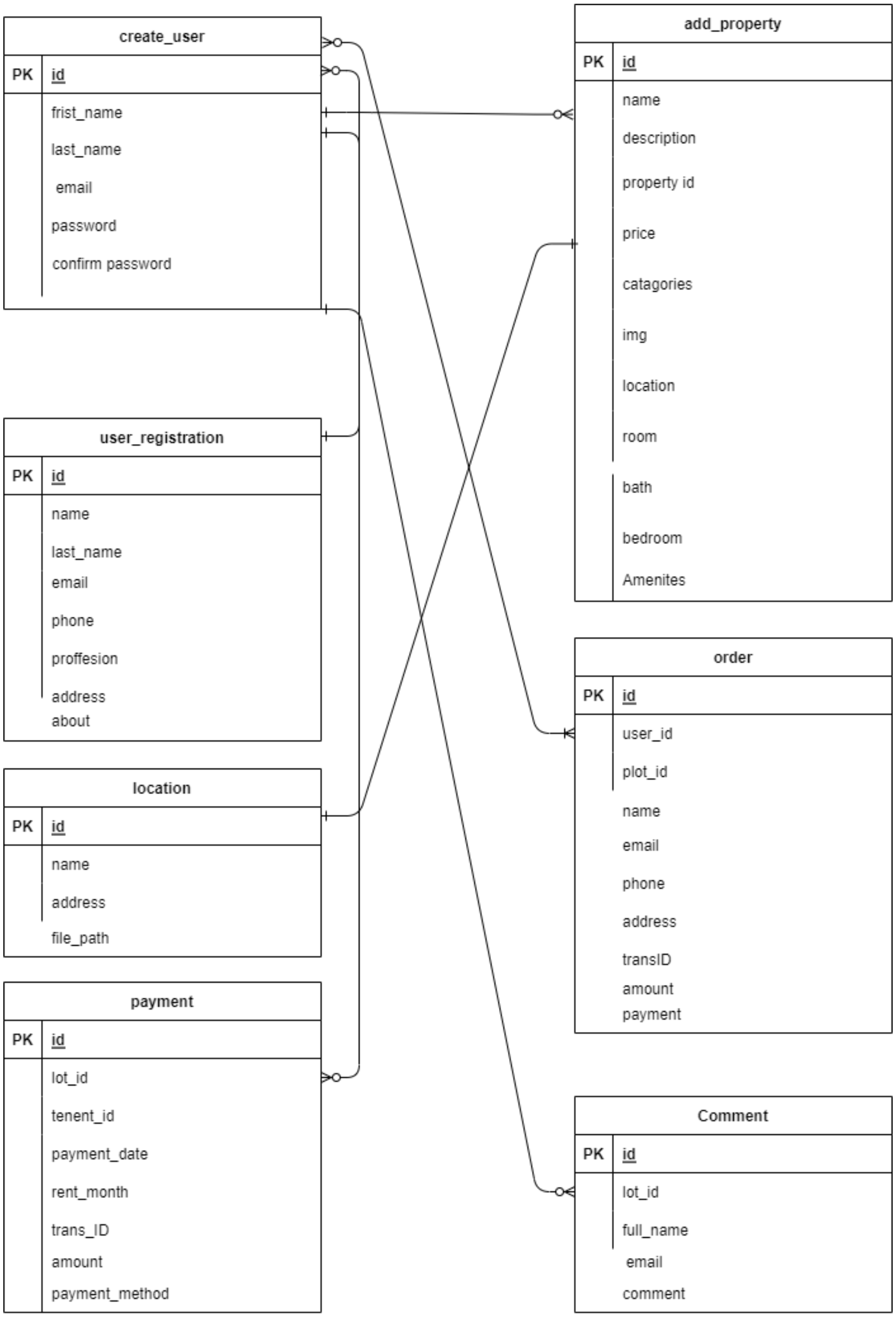


Figure 3.6: Entity Relationship Diagram

This ERD gives an idea of overall working of a project. Our plan is simple to implement and make user-friendly as impossible as . There are seven entity .In every entity has some attribute. Create_user entity has relationship with one to many add_property, order and payment , one to one relationship with user_registration .

3.7 Design Requirements

This section gives an idea of overall working of a project. Our plan is simple to implement and make user-friendly as impossible as .

3.7.1 Functional Requirements and Description

Functional Requirements referred to a mandatory function, which is mandatory to the system. Those functions are must be perform perfectly in a software. Requirements are given below.

3.7.1.1 Login User

Table 3.7.1.1: Login User

ID : FR - 01
Requirement Name: Login User
Description: User can input valid username and password then user successfully login.
Stockholders: Renter, Owner/Landlord

3.7.1.2 Logout User

Table 3.7.1.2: Logout User

ID : FR - 02
Requirement Name: Logout
Description: If user is login and user want to exit from session , it will close all user session and page reload to default

Stockholders: Renter, Owner/Landlord

3.7.1.3 Default User

Table 3.7.1.3: Default User

ID : FR - 03
Requirement Name: Default User
Description: Any one can access to see default page as default user
Stockholders: Client/Renter, Owner/Landlord, Public

3.7.1.4 Registration

Table 3.7.1.4: Registration

ID : FR - 04
Requirement Name: Registration
Description: User should be needed registration for login to access the system.
Stockholders: Client/Renter

3.7.1.5 Update Profile

Table 3.7.1.5: Update Profile

ID : FR - 05
Requirement Name: Update Profile
Description: If a user should be needed registration or profile changes
Stockholders: Client/Renter

3.7.1.6 Add Flat

Table 3.7.1.6: Add Flat

ID : FR - 06
Requirement Name: Add Flat

Description: A admin/owner can easily add flat after a valid authentication
Stockholders: Owner/landlord

3.7.1.7 Update Flat

Table 3.7.1.7: Update Flat

ID : FR - 07
Requirement Name: Update Flat
Description: A admin/owner can easily update flat after a adding a flat
Stockholders: Owner/landlord/admin

3.7.1.8 Delete Flat

Table 3.7.1.8: Delete Flat

ID : FR - 08
Requirement Name: Delete Flat
Description: A admin/owner can easily remove flat after a adding a flat
Stockholders: Owner/landlord/admin

3.7.1.9 My Flat Information

Table 3.7.1.9: My Flat Information

ID : FR - 09
Requirement Name: My flat Information
Description: A Client/Renter can view easily flat history
Stockholders: Client/Renter

3.7.1.10 Admin

Table 3.7.1.10: Admin

ID : FR - 10
Requirement Name: Admin
Description: Admin can monitor every steps
Stockholders: Admin

3.7.1.11 Feedback

Table 3.7.1.11: Feedback

ID : FR - 11
Requirement Name: Feedback
Description: A owner/renter can easily give their personal opinion in the system
Stockholders: Owner/renter

3.7.1.12 Payment (Pay)

Table 3.7.1.12: Payment (Pay)

ID : FR - 12
Requirement Name: Payment
Description: A renter can easily give their rent bills through the system
Stockholders: Renter

3.7.1.13 Payment (Receive)

Table 3.7.1.13: Payment (Receive)

ID : FR - 13
Requirement Name: Payment
Description: A owner can easily get his rents through the system
Stockholders: Owner

3.7.1.14 Payment History

Table 3.7.1.14: Payment History

ID : FR - 14
Requirement Name: Payment History
Description: A renter can easily view his payment history in the system
Stockholders: Renter

3.7.1.15 Financial Report

Table 3.7.1.15: Financial Report

ID : FR - 15
Requirement Name: Financial Report
Description: A Owner can easily view his financial report in the system
Stockholders: Owner

3.7.2 Non-Functional Requirements (NFR):

Non-functional Requirements are given below for this project.

