"Home Rental Management System"

A Project Submitted to

Savitribai Phule Pune University

In partial fulfillment of the requirements for the degree the

M.Sc.(Computer Science) First Year

By

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&

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YEAR 2021-22

<u>CERTIFICATE</u>

This is to certify that Mr. Sanket Awate Roll No.4002 & Mr. Sanket Patil Roll No.4036 of M.Sc. I (Computer Science) has completed their project work entitled **"Home Rental System"** during the academic year 2021-22 as partial fulfillment of the M.Sc.(comp. science) course.

Date:

Place:

Project Guide   **Head of the Department**   **Principal**

Internal Examiner   **External Examiner**

ACKNOWLEDGEMENT

We are very grateful to present the project report on "**Home Rental**".

It is the great sense of satisfaction that we represent our project work. This project was undertaken in the partial fulfillment of the requirement for the degree of "Masters of Computer Science" of Pune University Examination. We wish to express our thanks to all those who helped us in completing the project.

We would like to express our explicit thanks and acknowledgment to our project guide for their kindly and timely guidance.

Our project guide for this system is Mr. Umakant Pise. We are thankful to her valuable suggestion and providing us ample laboratory time for the development of the system.

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<u>INTRODUCTION</u>

Computer plays an important role in our daily life. Anything we want we can get only in one mouse click. Speed, reliability and accuracy of the computer make it a powerful tool for different purposes. A very important and basic need of today's modern business world is the quick availability and processing of information using computer. One can easily get the type of required information within a fraction of a second. The project that I have taken is also in this category which is used in our daily life whenever we want to purchase some items we can easily get them at our home.

OBJECTIVE:

The objective of this project is to create on home rental website with content management system which allows the products information to be updated securely using mobile or internet devices. The website will have an online interface in from of an home rental website that will allow users to buy property and rent.

PROBLEM DEFINITION

EXISTING SYSTEM:

- In Today's busy world and fast growing system with the advancement in services needed in day to day life, there are some people who don't get enough facilities like crafts product and decoration and home interior.

- One must know what the problem is before it can be solved. The basis for the online shopping portal is to buy products online and save the timing.

- A Online rental portal, who want to buy any product of their need, has to contact different user, before deciding upon a particular Property that best suit his needs, requirements and satisfaction.

PROPOSED SYSTEM:

- Here in this project we are trying to cover all possibility for people. An Home Rental system which will allow formal and informal merchants in developing countries to advertise and sell their good on the internet.

- The objective of this project is to create an Home Rental web system with content management system which allows product information to be update securely using mobile or internet devices. The web portal will have an online interface in form of Home Rental website that will allow users to buy goods from merchants.

ANALYSIS

SCOPE:

- Purchasing property and services over the internet without need of going physically to the market is what online rental all about. Online rental is just like a retail store shopping that we do by going to the market, but it is done through the internet.

FEASIBILITY STUDY:

- Only developers are needed to have programming knowledge and database management knowledge.
- Any technical knowledge is not needed by the user other than online knowledge.
- In this html, CSS, Bootstrap, PHP is used because of it, the system is not costly.

FINANCIAL FEASIBILITY:

- No extra training is required for user to use this website, as system is user friendly.
- The cost of proposed system is beneficial against cost and efforts involved in maintaining the all services.
- Though the system is developed in the generalized form, which covers all the procedures and operations carried out in an internet based solution. The version used in the system is PHP and MySQL.
- MySQL can manage large amount of data and is simple and secure. Using PHP helps us to design the look of our application.

OPERATIONAL FEASIBILITY:

- It is feasible system is user friendly. It comes with GUI which will be understood by user easily.
- Each user can easily use our site. However it is desirable that the user has the basic knowledge of the computers.
- Without making any changes in the rules and regulations of the existing system proposed system can easily adopted.

HARDWARE AND SOFTWARE REQUIREMENT

Software Requirements:

1) For Website Development:

- Operating System   :   Linux
- Web Browser   :   Firefox, Chrome, Internet Explorer
- Front End   :   Html , CSS 3, Java Script, Bootstrap
- Server Side   :   PHP 5
- Back End   :   MySQL
- Server   :   Apache 2/ XAMMP Server

2) For User:

- Operating System   :   Linux, Windows, etc.
- Web Browser   :   Firefox, Chrome, Internet Explorer

Hardware Requirements:

- Ram   :   512 Mb And Above
- Hard Disk   :   4 GB
- Processor   :   i3 Processor
- Processor Speed   :   1 GHz to 2 GHz

STRUCTURE OF PROJECT

- ❖ Before Login
  - ➤ Login
  - ➤ Register
  - ➤ Forget Password
  - ➤ Administrator Login

- ❖ After Administrator Login
  - ➤ Edit Website Details
  - ➤ Add Photos
  - ➤ Add Listing
  - ➤ Add Items
  - ➤ Delete Photos
  - ➤ Delete Listing
  - ➤ Delete Items
  - ➤ Manage User
    - • See Users
    - • Users Rental
    - • Add Users
    - • Delete Users
  - ➤ Logout

- ❖ After User Login
  - ➤ My Profile
    - • Edit Profile
    - • Change Password

  - ➤ LOGOUT

FUNCTIONAL REQUIREMENTS

Login Module:

This module is provided for administrator and users such as Product buyer and seller who have registered themselves in the system. These login are provided according to the need of the systems.

- Input: User id and password
- Process: After entering user id and password by user process of validation occur to identify whether user id and password is available in database or not.
- Output: Registered user can access website and can use the services.

