

A Project Report  
on  
FindMeHome  
Submitted in partial fulfillment of the requirement of Project-IV  
BIT279CO  
Of  
Bachelors of Information Technology

**Submitted To**



Purbanchal University  
Biratnagar, Nepal

**Submitted By**

Bishal Tamang(343564)  
Samir Shrestha(343576)  
Shristi Pradhan(343580)

**Kantipur City College**

Putalisadak, Kathmandu

26<sup>th</sup> August, 2022

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**Project Supervisor**

Mr. Ashim KC

**Kantipur City College**

Putalisadak, Kathmandu

26<sup>th</sup> August, 2022

## Topic Approval Sheet

It is hereby informed that the topic selected by Bishal Tamang(343564), Samir Shrestha(343576) and Shristi Pradhan(343580) of Bachelors of Information Technology, IV-semester for their semester project (BIT279CO) has been found suitable as per the credit assigned by Purbanchal University (PU), Biratnagar, Nepal.

The project Committee has approved the following topic and supervisor for the above-mentioned students,

Topic Approval: FindMeHome

-----  
Mr. Saroj Pandey

HOD, Department of IT

Kantipur City College

-----  
Mr. Ashim KC

Project Supervisor

Kantipur City College

## **Certificate from Supervisor**

This is to certify that the project entitled “FindMeHome” submitted by Bishal Tamang(343564), Samir Shrestha(343576) and Shristi Pradhan(343580) to the Department of Information Technology, Kantipur City College, Kathmandu, Nepal towards the requirement for the **Project-IV**, is an original work carried out by them under my supervision and guidance.

-----

**Mr. Ashim Kc**

Department of IT

Kantipur City College

(Project Supervisor)

## Acknowledgement

The project members express the project members the deepest appreciation to all those who supported in the completion of the project of project on “Find Me Home”.

In the foremost place, the project members would like to give special gratitude to our principal, **Mr.Raju Kattel**, Deputy Head of Department, **Mr. Saroj Pandey**, project supervisor and coordinator **Mr. Ashim Kc**, who gave his valuable time for guidance and supervision and helped during the complications in preparing this project. And the project members want to express their gratitude for his valuable time from the bottom of the heart.

Apart from this, the project members also want to thank to the fellow colleagues who helped in the project. During the development, the project members had ups and down but, didn't lose hope in the project and worked together as a team.

Bishal Tamang(343564)

Samir Shrestha(343576)

Shristi Pradhan(343580)

## **Abstract**

**“Find Me Home”** is a website designed targeting those who are in pursuit of room for renting purpose and also to those who are willing to provide room for rent. Here the user denotes both the landlord and the tenant. The user can act as both landlord and tenant by the use of same email address but the rule is that the role must be different. Email, also for the verification of user, has been used. This verification process makes this website fraud free. Adding own room details, editing them or removing them are easy. The user can add the room in their wishlist. For ease to the user, this website integrates the Google map, through which the available rooms are presented. Using the map, the user can see the room around the pinned location on map. The main objective of our project is to provide relief to those who need room, in a sense that they don't have to provide extra payment for agent for finding them room and to save the time finding the room. The user can analyze the shown room through rating provided by the users. The details about the rooms are transparent along with the services provided to them. Hence, this website is fraud free and is completely free to use.

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# **Chapter 1: Introduction**

## **a. Project Introduction**

“FindMeHome” is a free website designed for making the task of finding the room for rent easily with no effort at all. It is room/ flat centric website meaning that unlike other websites where details of office, land, building, etc are included, we have included only the rooms and the flats. The layout for landlord is slightly different from that of tenant.

## **b. Problem Statement**

At present, also many landlords or owners use traditional method of renting system or no any system. The administrator need a lot of time to maintain these details without error. A small error may lead to tenant dissatisfaction.

As some of the existing system we overviewed had various cons like room location is not provided briefly, multiple rooms liked by tenant is added to the wishlist directly without sign in. Some UI color combinations were not good, etc.

With the help of this system, the project members tried to solve the cons part as it will be easier for the tenant to find the rent as per their requirements. For, finding the rent as required location and other requirements filter can be used which makes easier for tenant. Wishlist stores the room liked by the tenant which can be accessed later in the wishlist section. Notification and alert messages is shown to the user for proper specification of processes and invalidation. Landlord can easily add, modify or delete room as required.

“FindMeHome” help in an easy way to overcome the problems created by the traditional method and reduce the pressure on the tenants and landlords.

### **c. Objectives of the project**

The objectives of this project are as follows:

- To convey room details effectively.
- To allow user (landlord) to manipulate room details with ease.
- To help tenant to take correct decision when choosing the room (by the help of ratings).

### **d. Significance of the project**

The significance of this projects are as mentioned below:

- Modification of room details can be done easily.
- Room detail is presented easily.
- Easier for tenant to choose room as per rating and room details provided.

### **e. Project features**

The features included in this project are as follows:

- Show landlord contact and name only to a signed in tenant.
- Initially, when signed in it verifies email.
- Rooms can be added, modified or deleted as required.
- Wishlist can be accessed.
- Tutorials are provided.
- User is notified for the steps he has taken.
- User is alerted for wrong inputs

- Rating can be provided for a room.
- Password recovery

#### **f. Assignment of roles and responsibilities**

Member Name	Task Performed
Samir Shrestha(343576)	Backend
Bishal Tamang(343564)	Frontend
Shristi Pradhan(343580)	Documentation

*Table 1 : Assignment of Roles and Responsibilities*

#### **g. Documentation Organization**

Chapter 1	<p>It is about introduction of the project and it is divided into five sub-chapter i.e.</p> <ul style="list-style-type: none"> <li>1.1. Introduction</li> <li>1.2. Problem Statement</li> <li>1.3. Objectives</li> <li>1.4. Significance</li> <li>1.5. Features</li> <li>1.6. Assignment of roles and responsibilities</li> <li>1.7. Documentation Organization</li> </ul>
Chapter 2	<p>It is about the review of the existing system.</p> <ul style="list-style-type: none"> <li>2.1. System 1 <ul style="list-style-type: none"> <li>2.1.1. Introduction</li> </ul> </li> </ul>

	2.1.2. Pros 2.1.3. Cons 2.2. System 2 2.2.1. Introduction 2.2.2. Pros 2.2.3. Cons
Chapter 3	It is about system analysis of the project and it is divided into three sub-chapter i.e. 3.1. System Development Model 3.2. Requirement Specification 3.3. Feasibility Study
Chapter 4	It is about system design of the project and it is divided into four sub-chapter i.e. 4.1.Context Diagram and Data Flow Diagram(DFD) 4.2. Use Case Diagram 4.3. Database Design 4.3.1. ER Diagram 4.3.2. Relational Data Structures 4.3.3. Data Dictionary
Chapter 5	It is about System development and implementation of the project and it is divided into three sub-chapter i.e. 5.1. Programming Platform (Tools and Technologies Used) 5.2. Operating Environment 5.3. Testing and Debugging 5.3. Implementation and Result Analysis

Chapter 6	<p>It is about conclusion and future enhancement of the project and it is divided into three sub-chapter i.e.</p> <p>6.1. Conclusion</p> <p>6.2. Limitation</p> <p>6.3. Future Enhancement</p>
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*Table 2 : Documentation Organization*

## **Chapter 2: Existing System Overview**

The most common problems are related to residence in the country Nepal, to be more specific it is related with the rents. As one kind find anything on the internet these days. There are different types of websites available that works with the principle of finding the rents for tenants.

Some of the existing system we overviewed that the websites has been servicing for a renting.

### **a. RoomFinderKathmandu**

- **Introduction**

“RoomFinderKathmandu” website contains details about Flat & Apartments, House & Buildings, Land, Business & Shop, Office & Commercial Space and Hostel. Paying guest & Flat mates method of renting is also possible. Flat mates is also known as room sharing where the person shares a flat with others.

- **Pros**

- i. Shows not only room details but also other details like hostels, shops, etc others.
- ii. Room sharing is provided
- iii. Rent and sale both are possible.

- **Cons**

- i. Room location to the tenant is not provided briefly (like street or tole number)
- ii. It is added in the wishlist directly though the user has not signed in.

### **b. Gharbeti**



- **Introduction**

“Gharbeti” is a website that contains Buildings, Apartment, Hostel, Space and Land details.

- **Pros**

- i. Landlord can choose the tenant.(Those who have applied for the room)
- ii. Rent and sale both are possible.