3.7.2.1 Performance

Table 3.7.2.1: Performance

ID : NFR - 1
System will provide all service without any fault.
Description: When a user browse or search any flats , outcome appears must be faster.
Stockholders: Owner/Renter

3.7.2.2 Usability

Table 3.7.2.2: Usability

ID : NFR - 2
System will provide all default service for all user
Description: When a user browse or search any flats , outcome appears but some functions are default for them
Stockholders: Owner,Renter

3.7.2.3 Security

Table 3.7.2.3: Security

ID : NFR - 3
System will provide all type of security service
Description: All the data should be secured , and protected from any kind of fraud
Stockholders: Admin

3.7.2.4 Maintainability

Table 3.7.2.4: Maintainability

ID : NFR - 4
Admin can be able to reset all data
Description: Admin change change all things and reset all data and also can update
Stockholders: Admin

3.7.2.5 Capacity

Table 3.7.2.5: Capacity

ID : NFR - 5
System will able to record up to 9999 profile
Description: All project data will be stored in the database
Stockholders: Admin

3.7.2.6 Availability

Table 3.7.2.6: Availability

ID : NFR - 6
Available 24 hours
Description: The whole system should be available to the admin 24 hours a day
Stockholders: Admin

3.7.3 Software Requirements

Frontend: HTML ,CSS ,Bootstrap, JavaScript, Livewire

Backend: PHP

Framework: Laravel

Database: MySQL , XMAAP

Editor: VS Code

3.7.4 Hardware Requirements

There are no exact consistency requirements.

CHAPTER 4
Design Specification

4.1. Front-end Design

Users engage with your program through its front-end design. We made an effort to keep the user interface (UI) as straightforward as feasible.The Front-end design of the web-application is completed in XML, which means Extensible Markup Language. For the prototype of the web-application, we used additional tools. Like Adobe XD , Adobe Photoshop and Adobe Illustrator .

HTML5: HTML and HTML5 used to build the structure of web page and there are modern tags to build the web page structure.

CSS: CSS is a powerful CSS pre-process for modern web application development. SCSS has great features to do CSS in minimal time because the cascading is convenient and easy to write because there is functions, mixins, extends and so on which helps to write CSS rules.

JavaScript: JavaScript is widely used powerful client-side language which helps to implement the business logics in client side. JavaScript has lot of popular frameworks to build front-end layer and there is facility of component and state based development.

Livewire: Livewire is a full-stack framework for Laravel that makes building dynamic interfaces simple, without leaving the comfort of Laravel. It allows you to build modern, reactive, dynamic interfaces using PHP, and it integrates seamlessly with the rest of your Laravel application.

Adobe Photoshop: Its only systems for which Adobe Photoshop was accessible were Windows and Mac. With its many capabilities and ease of use, Photoshop is completely customizable. These days, more recent terminology like "Photoshopping" are also popular. RGB and CMYK are just two of the many color spaces that Photoshop supports. Although we chose Photoshop for my initial application design concepts because it is so well-known and easy to use.

4.2 Back-end Design

In essence, backend design is what takes place in your program's background. The most popular language used recently to create web-applications is PHP. As a result, PHP served as the project's primary backend language. We used the readily linkable, real-time MySQL database as the database, which is user-friendly.

PHP: PHP is known for its simplicity, flexibility, and efficiency, and it is particularly well-suited for building dynamic, data-driven websites. It is often used in conjunction with a database, such as MySQL.

XAMPP : XAMPP aims to create an easy-to-install distribution for developers to enter the Apache realm. XAMPP is set up with all functionality enabled to make it convenient for developers.

Laravel : Laravel is a free, open-source PHP web framework used for web application development. It is built on top of several Symfony components and makes it easier for developers to write web applications by providing a set of tools and resources. Laravel provides a clean and elegant syntax, which makes it easier to write and maintain code, and it comes with a range of features such as routing, authentication, and templating, which can help you build robust and scalable web applications quickly.

MySQL : MySQL provides data integrity protection through the use of the Secure Sockets Layer (SSL) protocol, data masking, authentication plugins, and other layers of security. Additionally, a firewall that guards against online threats is part of the MySQL Enterprise package.

4.3 Interaction Design and UX Experience

The technique of encouraging interactions between users of systems or services is known as interaction design. This is among your application's most important components. An excellent user experience is a result of well-designed interactions. Before designing, user experience should be thought of.

4.4 Implementation Requirements

Tools and Technology

For developing a “AR Property System” , We used several tools and technologies to build this software are listed below –

- Presentation Layer: HTML5, SCSS, JavaScript, Livewire
- Presentation Layer Frameworks: Laravel
- Data Layer: MySQL
- Tools: VS Code, Google Chrome

VS CODE: VS Code is a popular and faster IDE facilities usable extensions installation, code formatting with integrated terminal facility.

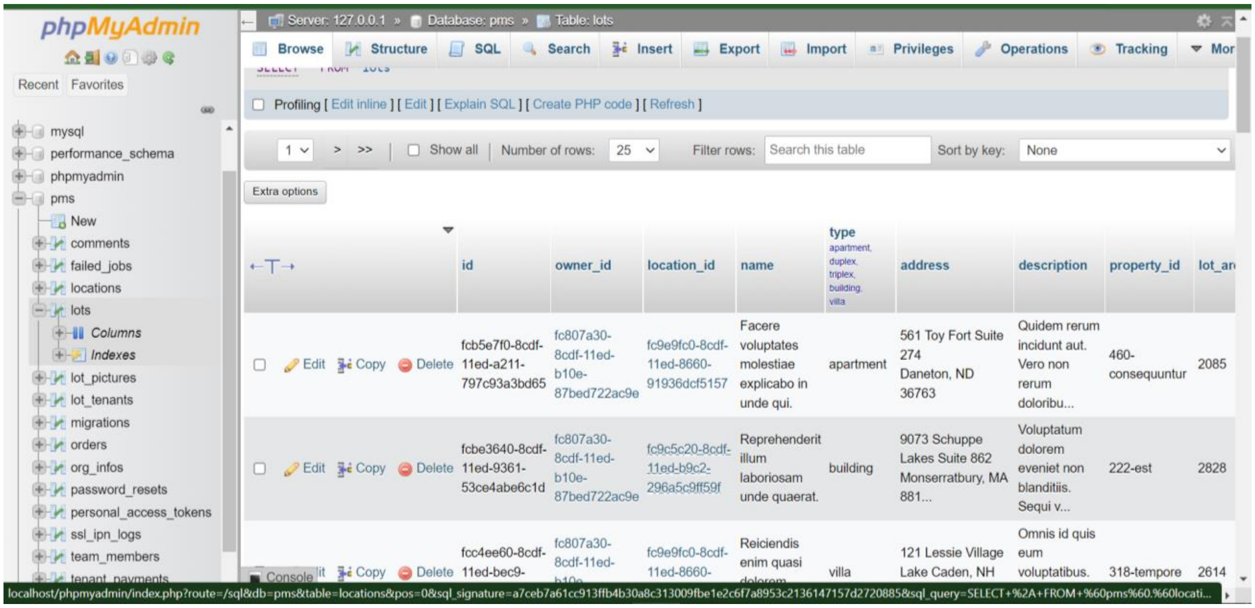
Google Chrome: In order to preview the presentation layer, testing and debugging, Google Chrome is a popular and great browser with facility of inspecting console and network tab along with checking the DOM structure.

CHAPTER 5
Implementation And Testing

5.1 Implementation of Database Design

All necessary data for this application is kept in the database. Developers commonly store data in secure databases.
Like , MySQL and NoSQL

For store our data we used MySQL server .