Administrator Module:

The administrator is provided with password and login-id with which he/she can access the system. Administrator is provided right of maintaining the database, verifies registered users.

- Input: Login id and password.
- Process: Process of validation will occur.
- Output: Administrator will maintain the database and will perform Property search process.

User Module:

As users are the main visitor of site, the following facilities are available through this module. Can search the Products according to their need can order online books.

- Input : User Id and password
- Process: Process of validation will occur.
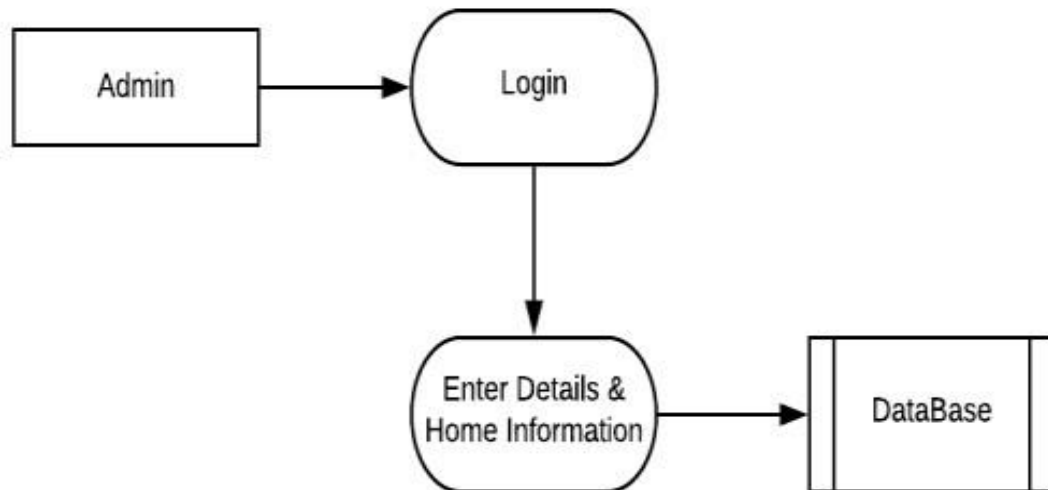- Output: Only genuine user can access services provided by website.

SYSTEM DESIGNING

DFD:

Reply   *Request*

Operation/data processing

Authentication

SYSTEM Database

Login / Index

Rental House

(Approved/ Reject)

(Acknowledgeme .

(Acknowledgement)