- **Cons**

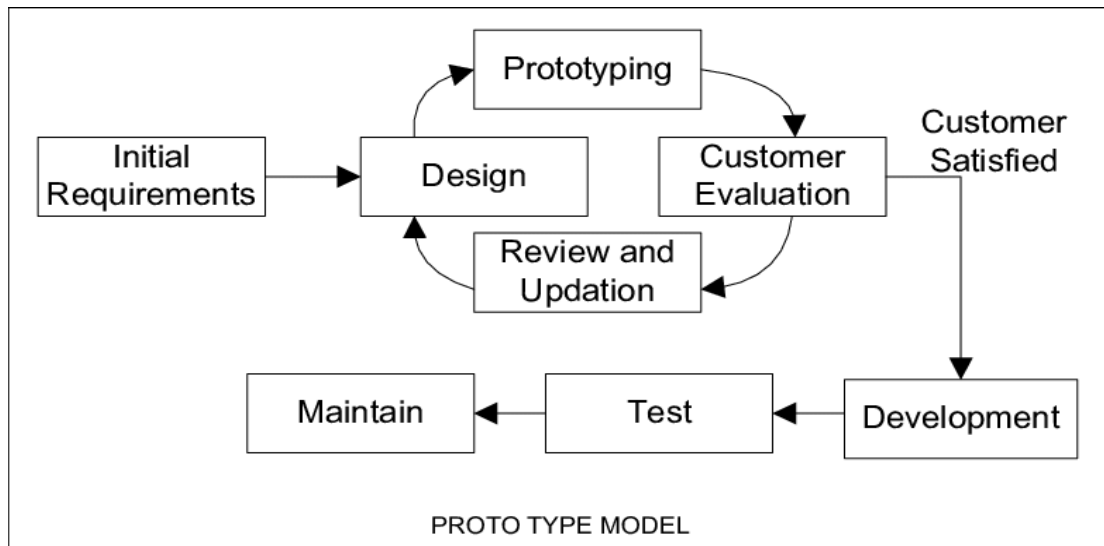
- i. UI (Color combination is not good).
- ii. Exact location is not specified.
- iii. In case landlord has added only one image, the section for containing other images (7 images), represented as empty but the representation is not eye pleasing.
- iv. Multiple room, building, apartments, etc liked by buyer/tenant is not stored in wishlist.

Reviewing all the features pros and cons of those websites the project members came up with this project by trying to minimize the cons and making it more flexible. The project members grabbed the idea and created the simpler version of it. Our system is easier to use and anyone with basic knowledge can handle the website. For, this the project members went through series of websites and views from local searching for possible assistance in day-to-day life of a user. The solution was brought as a computer system with various markup languages (HTML, CSS, PHP, JavaScript). And it is absolutely free to use.

## Chapter 3: System Analysis

### a. System Development Model

Our project is based on the prototype model. Prototype model is a software development model in which prototype is built, tested, and reworked until an acceptable prototype is built.



As our system is developed on the basis of prototype there are various steps for achieving the final system. Those steps are mentioned below:

- **Requirement**

We first gathered the various information about the system in various web pages that are essential for our system. Like, Gharbeti and Room Finder Kathmandu sites were taken as an help to collect some information for the system in detail.

- **Quick Design**

The second phase is the quick design. In this stage, after gathering the requirements we made a simple design of the system that represents idea how the system looks.

- **Build Prototype**

In this stage, the prototype of our system was built which includes specific reaction for specific action.

- **Evaluation**

The proposed system is then presented to the supervisor for initial user evaluation where, the supervisor pointed out the system weakness and strength of the working model.

- **Refining Prototype**

Supervisor feedback and suggestions were analysed and refined according to it. This phase will not be over until all the requirements specified are met by the developer. Once the developed prototype is satisfied to the supervisor, a final system is developed based on the approved final prototype, if not then the refining stage again continues as per the evaluation.

- **Implement and Maintain**

In this stage once the final system is developed based on the final prototype, the system is thoroughly tested and deployed.

## b. Requirement Gathering Process

Requirement No.	Requirement Name	Requirement Description
1.	Room details	Information of different rooms and locations.
2.	User details	Information about the tenants and landlords.
3.	Feedback Collection	Feedback from the user.
4.	User Interface	Interface details was gathered from the group discussion and through various websites.

*Table 3 : Requirement Gathering Process*

## c. Feasibility Study

- **Technical Feasibility**

Under this feasibility study, hardware of 64-bit operating system and also feasible for 32 –bit operating system. Operating system compatible on all types of Operating System

Operating System used : Windows: 10 and 11.

Skills required: Knowledge of HTML, CSS, JavaScript

PHP stands for Hypertext Preprocessor, an extremely popular scripting language that is used to create dynamic Web pages. It was among the first server-side languages that could be embedded into HTML, making it easier to add functionality to web pages without needing to call external files for data.

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).

## Chapter 4: System Design

### a. Context Diagram and Data Flow Diagram(DFD)

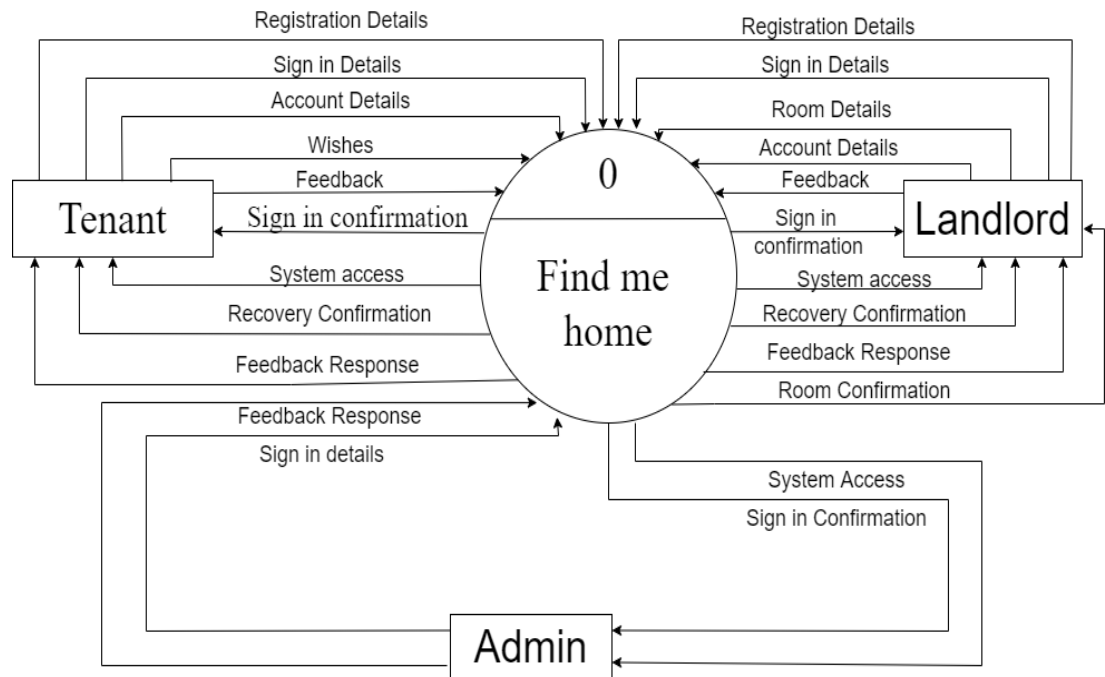


Figure 1 : DFD (Level 0)

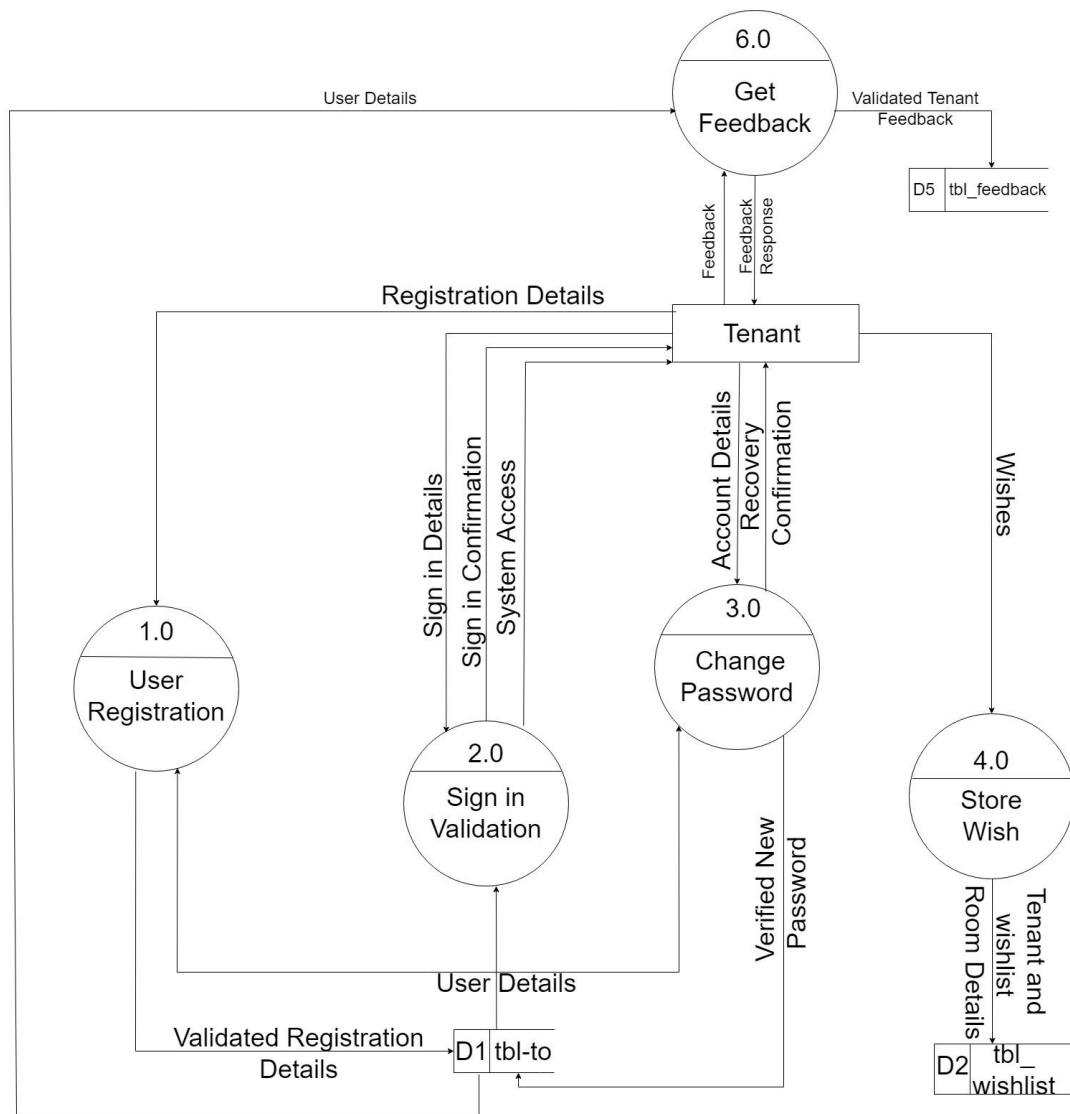


Figure 2 : DFD - Level 1 (Tenant Perspective)