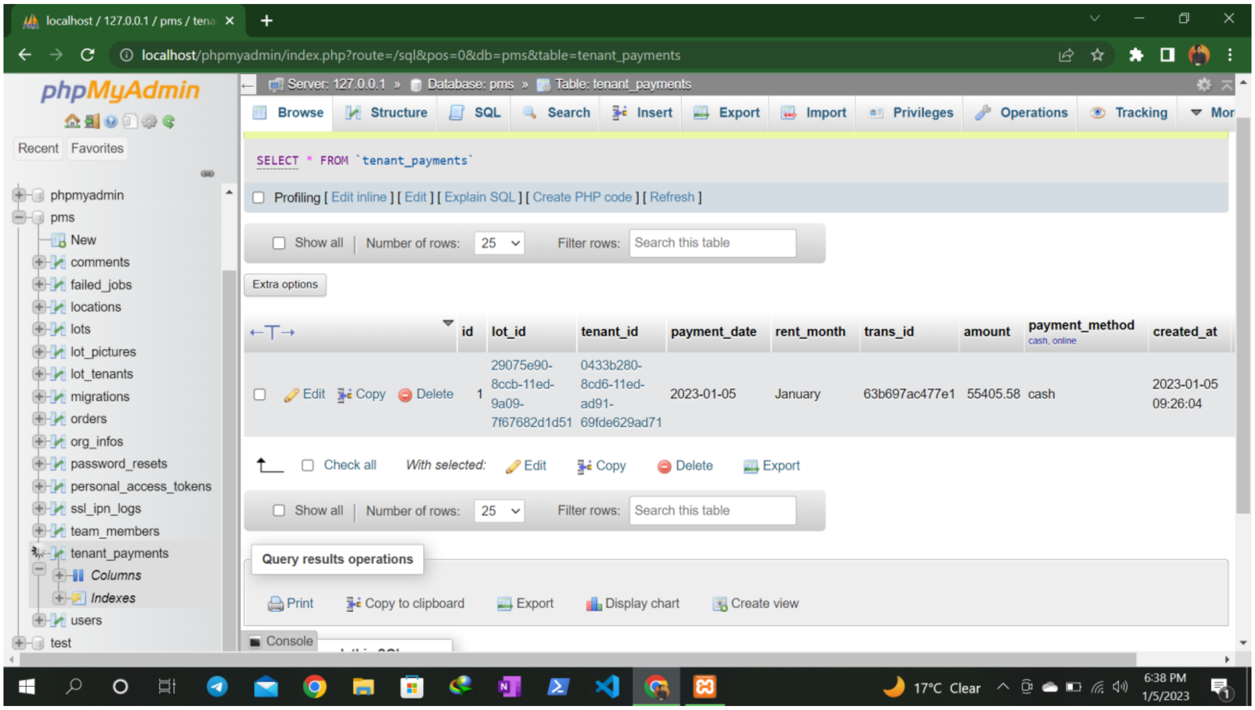
□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

1 > >> | □ Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

←T→	id	owner_id	location_id	name	type apartment, duplex, triplex, building, villa	address	description	property_id	lot_ar
□ Edit Copy Delete	fcb5e7f0-8cdf-11ed-a211-797c93a3bd65	fc807a30-8cdf-11ed-b10e-87bed722ac9e	fc9e9fc0-8cdf-11ed-8660-91936dcf5157	Facere voluptates molestiae explicabo in unde qui.	apartment	561 Toy Fort Suite 274 Daneton, ND 36763	Quidem rerum incidunt aut. Vero non rerum doloribu...	460-consequuntur	2085
□ Edit Copy Delete	fcbe3640-8cdf-11ed-9361-53ce4abe6c1d	fc807a30-8cdf-11ed-b10e-87bed722ac9e	fc9c5c20-8cdf-11ed-b9c2-296a5c9ff59f	Reprehenderit illum laboriosam unde quaerat.	building	9073 Schuppe Lakes Suite 862 Monserratbury, MA 881...	Voluptatum dolorem eveniet non blanditiis. Sequi v...	222-est	2828
lit Copy Delete	fcc4ee60-8cdf-11ed-bec9-	fc807a30-8cdf-11ed-b10e	fc9e9fc0-8cdf-11ed-8660-	Reiciendis enim quasi dolorem	villa	121 Lessie Village Lake Caden, NH	Omnis id quis eum voluptatibus.	318-tempore	2614

localhost/phpmyadmin/index.php?route=/sql&db=pms&table=locations&pos=0&sql_signature=a7ceb7a61cc913ffb4b30a8c313009fbe1e2c6f7a8953c2136147157d2720885&sql_query=SELECT+%2A+FROM+%60pms%60.%60locati...

Figure 5.1.1: Database Storage


localhost / 127.0.0.1 / pms / tena
localhost/phpmyadmin/index.php?route=/sql&pos=0&db=pms&table=tenant_payments
phpMyAdmin
Recent Favorites
phpmyadmin
pms
New
comments
failed_jobs
locations
lots
lot_pictures
lot_tenants
migrations
orders
org_infos
password_resets
personal_access_tokens
ssl_ipn_logs
team_members
tenant_payments
Columns
Indexes
users
test
Server: 127.0.0.1 » Database: pms » Table: tenant_payments
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Mor
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table
Extra options
Check all With selected: Edit Copy Delete Export
Query results operations
Print Copy to clipboard Export Display chart Create view
Console
17°C Clear
6:38 PM
1/5/2023

```
SELECT * FROM `tenant_payments`
```

	id	lot_id	tenant_id	payment_date	rent_month	trans_id	amount	payment_method cash, online	created_at
□ Edit Copy Delete	1	29075e90-8ccb-11ed-9a09-7f67682d1d51	0433b280-8cd6-11ed-ad91-69fde629ad71	2023-01-05	January	63b697ac477e1	55405.58	cash	2023-01-05 09:26:04

Figure 5.1.2: Stored data

5.2 Implementation of Front-end Design

Designing any type is simple but designing a user friendly one is very difficult. The main thing about a web-application is its design and how user friendly it is.

For Front-end Design we use .

A screenshot of our web-application page with the flat in home page is shown below in Figure 5.2.1.

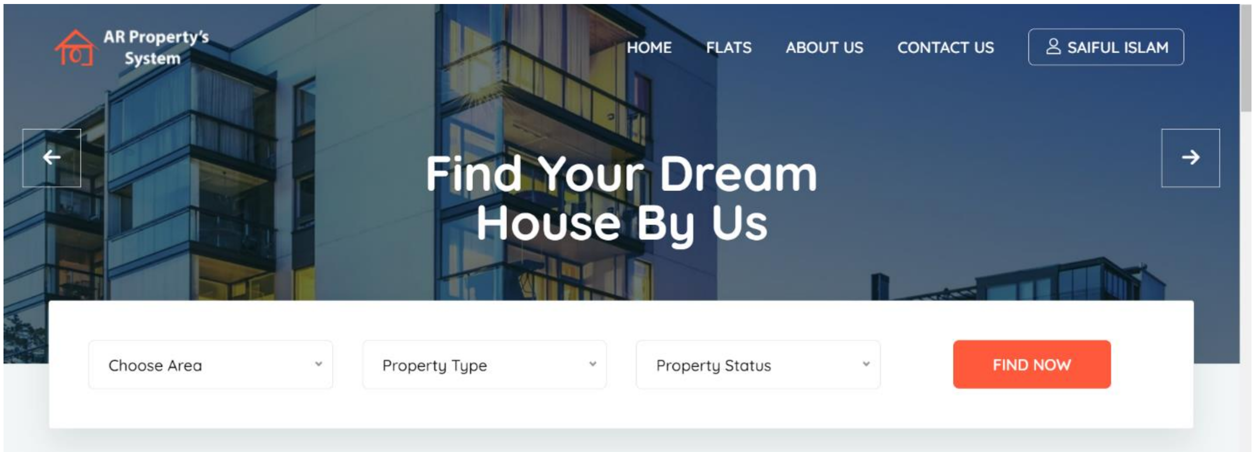
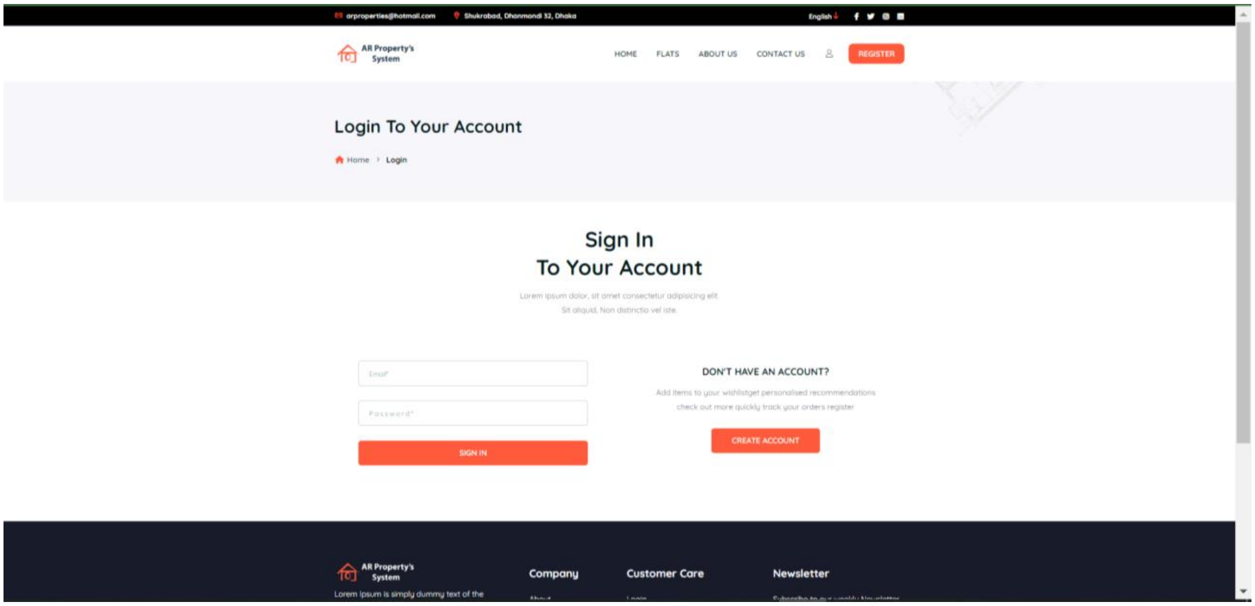


Figure 5.2.1: Home Page

In Figure 5.2.2, Login page where consumers and owners can log in to the system.