Logout
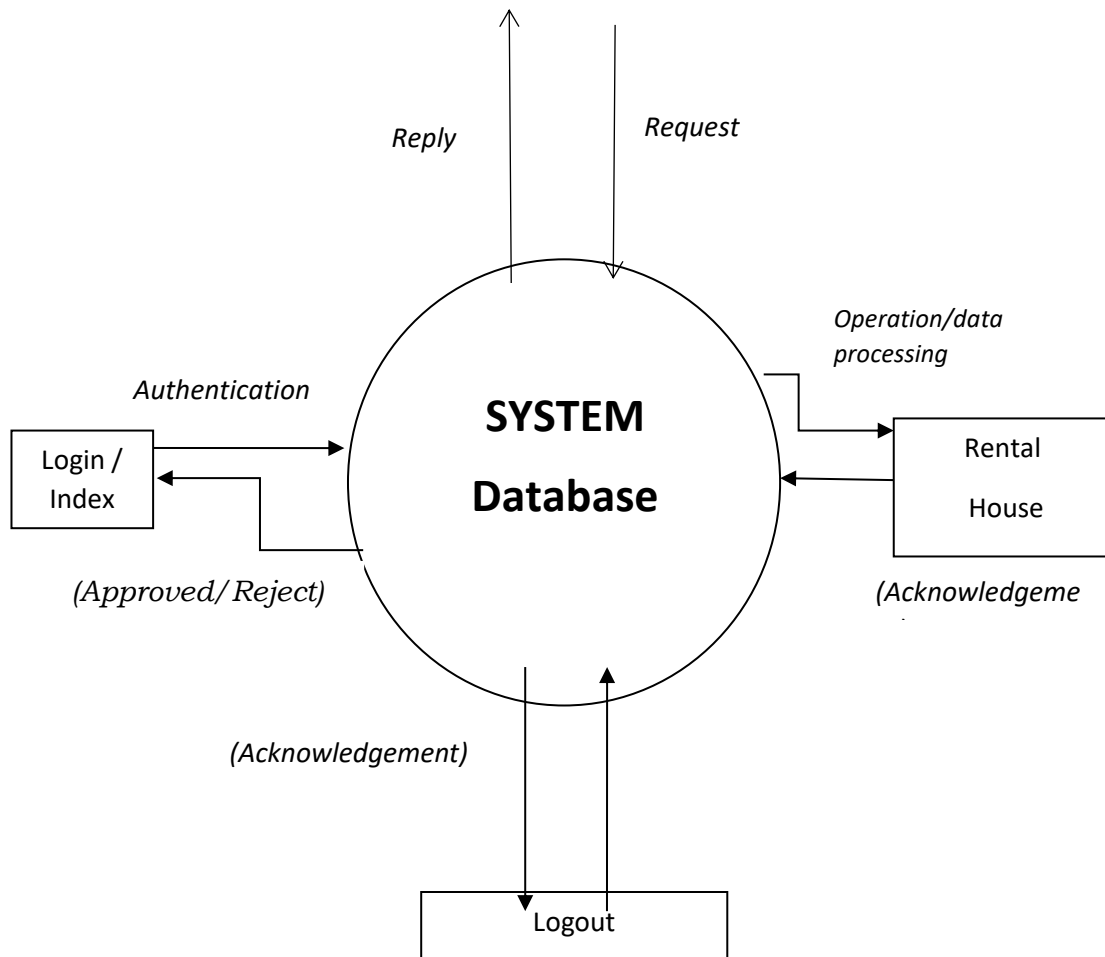
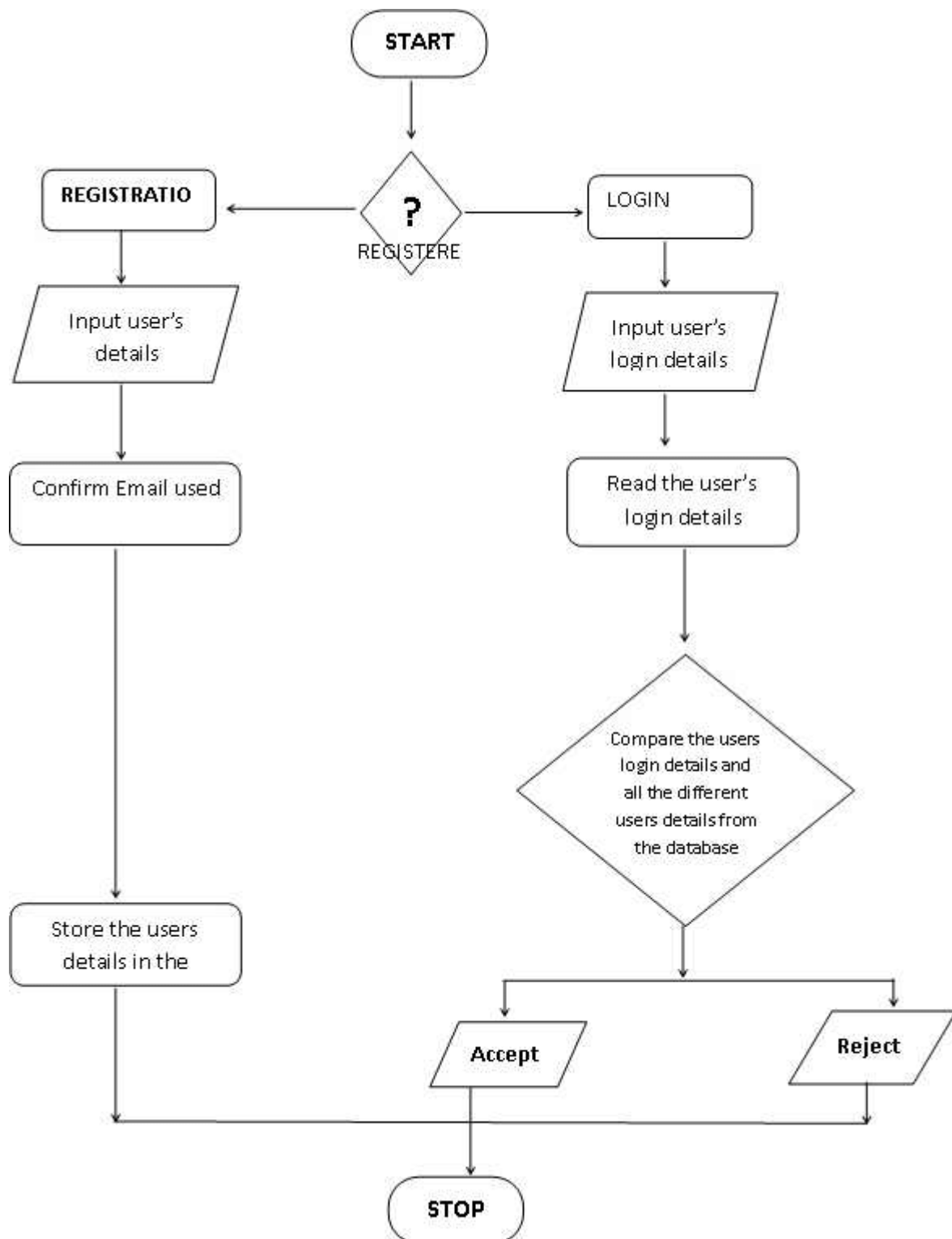## (0 level DFD)