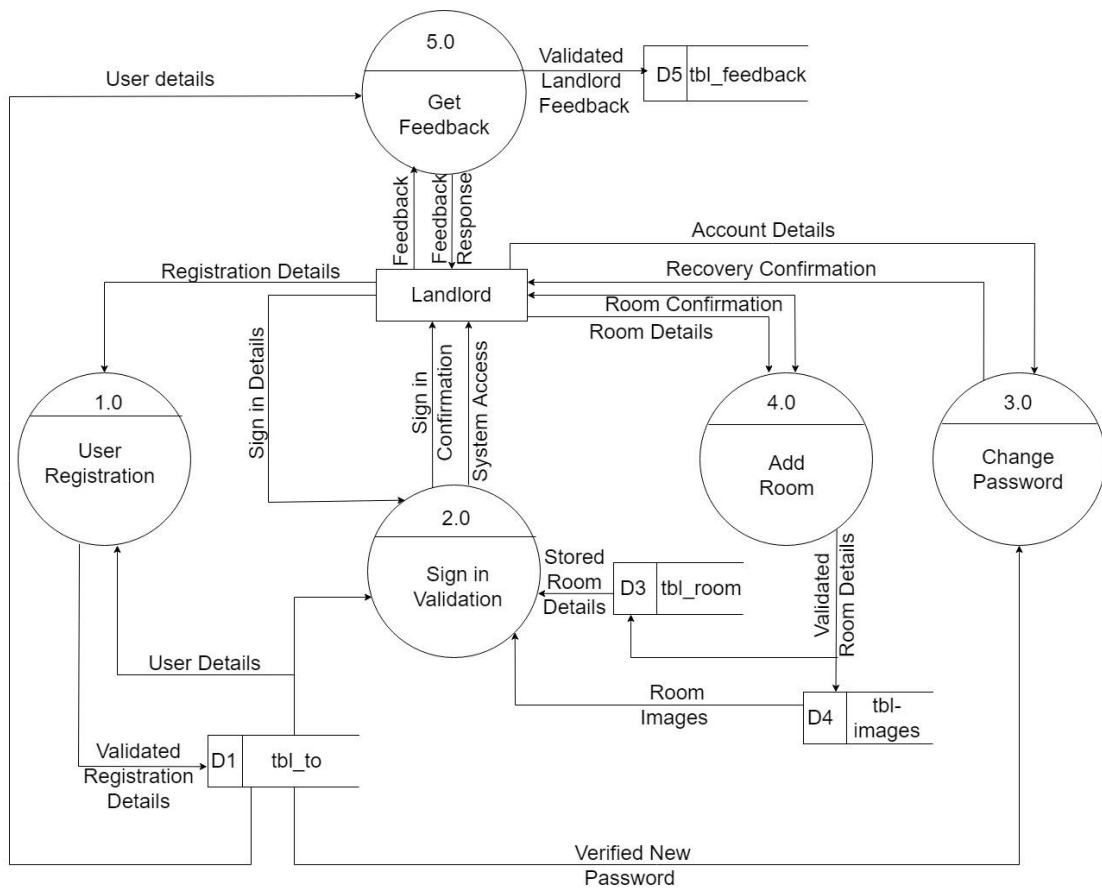


Figure 3 : DFD - Level 1 (Landlord Perspective)



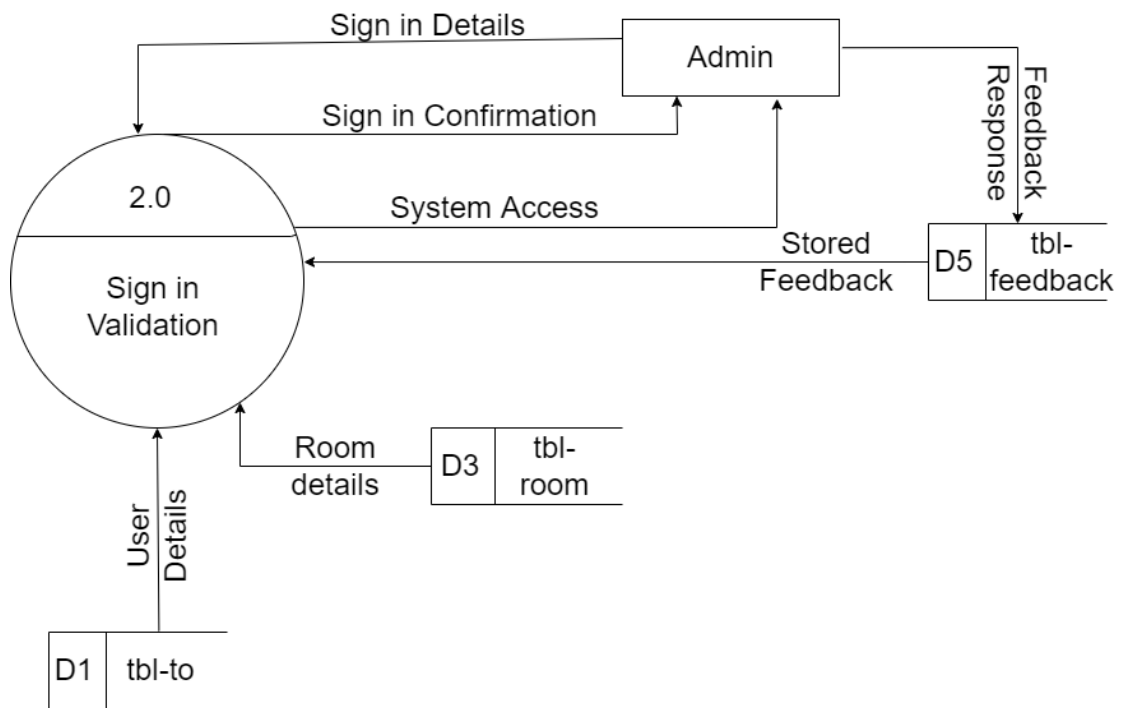


Figure 4 : DFD - Level 1 (Admin Perspective)