Login To Your Account

Sign In
To Your Account

Lorem ipsum dolor, sit amet consectetur adipisicing elit.
Sit aliquid, Non distinctio vel iste.

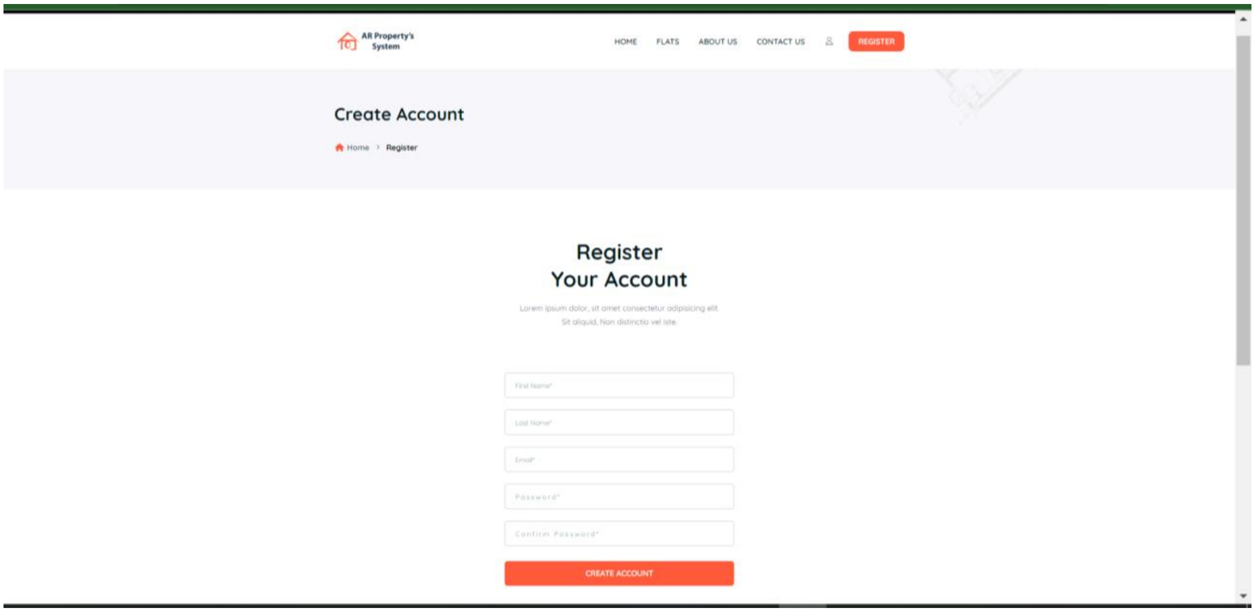
DON'T HAVE AN ACCOUNT?

Add items to your wishlistget personalised recommendations
check out more quickly track your orders register

Lorem Ipsum is simply dummy text of the

Figure 5.2.2: Login Page

In Figure 5.2.3, Registration page where consumers and owner register with this from.



Create Account

Register Your Account

Lorem ipsum dolor, sit amet consectetur adipisicing elit Sit aliquid, Non distinctio vel iste.

First Name*

Last Name*

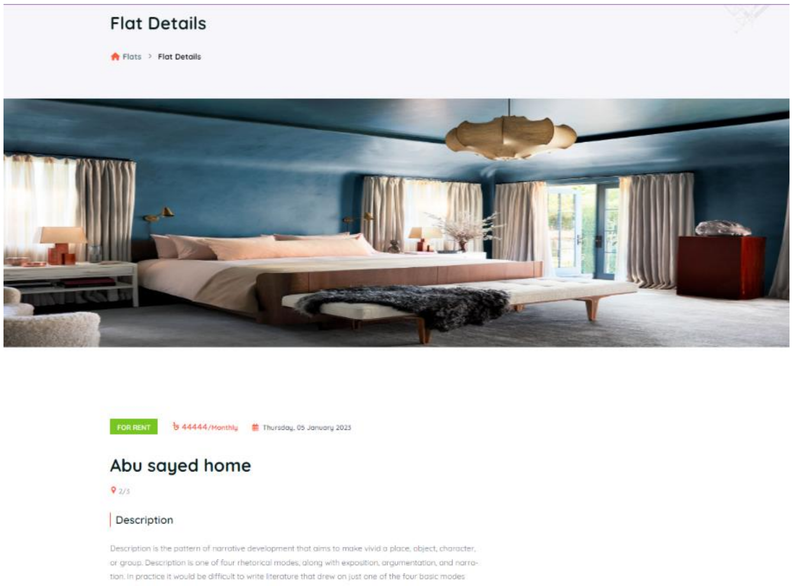
Email*

Password*

Confirm Password*

Figure 5.2.3: Registration Page

In Figure 5.2.4, Here, It's a flat detail page where anyone can show some properties decription.



Flat Details

৳ 44444/Monthly Thursday, 05 January 2023

Abu sayed home

2/3

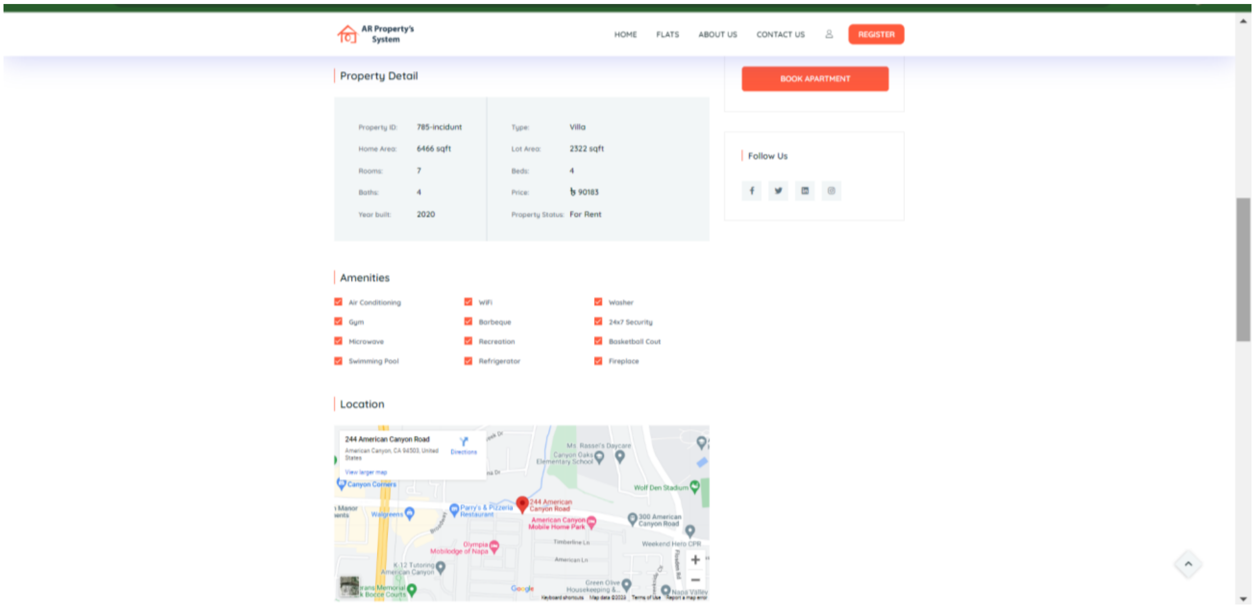
Description

Description is the pattern of narrative development that aims to make vivid a place, object, character, or group. Description is one of four rhetorical modes, along with exposition, argumentation, and narration. In practice it would be difficult to write literature that drew on just one of the four basic modes

Figure 5.2.4: Flat details page

In Figure 5.2.5, Here, Property Details , maps and utilities , where people can book apartments.