DFD for Registration
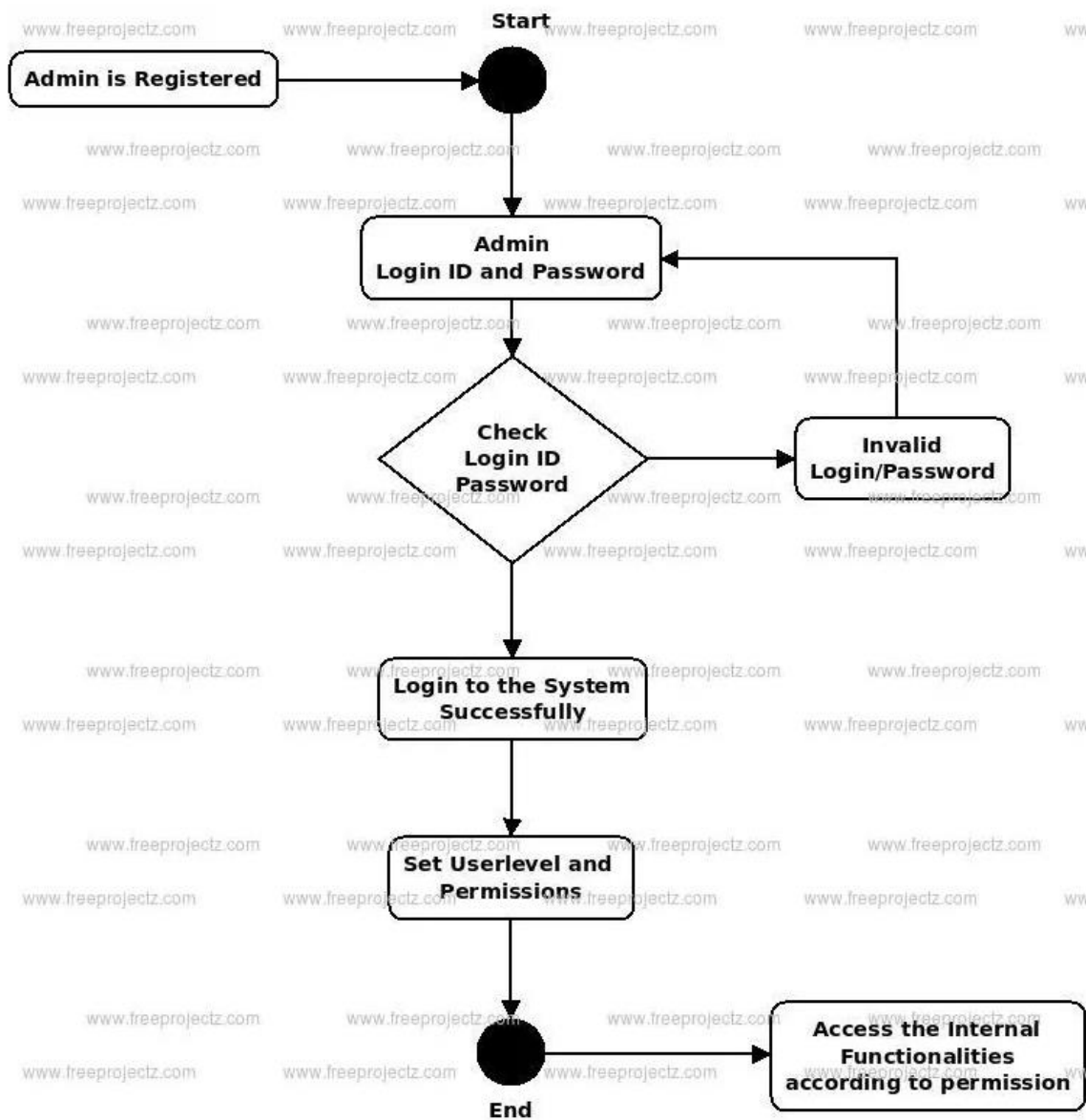
Level 0:

Level 1:

Level 2:

UML Sequence Diagram

Actor — Houseview — House Manegment — Application Form — Agent

select

product

Applay

House update notification

check

application & appointment notification
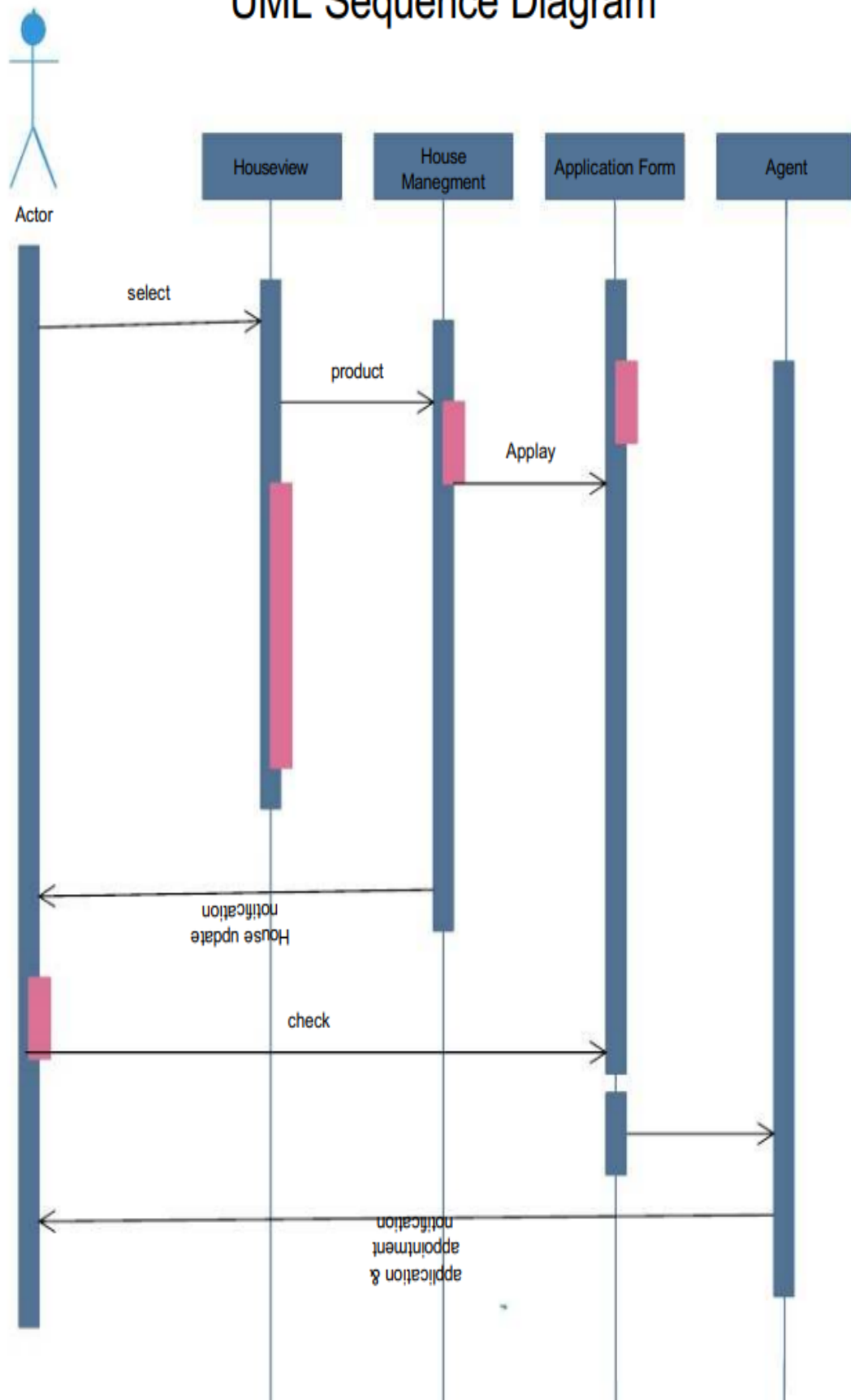
USECASE DIAGRAM FOR ADMIN AND USER:

Use Case Diagram
Society Management System
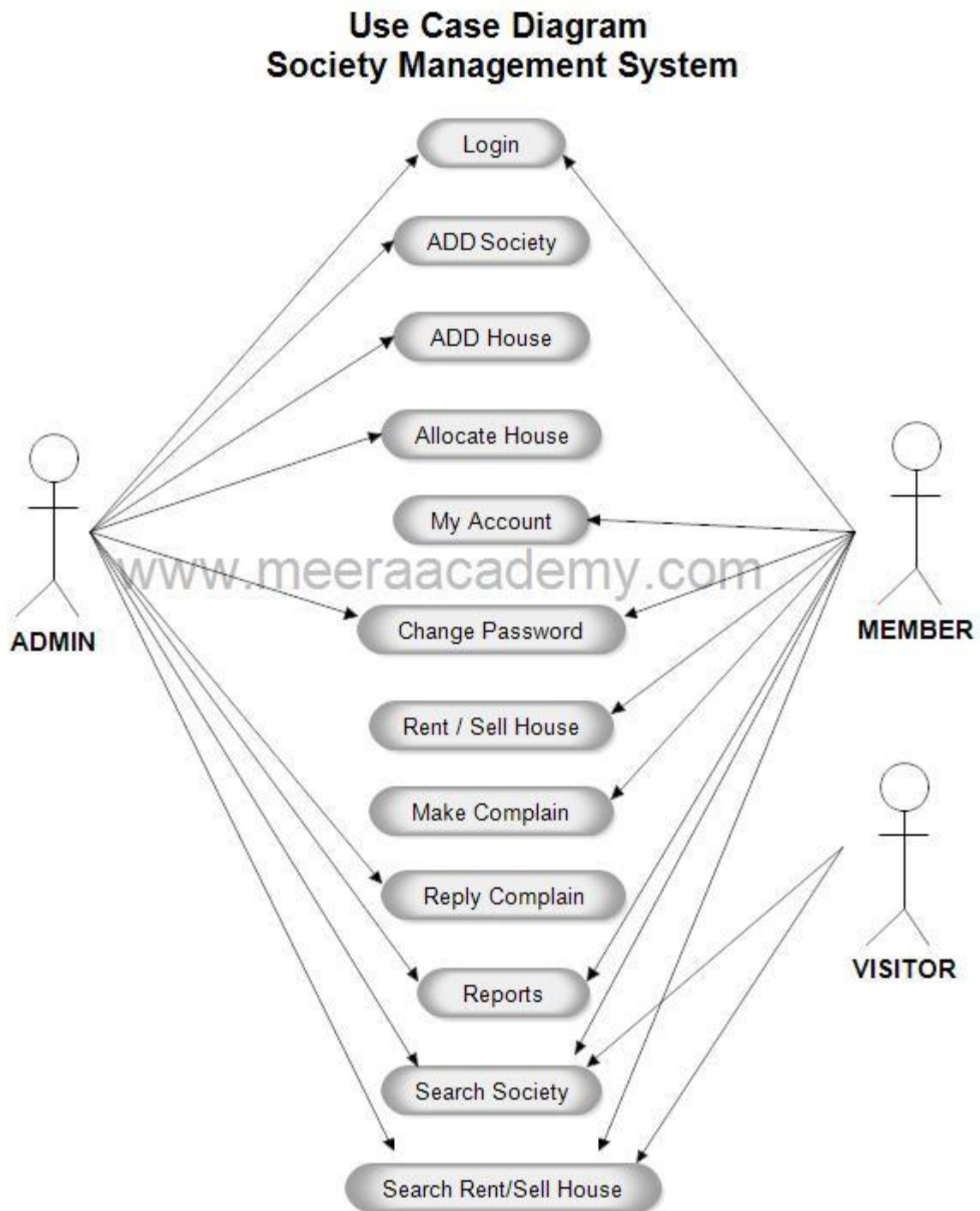
ACTIVITY DIAGRAM FOR USER:

ACTIVITY DIAGRAM FOR ADMIN:

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CLASS DIAGRAM:

REGISTRATION

USER
USER NAME: STRING
USER ID : STRING
PASSWORD: STRING
CONTACT : STRING
ADDRESS : STRING

REGISTRATION
USER NAME : STRING
FNAME : STRING
LNAME : STRING
ADDRESS: STRING
CONTACT: STRING
EMAIL : STRING

ADMIN
ADMIN NAME: STRING
ADMIN ID : STRING
PASSWORD: STRING
CONTACT : STRING

USER NAME : STRING
PASSWORD : STRING

CART
PROD_NAME : STRING
PRICE : STRING
USER_NAME : STRING

PRODUCTS
PROD_CAT : STRING
PROD_NAME : STRING
PROD_TYPE: STRING
PRICE   : STRING
BRAND : STRING

ITEM PURCHESED
USER_NAME : STRING
PROD_NAME : STRING
PRICE : STRING
DATE : STRING
ADDRESS : STRING

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SEQUENCE DIAGRAM FOR ADMIN:

1

COLLABORATION DIAGRAM FOR USER:

COLLABORATION DIAGRAM FOR ADMIN:

COMPONENT DIAGRAM:

E-CRAFTS TRADING SYSTEM

USER

ADMIN

DEPLOYMENT DIAGRAM:

PERSONAL COMPUTER

LINUX

WEB SERVER

APACHE

DATABASE SERVER

SQL

HTTP

DBMS
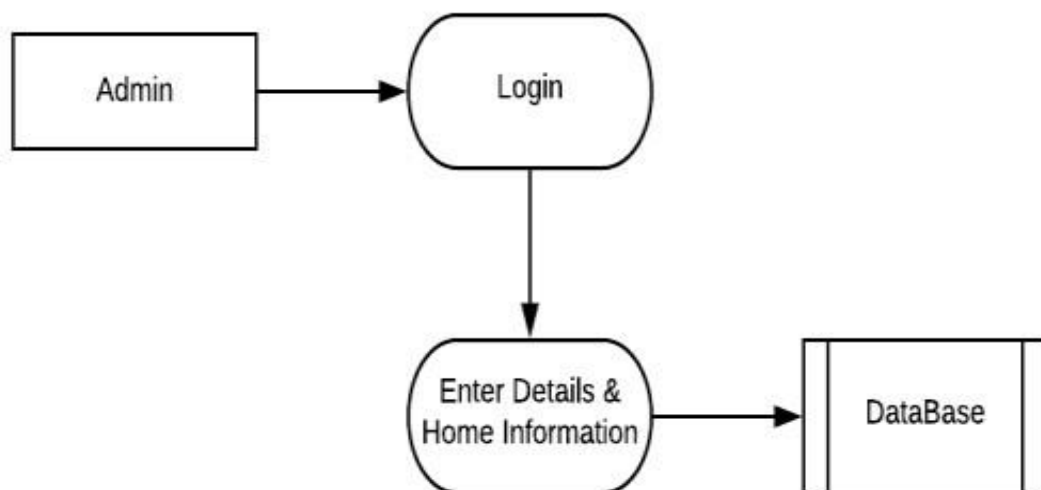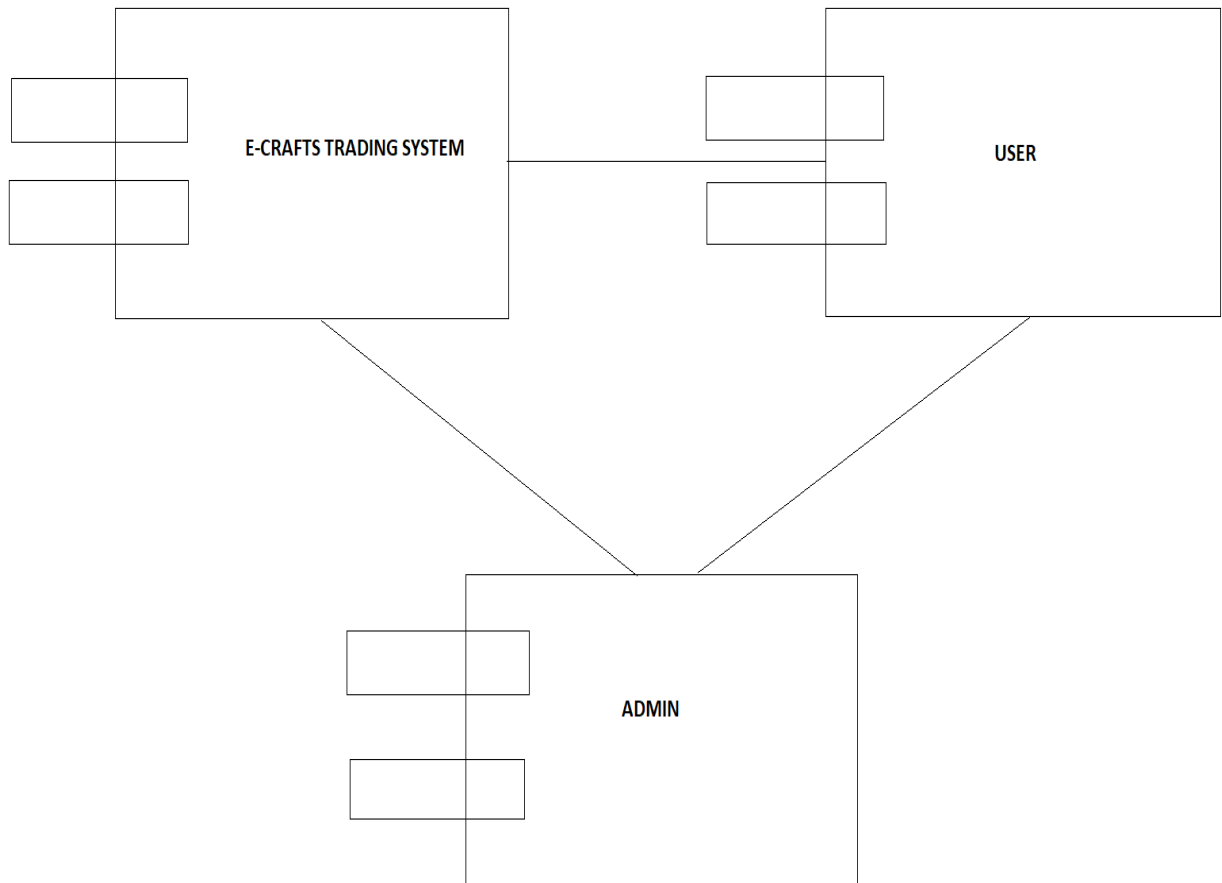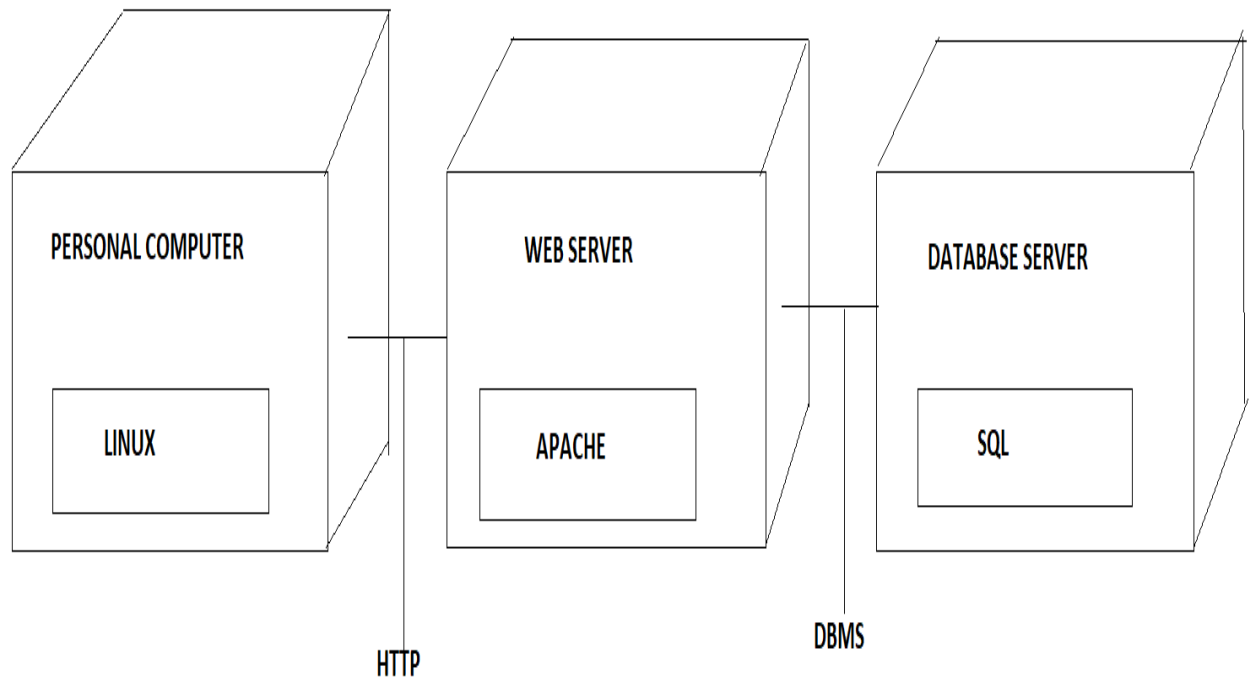
OUTPUT DESIGN