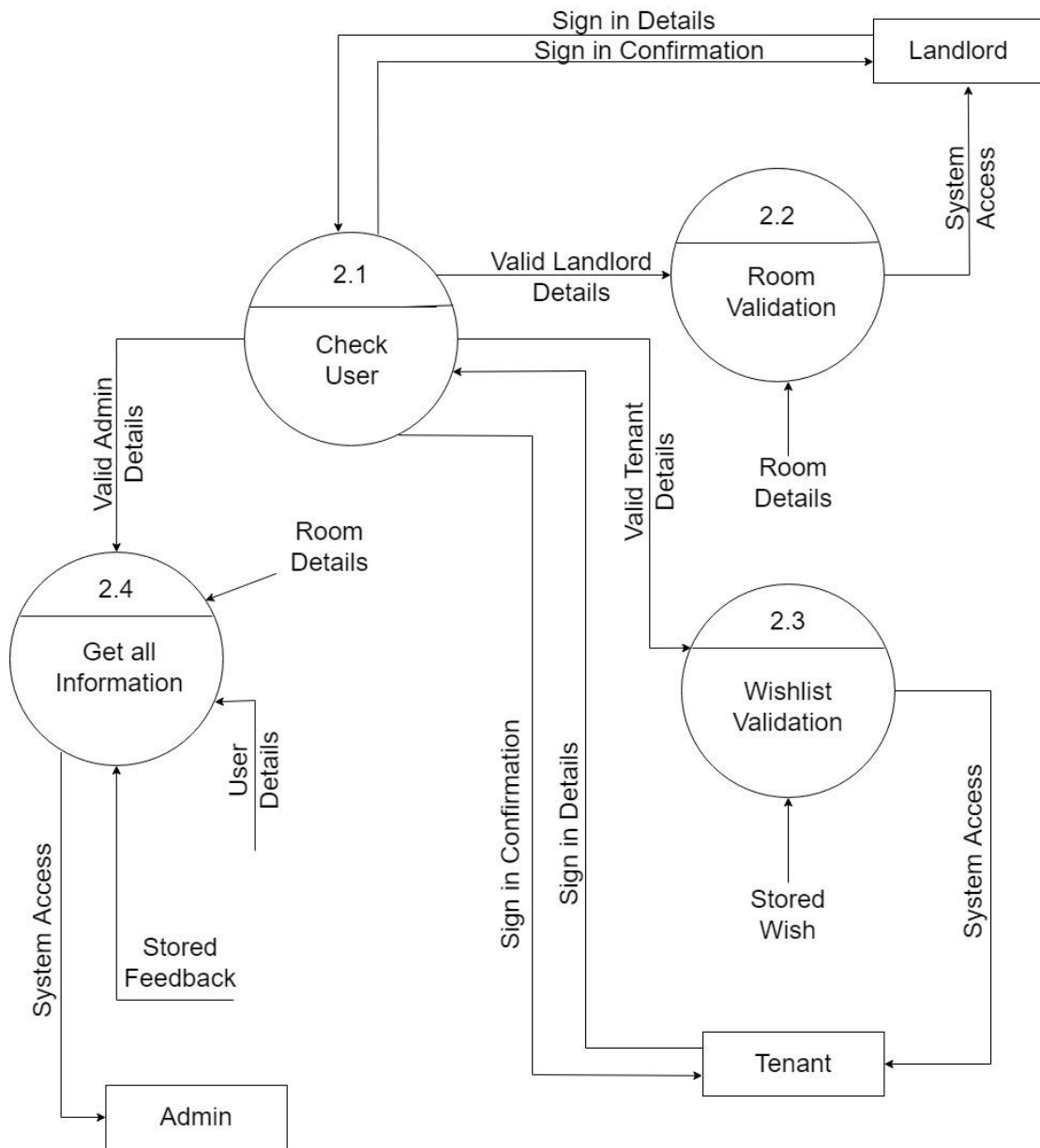


Figure 5 : DFD Level 2

## b. Use Case Diagram

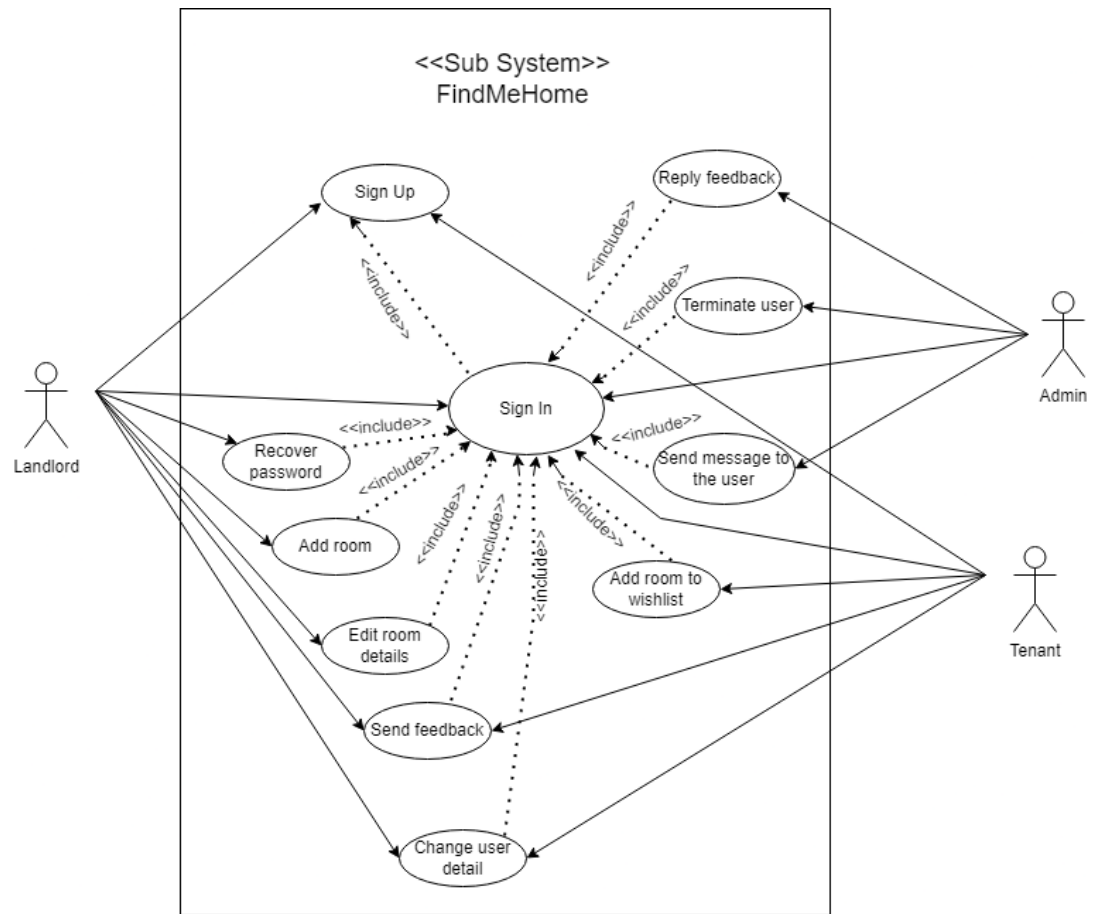


Figure 6 : Use Case Diagram

## c. Database Design

## d. ER diagram

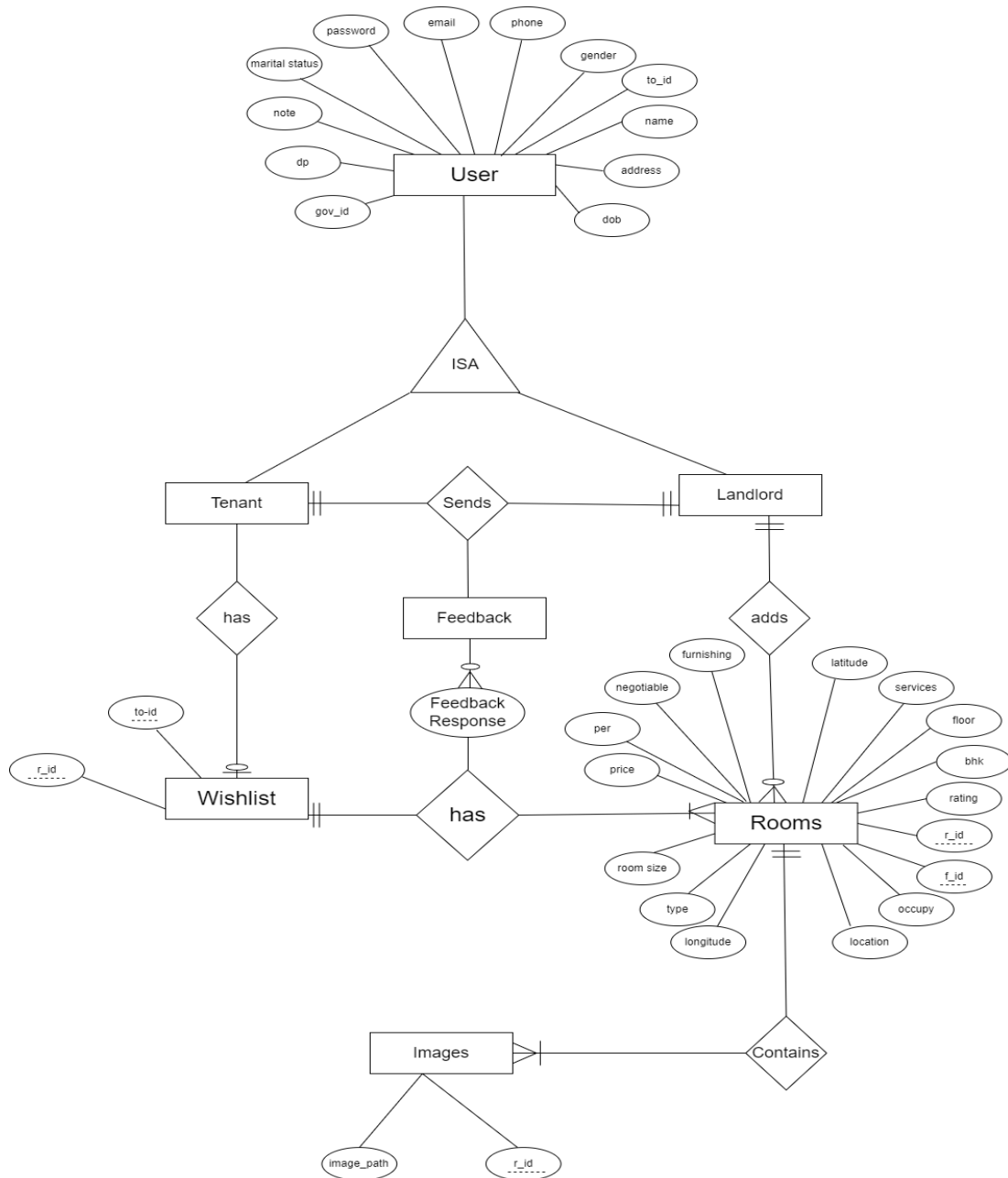


Figure 7 : ER Diagram

## i. Relational Data Structures

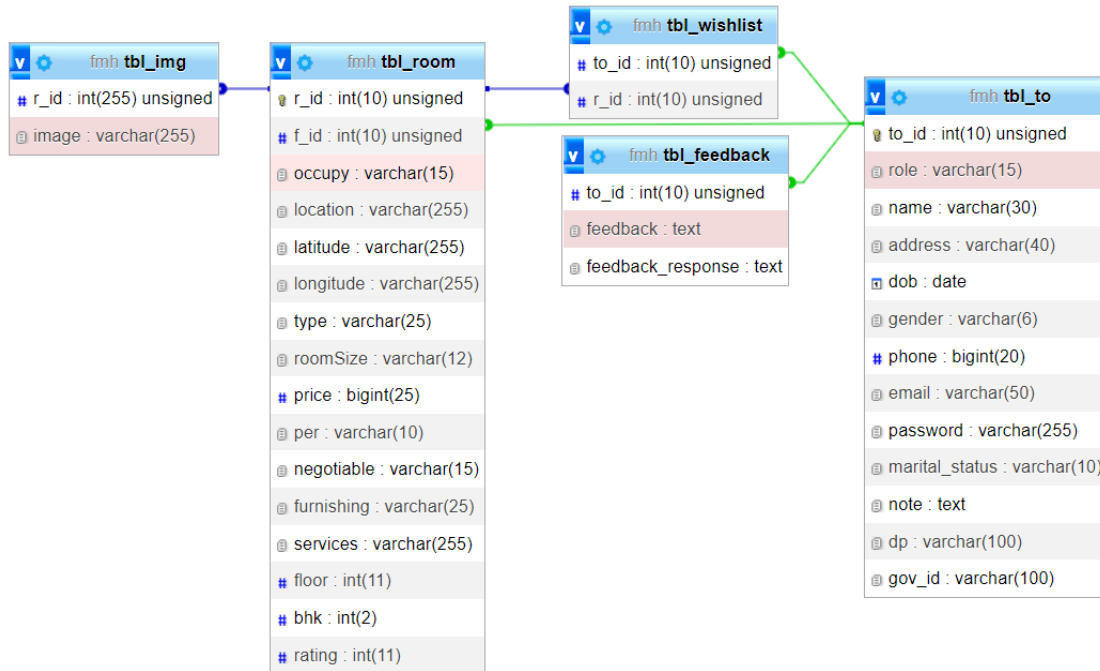


Figure 8 : Relational Data Structures

## ii. Data Dictionary

### tbl\_feedback

Column	Type	Null	Default	Comments
to_id	int(10)	No		
feedback	text	No		
feedback_response	text	No		

#### Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
tenant_feedback	BTREE	No	No	to_id	0	A	No	

### tbl\_img

Column	Type	Null	Default	Comments
r_id	int(255)	No		
image	varchar(255)	No		

#### Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
r_id	BTREE	No	No	r_id	19	A	No	

## tbl\_room

Column	Type	Null	Default	Comments
r_id (Primary)	int(10)	No		
f_id	int(10)	Yes	NULL	
occupy	varchar(15)	No	Not Occupied	
location	varchar(255)	No		
latitude	varchar(255)	No		
longitude	varchar(255)	No		
type	varchar(25)	No		
roomSize	varchar(12)	No	Small	
price	bigint(25)	No		
per	varchar(10)	No	Month	
negotiable	varchar(15)	No	Negotiable	
furnishing	varchar(25)	No	Not Furnished	
services	varchar(255)	No		
floor	int(11)	No		
bhk	int(2)	No	1	
rating	int(11)	No	0	

## Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	r_id	12	A	No	
f_id	BTREE	No	No	f_id	6	A	Yes	

## tbl\_to

Column	Type	Null	Default	Comments
to_id (Primary)	int(10)	No		
role	varchar(15)	No		
name	varchar(30)	No		
address	varchar(40)	No		
dob	date	No		
gender	varchar(6)	No		
phone	bigint(20)	No		
email	varchar(50)	No		
password	varchar(255)	No		
marital_status	varchar(10)	No		
note	text	Yes	NULL	
dp	varchar(100)	No		
gov_id	varchar(100)	No		

## Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	to_id	7	A	No	

## tbl\_wishlist

Column	Type	Null	Default	Comments
to_id	int(10)	No		
r_id	int(10)	No		

## Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
tenant	BTREE	No	No	to_id	3	A	No	
room	BTREE	No	No	r_id	3	A	No	

Figure 9 : Data Dictionary

## **Chapter 5: System Development and Implementation**

### **a. Programming Platform (Tools and Technologies used)**

For the development of the project, the project members used a computer with the following specifications:

- Windows 10 and 11
- RAM installed of 8 gigs
- 64-bit Operating System
- Frontend Tool: HTML, CSS
- Backend Tool: MySQL, PHP

### **b. Operating Environment (minimum requirement for the system to run – software/ hardware)**

Minimum RAM: 512 MB

Minimum disk space: 300 MB

Minimum processor: 32-bit

Minimum OS: Pentium III/1.4 GHz

Minimum monitor resolution: SVGA

### c. Testing and Debugging (Test Cases)

Test Case	1
Test Objective	To check whether the new user is added when sign up is done.
Expected Result	New user should be added while signing up.
Test Result	New user is added.
Conclusion	Test result matches the expected result.

*Table 4 : Test Case 1*

Test Case	2
Test Objective	To check whether the sign in process is successful when valid user is provided.
Expected Result	Sign is should be successful when valid user is provided.
Test Result	Valid user when provided the sign in got successful
Conclusion	Test result matches the expected result.

*Table 5 : Test Case 2*



Test Case	3
Test Objective	To check whether the password can be changed.
Expected Result	Password should be changed.
Test Result	Password was changed.
Conclusion	Test result matches the expected result.

*Table 6 : Test Case 3*

Test Case	4
Test Objective	To check whether the new room is added in the database.
Expected Result	New room should be added in the database.
Test Result	New room get added in the database.
Conclusion	Test result matches the expected result.