5.2.7.



Property Detail

Property ID:	785-incidunt	Type:	Villa
Home Area:	6466 sqft	Lot Area:	2322 sqft
Rooms:	7	Beds:	4
Baths:	4	Price:	৳ 90183
Year built:	2020	Property Status:	For Rent

Follow Us

Amenities

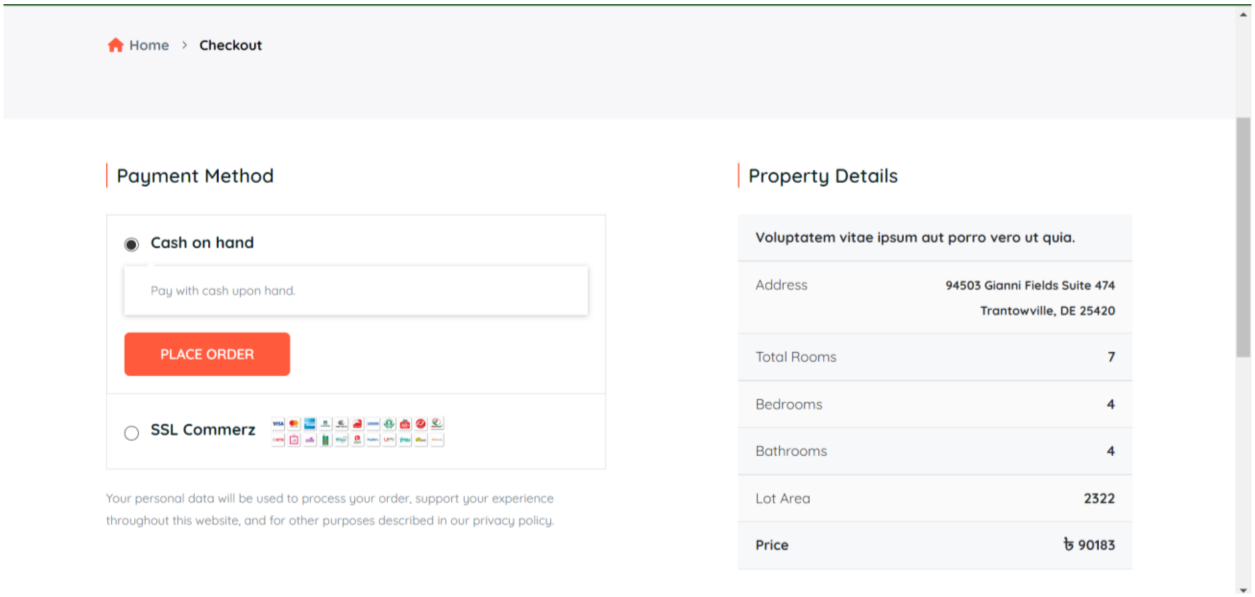
☑ Air Conditioning
☑ Gym
☑ Microwave
☑ Swimming Pool
☑ WiFi
☑ Barbeque
☑ Recreation
☑ Refrigerator
☑ Washer
☑ 24x7 Security
☑ Basketball Cout
☑ Fireplace

Location

244 American Canyon Road
American Canyon, CA 94503, United States
View larger map

Figure 5.2.5: Flat details with map

In Figure 5.2.6, Here, Checkout page to get a service.



Payment Method

● Cash on hand

Pay with cash upon hand.

PLACE ORDER

○ SSL Commerz

Your personal data will be used to process your order, support your experience throughout this website, and for other purposes described in our privacy policy.

Property Details

Voluptatem vitae ipsum aut porro vero ut quia.	
Address	94503 Gianni Fields Suite 474 Trantowville, DE 25420
Total Rooms	7
Bedrooms	4
Bathrooms	4
Lot Area	2322
Price	৳ 90183

Figure 5.2.6: Checkout

Here,Tenter can access the payment method by credit card and also mobile banking in Figure 5.2.7.

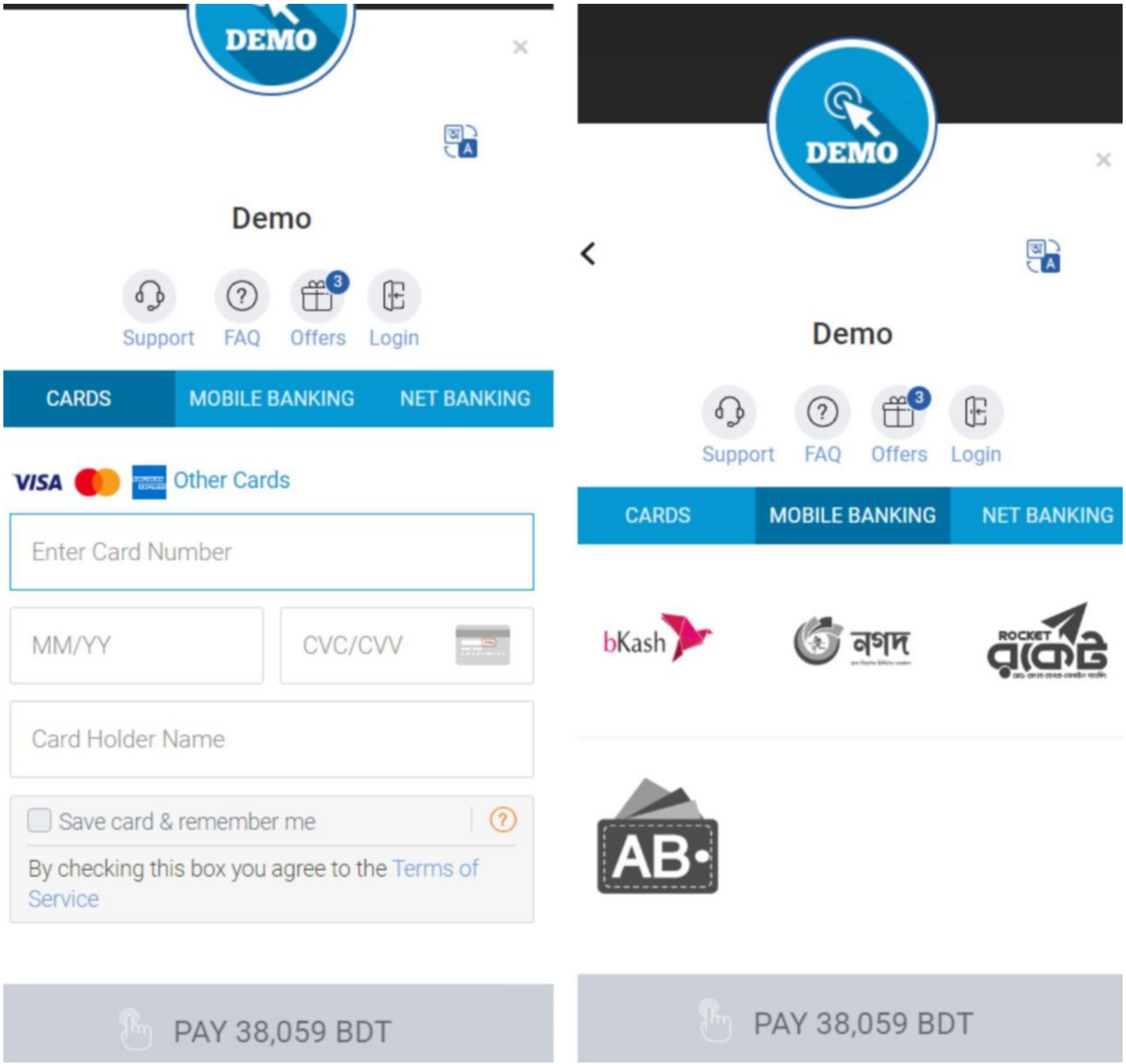
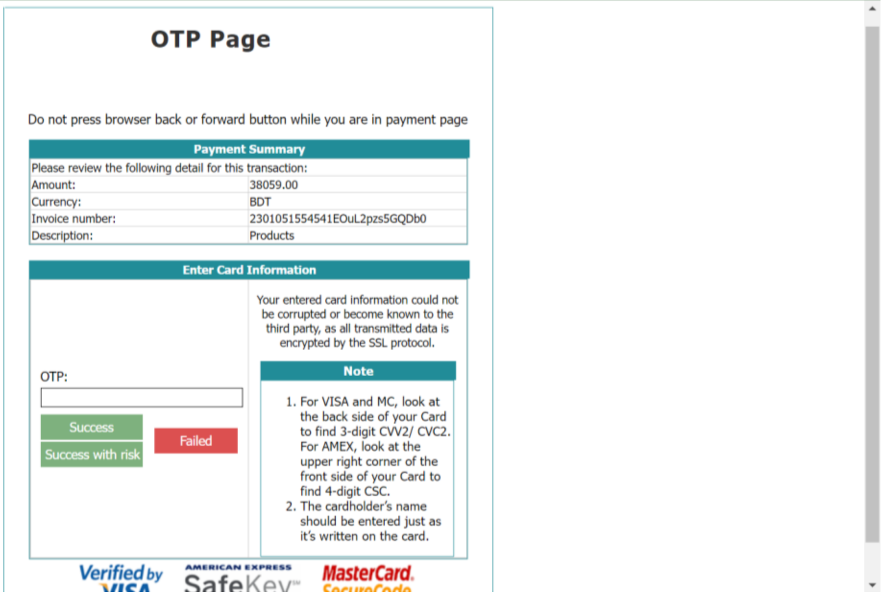