*Table 7 : Text case 4*

Test Case	5
Test Objective	To check whether the selected rooms are added in the wishlist.
Expected Result	Selected rooms should be added in the wishlist.
Test Result	A selected room got added in the wishlist.
Conclusion	Test results matches the expected result.

*Table 8 : Test Case 5*

Test Case	6
Test Objective	To check whether the user details can be edited.
Expected Result	User details should be edited.
Test Result	User details got changed.
Conclusion	Test result matches the expected result.

*Table 9 : Test Case 6*

Test Case	7
Test Objective	To check whether the specific room details are shown while using the filter.
Expected Result	Only the required or rooms with matching filter attribute should be shown.
Test Result	Only the required details got filtered.
Conclusion	Test result matches the expected result.

*Table 10 : Text Case 7*

Test Case	8
Test Objective	To check whether the user account can be terminated.
Expected Result	Terminated account should be removed from the database.
Test Result	Terminated account got removed from the database.
Conclusion	Test result matches the expected result.

*Table 11 : Test Case 8*

Test Case	9
Test Objective	To check whether the message is sent to the user in the email address.
Expected Result	Message should be sent to the user in the email address.
Test Result	Message got sent in the user email address.
Conclusion	Test result matches the expected result.

*Table 12 : Test Case 9*

Test Case	10
Test Objective	To check whether the reply for the feedback is sent to the user.
Expected Result	Feedback should be sent to the user.
Test Result	Reply for the feedback got sent to the user.
Conclusion	Test result matches the expected result.

*Table 13 : Test Case 10*

#### **d. Implementation and Result Analysis**

S.N.	Test Objectives	Results
1.	To check whether the new user is added when sign up is done.	Successful
2.	To check whether the sign in process is successful when valid user is provided.	Successful
3.	To check whether the password can be changed.	Successful
4.	To check whether the new room is added in the database.	Successful
5.	To check whether the selected rooms are added in the wishlist.	Successful
6.	To check whether the user details can be edited.	Successful
7.	To check whether the specific room details are shown while using the filter.	Successful
8.	To check whether the user account can be terminated.	Successful
9.	To check whether the message is sent to the user in the email address.	Successful
10.	To check whether the reply for the feedback is sent to the user.	Successful

*Table 14 : Implementation and Result Analysis*

## **Chapter 6: Conclusion and Future Enhancement**

### **a. Conclusion**

During this project, the team went through very hardships maintaining spirits and head towards the completion of project. Despite the challenges, we were able to achieve the objectives that we thought for this project. Research and guidance from the supervisor helped us a lot. Some of the features we thought of could not be achieved, but some appeared to be much more fruitful which can still be enhanced. On the other hand, some featured turned out to be the limitations for which we have plans to overcome on the forth coming days.

### **a. Limitations**

As it is known that, everything in this universe has its own pros and its cons, this program too has its own which the project members tried to eliminate as much as possible. The below mentioned are the limitations of the program

- Auto complete location feature could not be implemented.
- No section allocated for real time notification.
- All the room details are shown at once that causes difficulty in finding the desired rooms to the users..

### **b. Future Enhancement**

Human are the only creator of errors as well as solutions. So, keeping in mind lot of features and interfaces could have been made better. The future enhancements will be made accordingly. As the program contains a lot of limitations the members will try to fix it in future. The program can get a lot

of enhancing features that might make it better than any other programs available out there. There are some possible enhancements mentioned below:

- Better UI design
- Communication Platform
- Real time notification

## References

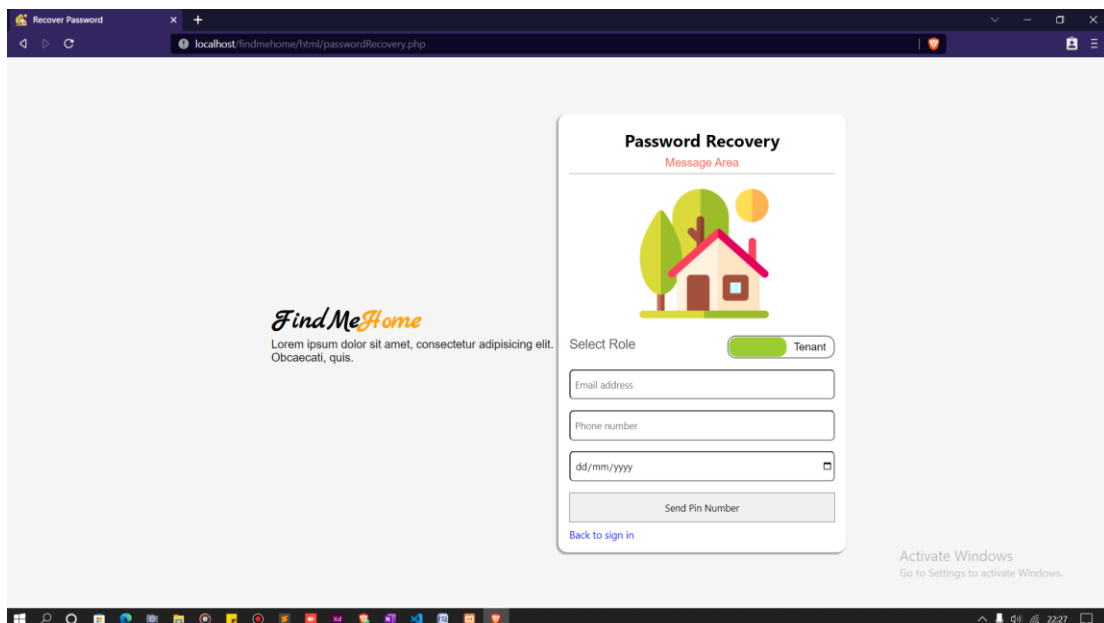
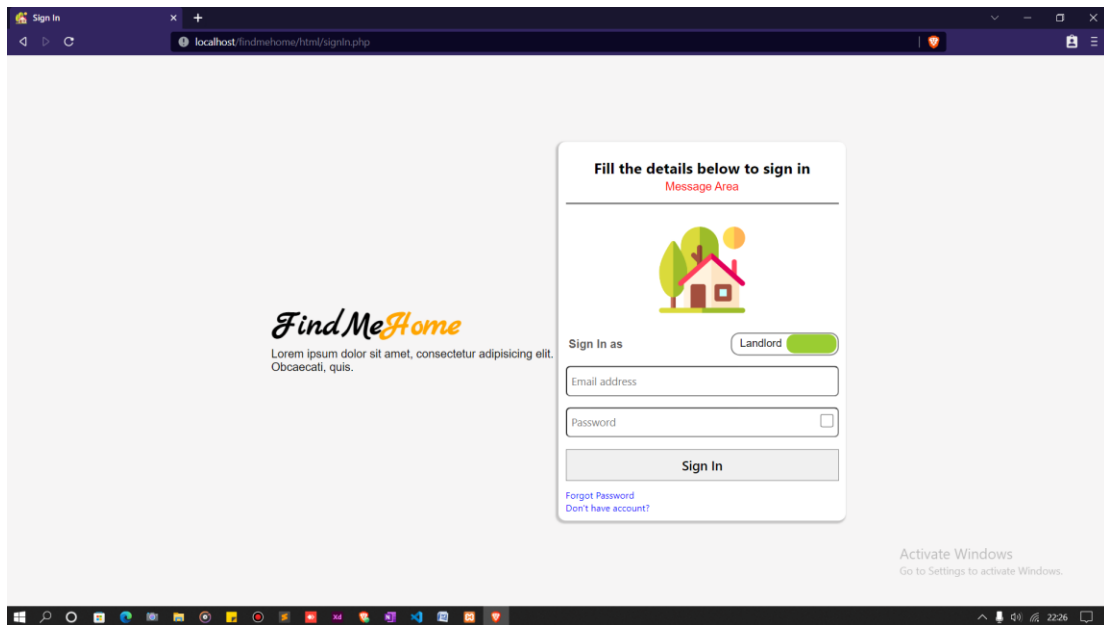
Official Documentation of PHP, accessed 3 – 29, May 2021 <https://php.net>

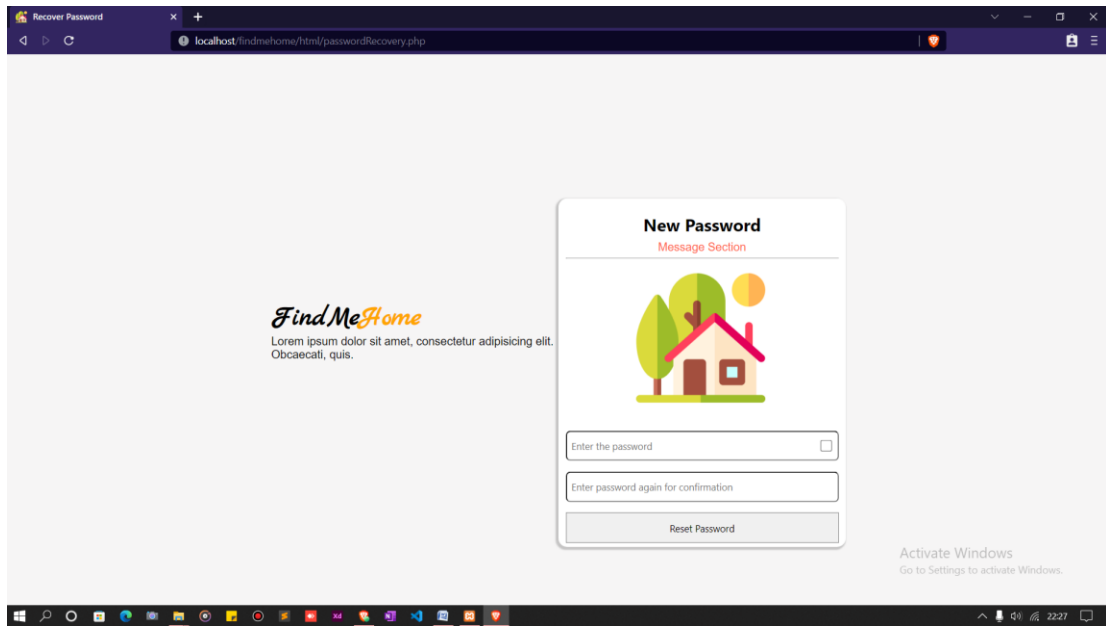
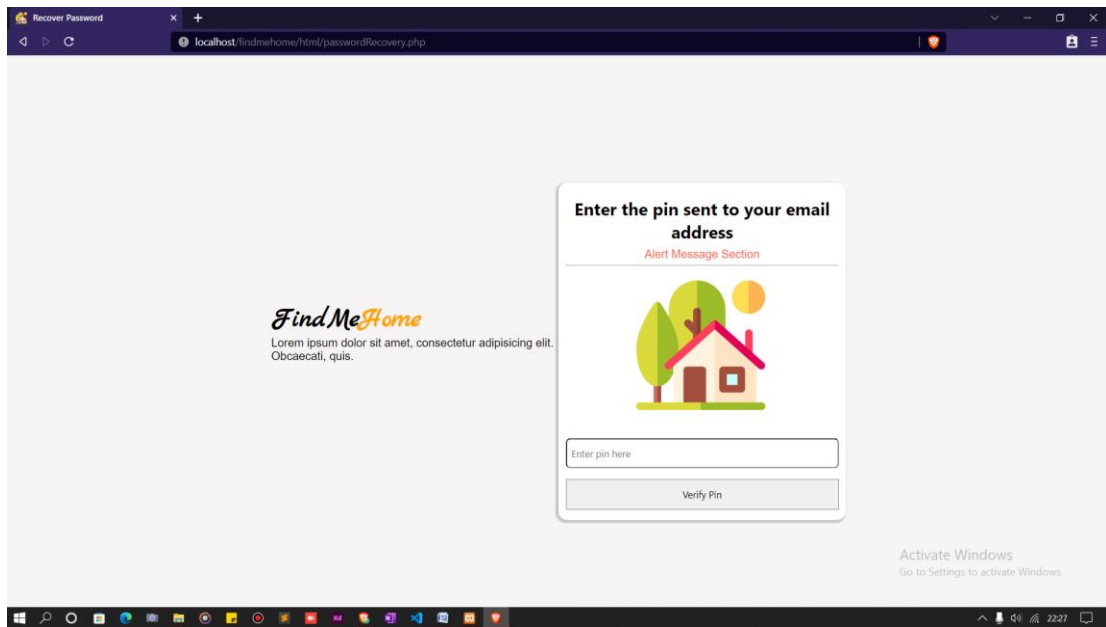
David Hunter, Jeff Raffer, Joe Fawcett, Eric van der Vlist, Danny Ayers, Jon Ducket, Andrew Watt, Lind McKinnon 2007, Beginning XML, 4<sup>th</sup> Edn, Wrox.



# Appendices

## Appendix 1: Screenshots





Sign Up

localhost:findmehome/html/signup.php

FindMeHome

Lorem ipsum dolor sit amet, consectetur adipiscing elit.  
 Obcaecati, quis.

Fill the details below to sign up

Message Area

Sign up as
 

Tenant

Enter name

dd/mm/yyyy

Gender

Marital Status

Enter permanent address

Enter phone number

Enter email address

Enter password

Enter password for confirmation

Upload your photo
 

Choose File

No file chosen

Upload citizenship card photo
 

Choose File

No file chosen

Sign Up

Already have an account?

Activate Windows

Go to Settings to activate Windows.