Figure 5.2.7: Payment Method

Here,Verification for security purpose in Figure 5.2.8.



OTP Page

Do not press browser back or forward button while you are in payment page

Payment Summary	
Please review the following detail for this transaction:	
Amount:	38059.00
Currency:	BDT
Invoice number:	2301051554541EOuL2pzs5GQDb0
Description:	Products

Enter Card Information

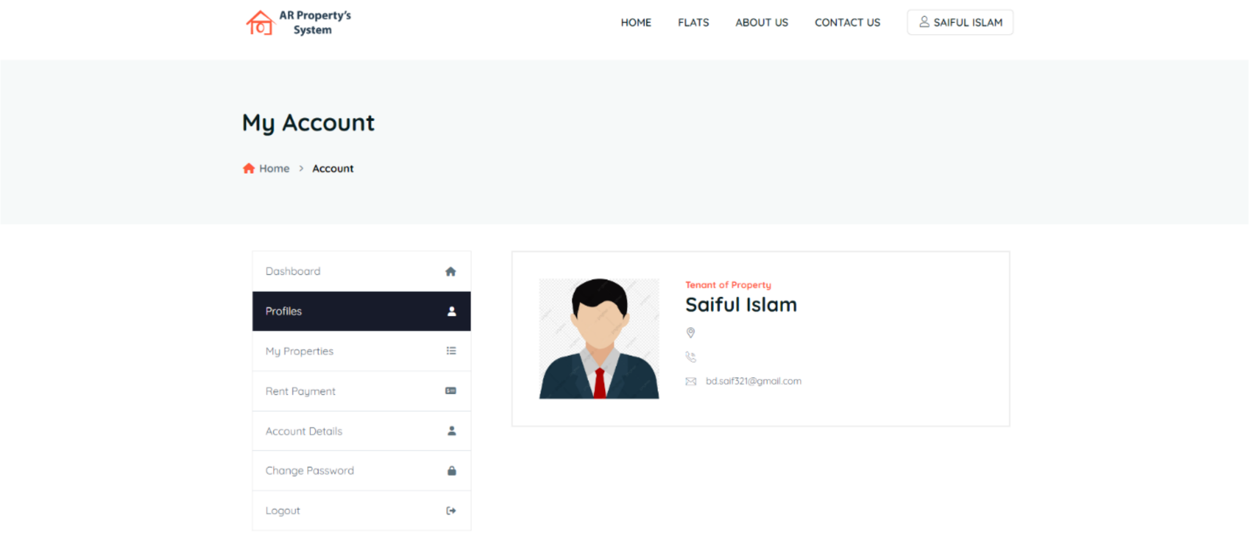
Your entered card information could not be corrupted or become known to the third party, as all transmitted data is encrypted by the SSL protocol.

Note

1. For VISA and MC, look at the back side of your Card to find 3-digit CVV2/ CVC2. For AMEX, look at the upper right corner of the front side of your Card to find 4-digit CSC.
2. The cardholder's name should be entered just as it's written on the card.

Figure 5.2.8: OTP Verification

Here, Owner and Tenter can access their all features in Figure 5.2.9.



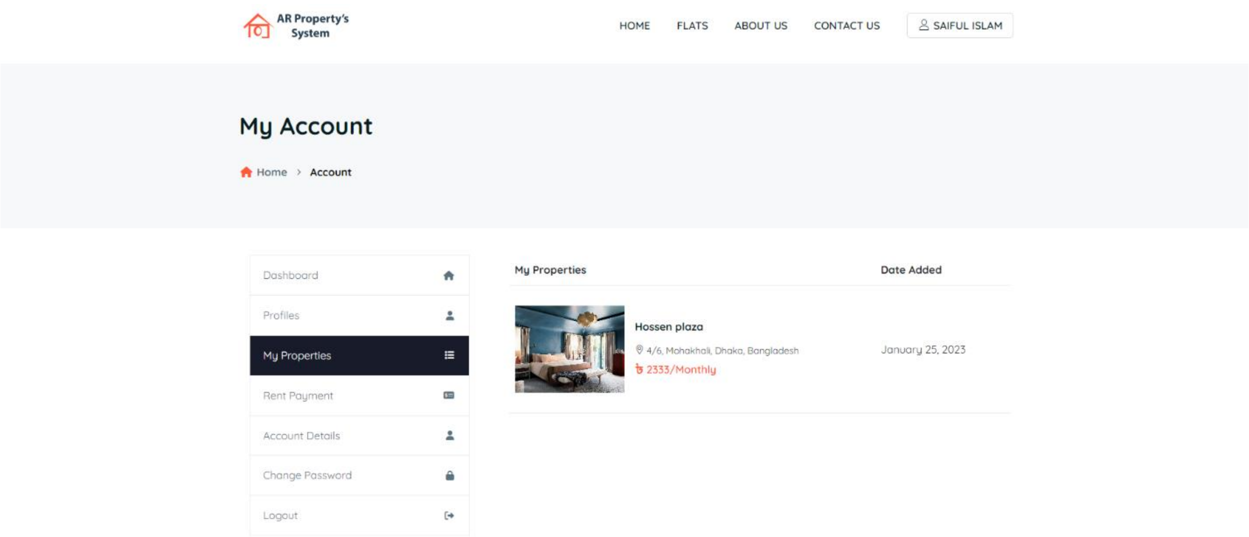
Tenant of Property

Saiful Islam

bd.saif321@gmail.com

Figure 5.2.9: My account with dashboard

Here, Owner and Tenter can access my property in Figure 5.2.10.

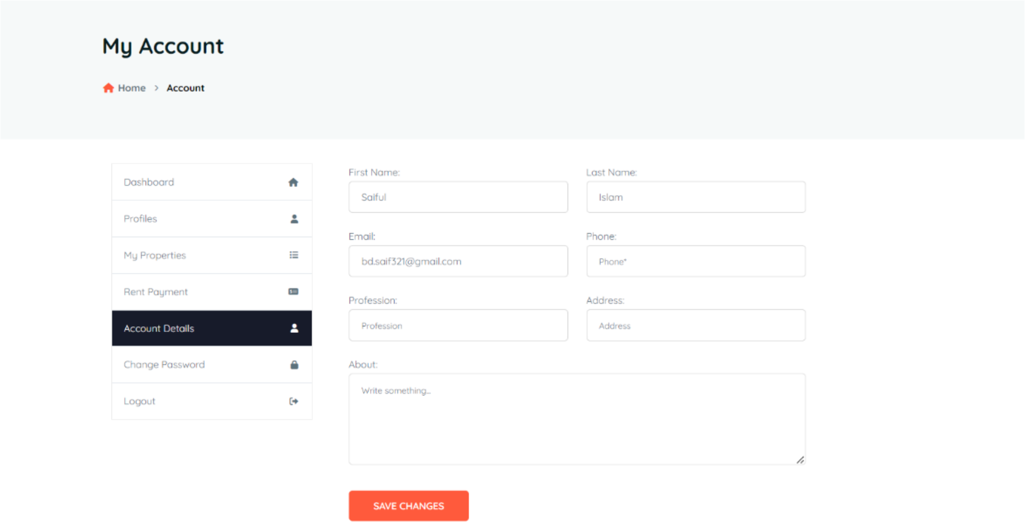


My Account

My Properties	Date Added
Hossen plaza 4/6, Mohakhali, Dhaka, Bangladesh ৳ 2333/Monthly	January 25, 2023

Figure 5.2.10: My Property

Here, the Owner or Admin or Tender can access and see all the information and also can edit in Figure 5.2.11.