Home : Tenant 1

localhost:findmehome/html/homeTenant1.php

FindMeHome

HomeWishlistTutorial

Filter

Location 1

BHK

Floor

Min Price


Max Price

☐ Location  
☐ BHK  
☐ Floor  
☐ Price

Filter

Filter using map

Available Room Details



BHK 1  
 Floor 8  
 Price Rs. 47,000  
 Rating 4.5  
 Location Anamnagar-3  

More

<

01

02

03

04

>

FindMeHome

Informations

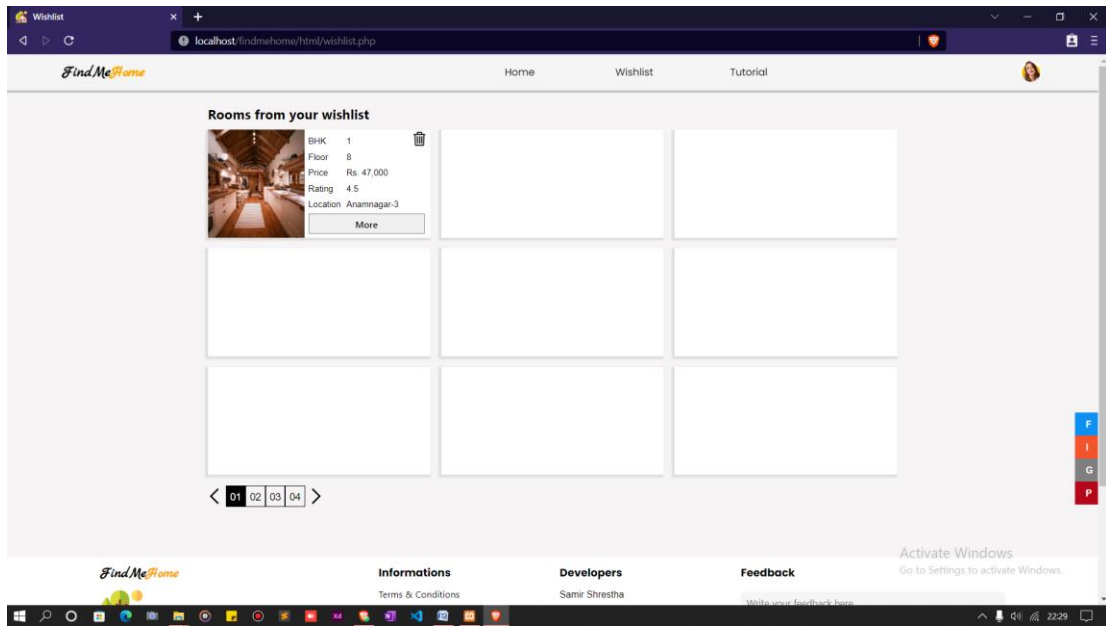
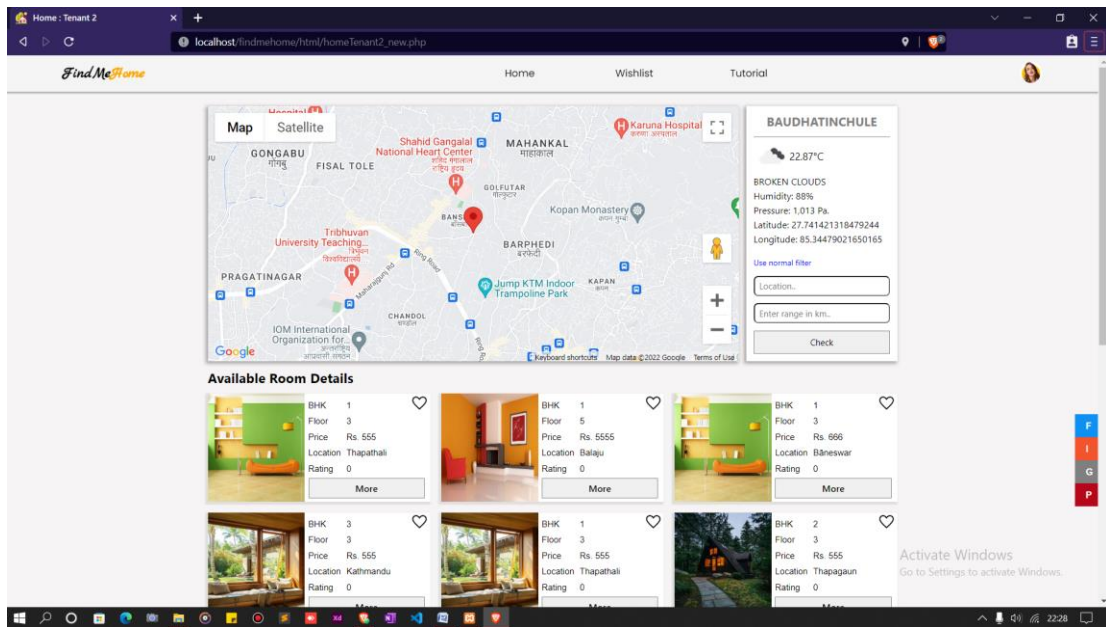
Developers

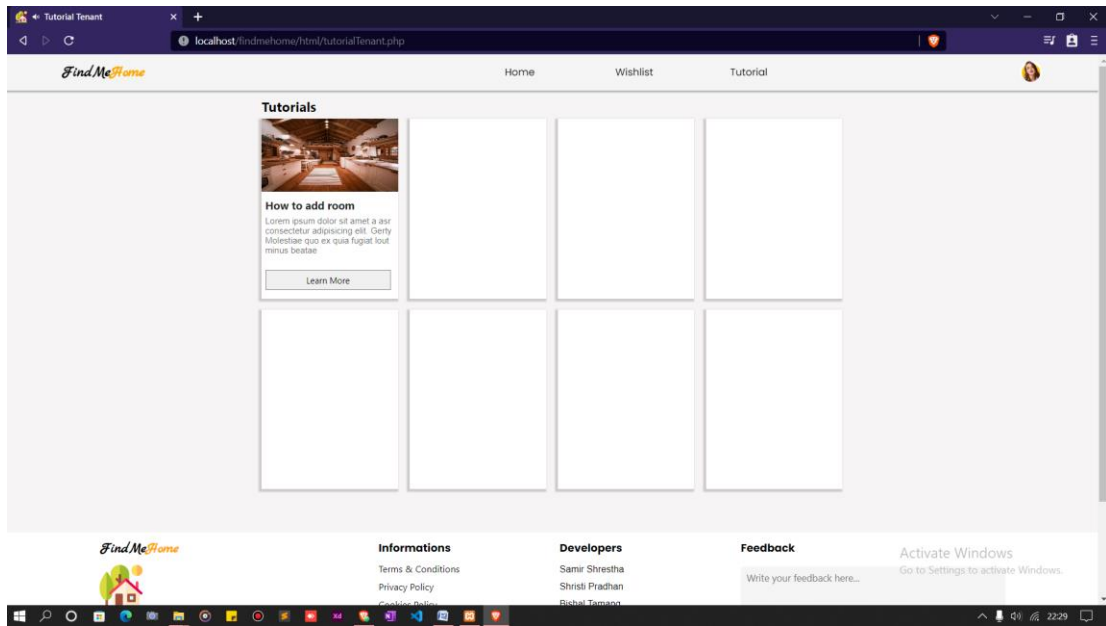
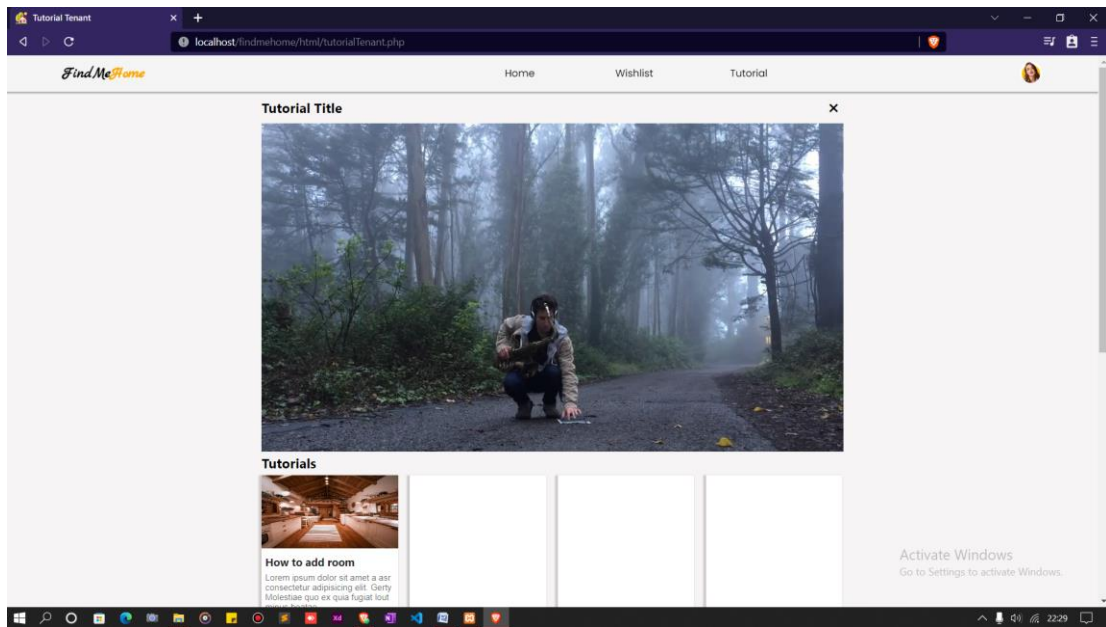
Feedback