My Account

First Name: Saiful

Last Name: Islam

Email: bd.saif321@gmail.com

Phone: Phone*

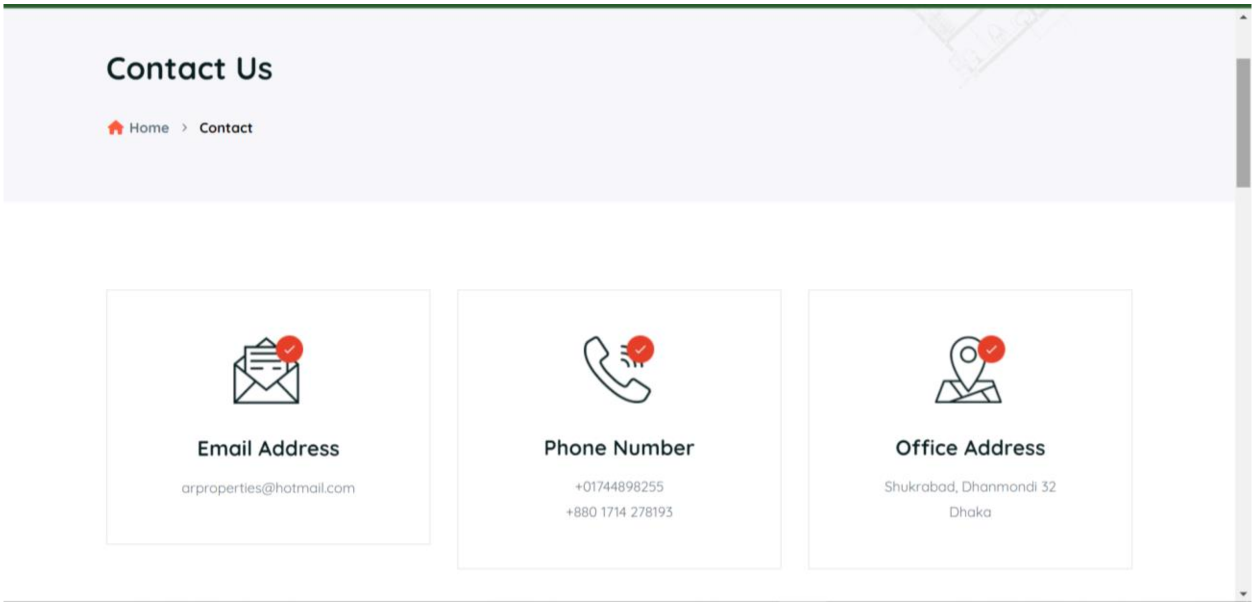
Profession: Profession

Address: Address

About: Write something...

Figure 5.2.11: My account with edit options

In Figure 5.2.12, Here, All necessary details for contract us.



Email Address

arproperties@hotmail.com

Phone Number

+01744898255
+880 1714 278193

Office Address

Shukrabad, Dhanmondi 32
Dhaka

Figure 5.2.12: Contract us

In Figure 5.2.13, Here, To get a quote , where you can leave some quote with details.

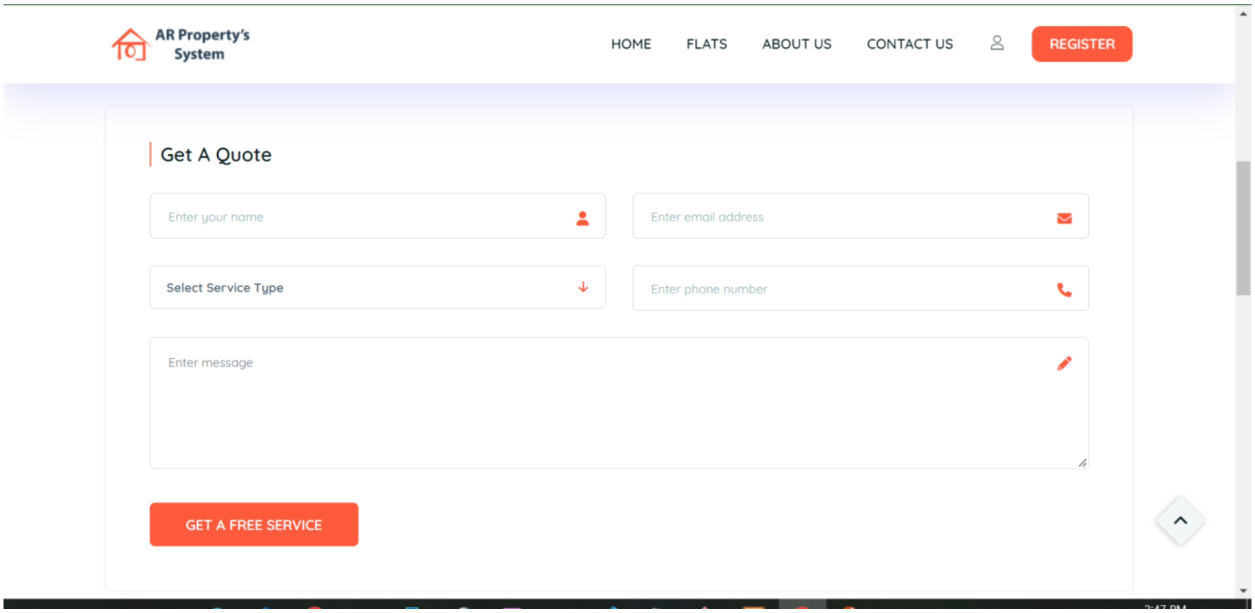
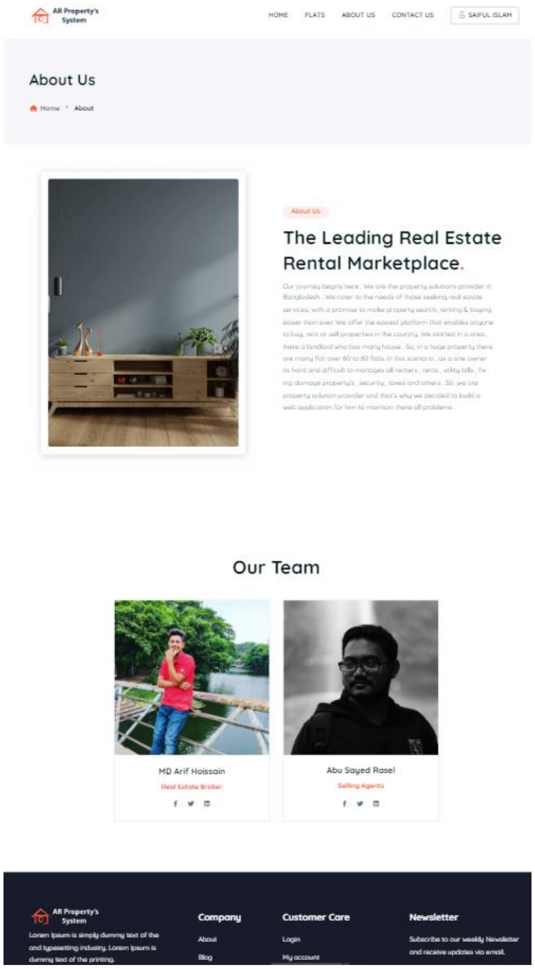


Figure 5.2.13: Get a quote

In Figure 5.2.14, Here, Our all information about the project and also about team members.