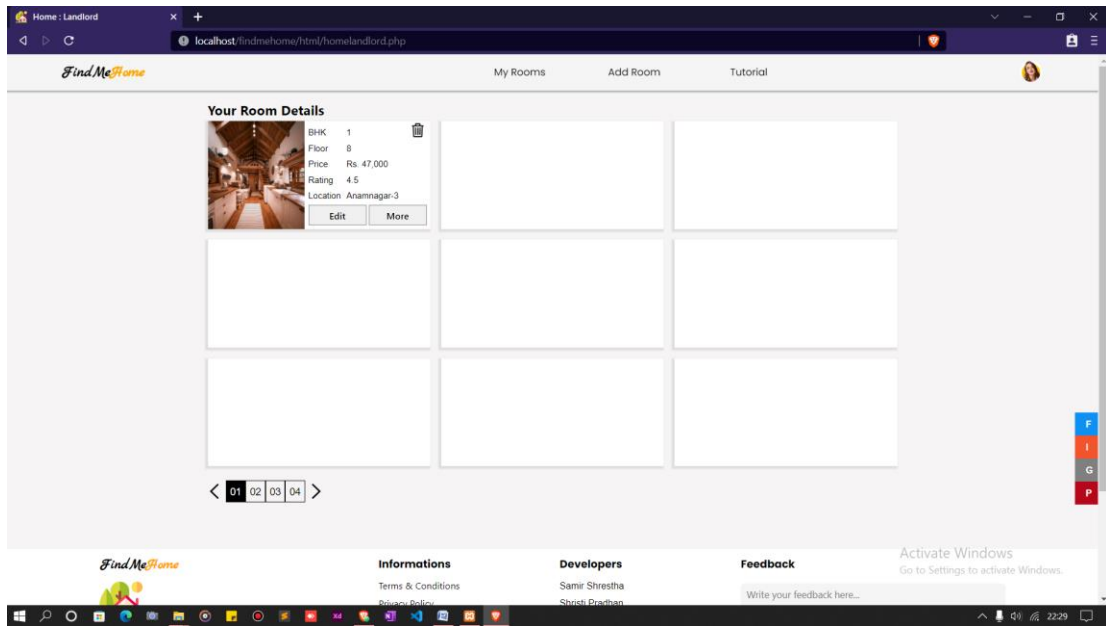
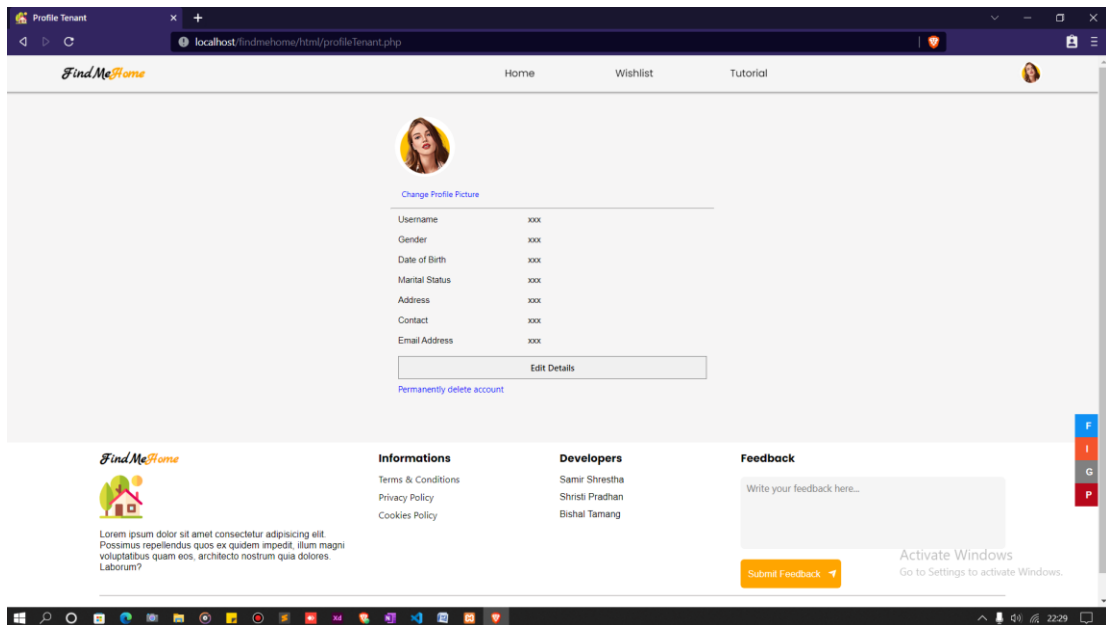
Activate Windows

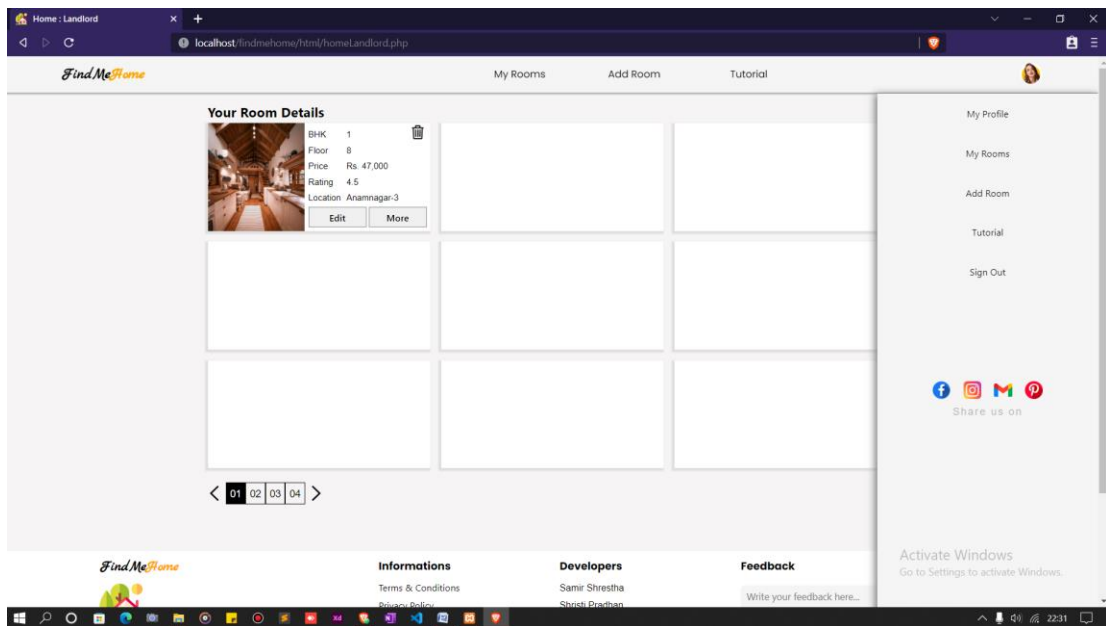
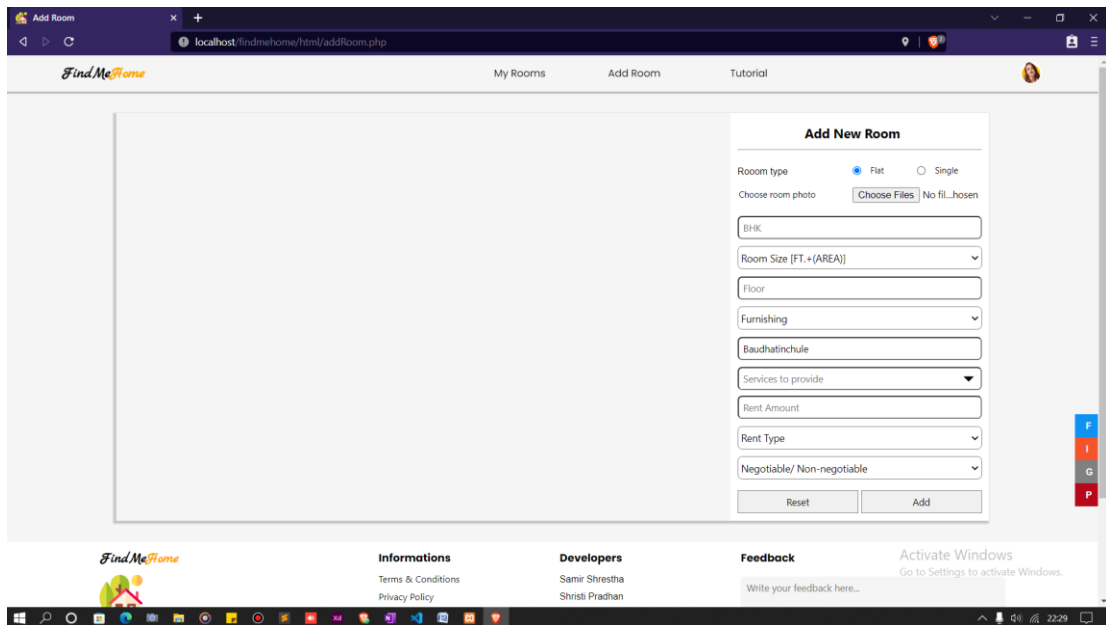
Go to Settings to activate Windows.

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## Appendix 2 : Gantt Chart

Activities	No. of weeks	Plan/ Actual	June				July				August			
			1	2	3	4	1	2	3	4	1	2	3	4
Requirement Gathering and Analysis	1	Plan												
		Actual												
Designing	3	Plan												
		Actual												
Implementation and Coding	7	Plan												
		Actual												
Testing	6	Plan												
		Actual												
Documentation	10	Plan												
		Actual												