The Leading Real Estate Rental Marketplace.

Our journey begins here , We are the property solutions provider in Bangladesh . We cater to the needs of those seeking real estate services, with a promise to make property search, renting & buying easier than ever. We offer the easiest platform that enables anyone to buy, rent or sell properties in the country. We started in a area , there a landlord who has many house . So, in a huge property there are many flat over 60 to 80 flats. In this scenario , as a one owner its hard and difficult to manages all renters , rents , utility bills , fixing damage property's , security , taxes and others . So ,we are property solution provider and that's why we decided to build a web application for him to maintain there all problems .

Lorem Ipsum is simply dummy text of the and typesetting industry. Lorem Ipsum is dummy text of the printing.

Subscribe to our weekly Newsletter and receive updates via email.

Figure 5.2.14: About us

5.3 Feature of Testing Implementation

Those tests are implemented for this web-application. Testing is the most crucial for developing a good, complete and error-free system. To find faults, correct them, and make it simpler to use, we basically tested it.

Feature to be tested are given below :

Table 5.3: Feature List for testing

Req.ID	Req. Description
FR - 01	Login for user , with specific email and password
FR- 02	Logout for user - If a user want to log off from the system
FR- 03	Default for user - Public Brower o site and system
FR- 04	Registration - Add all necessary details for a user
FR- 05	Update Profile - If changes needed for a user
FR- 06	Add Flat - User can add new flat
FR- 07	Update Flat - If changes needed for a user
FR- 08	Delete Flat - If a owner need to delete a flat
FR- 09	My Flat Information - user can view his flat details
FR- 10	Admin- can reset and can changes
FR- 11	Payment (Pay) - Paying the bills and utility
FR- 12	Payment (Receive) - receiving money from renters
FR- 13	Payment History - user can see his payment history
FR- 14	Financial Report - owner can see his financial report

5.3.1 Testing Trace and Reports

Table 5.3.1:Testing Details and Status Report

Req.ID	Req. Description	Test Case	Status
FR - 01	Login for user , with specific email and password	TC-1	Passed
FR- 02	Logout for user - If a user want to log off from the system	TC-2	Passed
FR- 03	Default for user - Public Brower o site and system	TC-3	Passed

FR- 04	Registration - Add all necessary details for a user	TC-4	Passed
FR- 05	Update Profile - If changes needed for a user	TC-5	Passed
FR- 06	Add Flat - User can add new flat	TC-6	Passed
FR- 07	Update Flat - If changes needed for a user	TC-7	Passed
FR- 08	Delete Flat - If a owner need to delete a flat	TC-8	Passed
FR- 09	My Flat Information - user can view his flat details	TC-9	Passed
FR- 10	Admin- can reset and can changes	TC-10	Passed
FR- 11	Payment (Pay) - Paying the bills and utility	TC-11	Passed
FR- 12	Payment (Receive) - receiving money from renters	TC-12	Passed
FR- 13	Payment History - user can see his payment history	TC-13	Passed
FR- 14	Financial Report - owner can see his financial report	TC-14	Passed

CHAPTER 6
Impact On Society , Environment And Sustainability

6.1 Impact on Society and Environment

Nowadays technology is improving so much that every application is acceptable for society and environment these days. From our application people can save time of need and give time to improve the environment and society. Besides, you can pay attention to your health, think about your health and keep your environment healthy. Keep people free from tension.

6.2 Sustainability Plan

In order to improve this project for the future, some worthless investment should be made like some changes practice small works here are profitable for everyone. New features will be added where the financials will improve a lot and reduce the cost at the same time. The structure of the data structure should be done in a more beautiful and cost less manner so that it gives better performance in the future. Work should be done on a regular basis so that there is no impact on the financier.

CHAPTER 7
Conclusion

7.1 Discussion and Conclusion

Life is short and time is precious in today's fast moving life. The wastage of time finding a rent or home . Also it's a waste of our body energy. This project is a web-based finding home for rent and a seller who wants to sell his home. It's specifically designed for them with an online based payment system and secured. Nowadays technology is improving so much that every application is acceptable for society and environment these days. From our application people can save time of need and give time to improve the environment and society.

7.2 Scope for Further Developments

For further development :

- We will improve user experiences
- We will add new functionality and feature
- More security
- Mobile app development
- Add live chat communication

REFERENCES

[1] Learn about Project Documentation, available at << https://pmiscse.daffodilvarsity.edu.bd/ >>, last accessed on 28-12-2022 at 11.30 PM.

[2] Visited for ideas, at << https://daffodilvarsity.edu.bd/ >>, last accessed on 29-12-2022 at 1.27 AM.

[3] Visited for ideas, at << https://www.bproperty.com/blog/bproperty-property-solutions-provider/ >>, last accessed on 29-12-2022 at 1.27 AM.

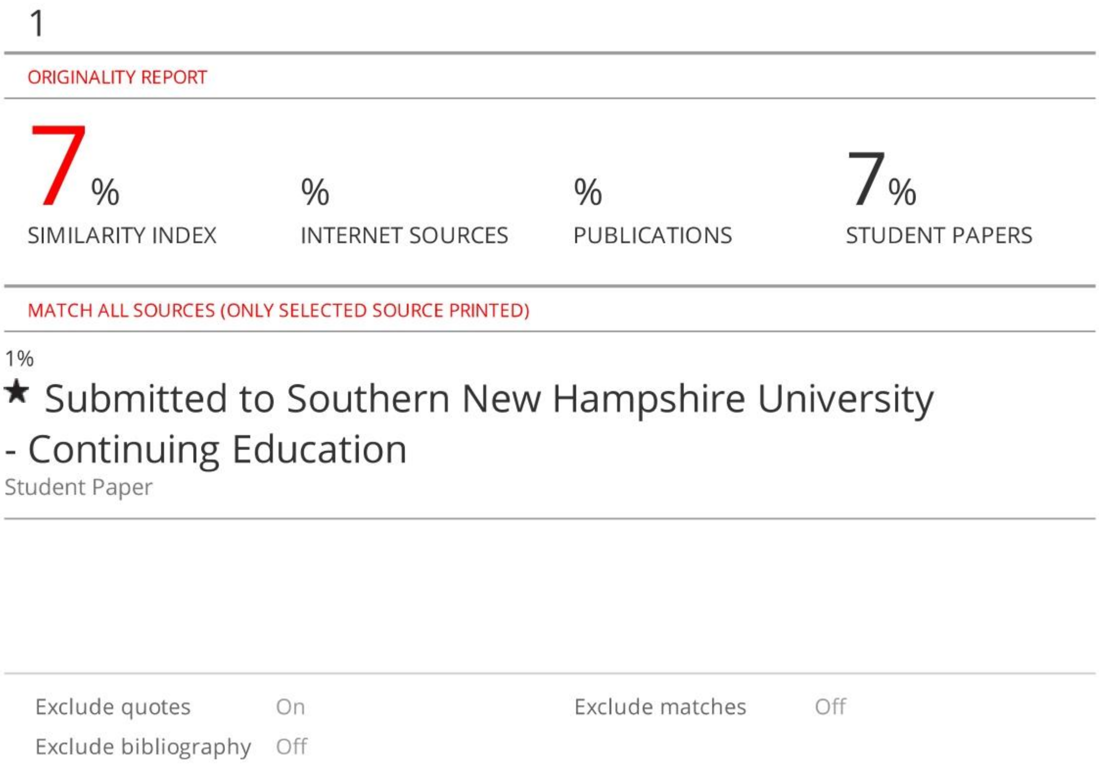
[4] Visited for ideas, available at << https://www.bdhousing.com/about-us >>, last accessed on 30-12-2022 at 4.50 PM.

[5] Learn about Models, available at << https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm >>, last accessed on 30-12-2022 at 7.30 PM.

[6] Learn about Models, available at << https://www.tutorialspoint.com/software_testing_dictionary/software_requirement_s pecification.html >>, last accessed on 30-12-2022 at 7.30 PM.

[7] Edited Documentation, available at << https://www.google.com/docs/about/ >>, last accessed on 04-01-2023 at 2.30 AM.

[8] Edited Diagrams , available at << https://www.draw.io/ >>, last accessed on 04-01-2023 at 2.45 AM.



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