I

    Input design is the process of converting user oriented inputs to a computer based format, which gets the credentials details from the supplier.
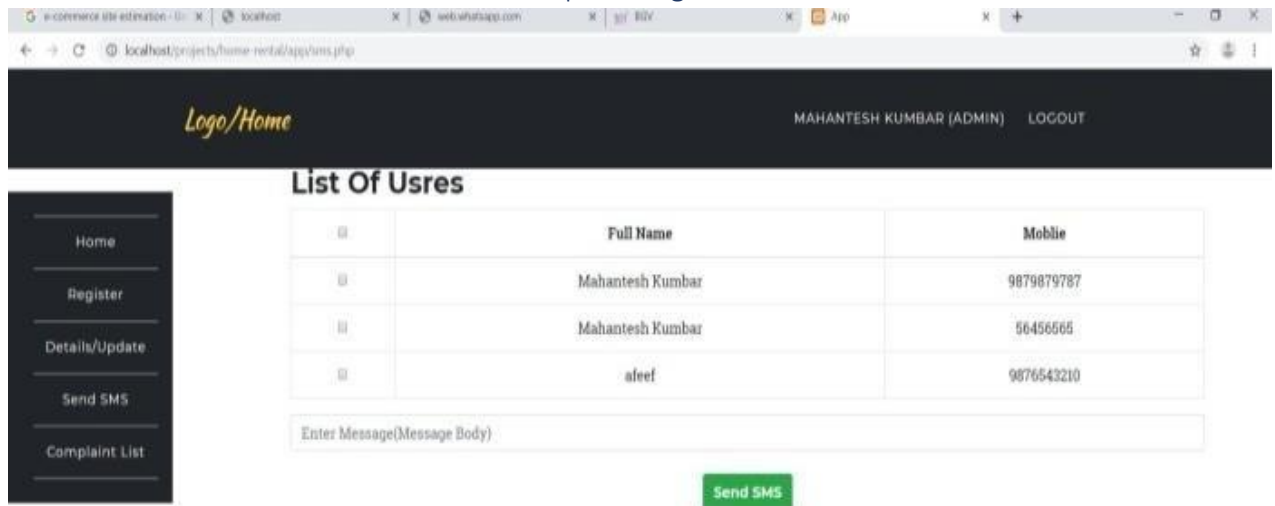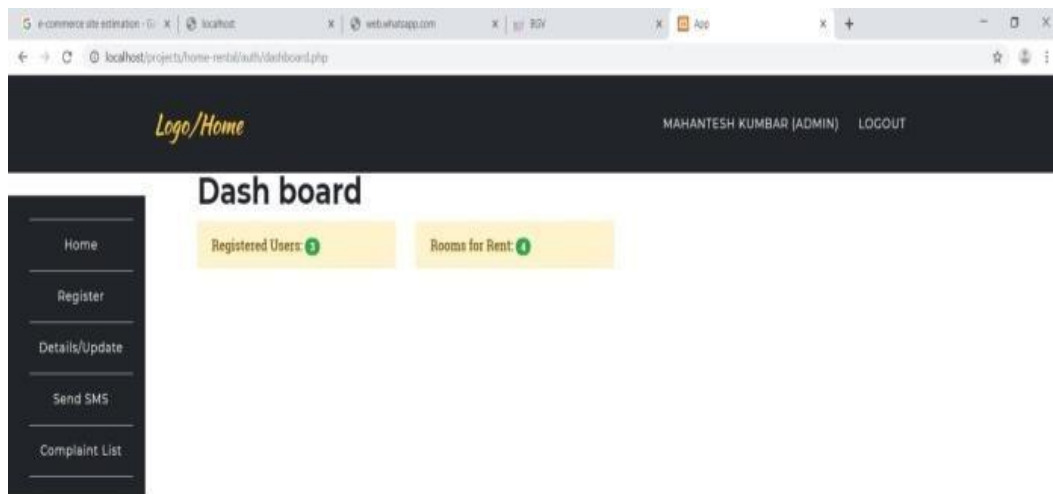
<p align="center">Input Design</p>

    Output generally refers to the results and information that are generated by the system. For many end users, outputs are the main reason for developing the system and the basics on which they will evaluate the usefulness of the application.

    Users generally merit the system analyst works easily with the user through an interactive process, until the result is considered to be satisfactory. Therefore, an effective interactive design is an important feature of design specification.

Home Page

Apartment Details Report

List of Apartment Details

Owner Details

Owner Name: mahantesh

Mobile Number: 2345676567

Alternate Number:

Email: admin@admddin.com

Country: india

State: karnataka

City: Belagavi

Address: port road bgm

Landmark: near ramdev

Room Details

Plot Number: 78 nh

Apartment Name: mant apartment

Flat Number: 101

Available Area: 1sqr feet

Floor: 2nd

Owner/Rented: rented

Purpose: Residential

Available Rooms: 2bhk

Other Details

Accommodation: wifi

Description: well

Vacant

Edit

Complaint

Apartment Details Report

DATA DICTIONARY

Use case name	**Renter Login**
Use case number	1
Use case Description	Allows users to Add House, remove House, rent House , receive appointment
Participator actor	Renter users
Pre-conditions	The user should open House Rental Management system Website and should create an account
Flow of events	The Admin and the Agents are allowed to add house and confirm house but throw this login privilege the tenant is able to add house and the house region agent or the administrator confirms the house to be displayed in the website. The tenant is also allowed to edit remove the items he/she has add to the website.
Alternative flow of events	

Use case name	**Add House**
Use case number	2
Use case Description	Adding a house information to be rented
Participator actor	Administrator , agent and Renter
Pre-conditions	The users must login to the web system
Flow of events	The users Login from Home page by clicking login button to the login page

Use case name	Remove House
Use case number	3
Use case Description	Removing a house information to be rented
Participator actor	Administrator , agent and Renter
Pre-conditions	The users must login to the web system
Flow of events	The Logged in user Under his Remove menu the use is able to remove The house he has add or if it is his/her region for Agents they are able to remove. For administrator he is able to access for delete entire houses added to the website
Post condition	The House will moved to Trash House folders for restoring if we need to bring the house again
Abnormal flow of events or Alternative conditions	If he/she try to delete the house they are not participated the system promotes "Can't delete".

Use case name	Rent House
Use case number	4
Use case Description	Removing a house information from to be rented to Rented
Participator actor	Administrator , agent and Renter
Pre-conditions	The users must login to the web system
Flow of events	The Logged in user can change the status of the house to rented
Post condition	The house will not be available in to be rented house list
Abnormal flow of events or Alternative conditions	

Use case name	Confirm House
Use case number	5
Use case Description	Committing the House to be viewed in the website for rental
Participator actor	Administrator , agent
Pre-conditions	The users must login to the web system and should admin or agent privilege
Flow of events	When the tenant adds the House notification will be sent to the region agent for confirmation

Use case name	**Search House**
Use case number	10
Use case Description	Allows Customers to search for House
Participator actor	Customer / Tenant
Pre-conditions	The user should open House Rental Management system Website
Flow of events	Inputting in terms of price ,region, area,…. For searching.

Use case name	**Request House**
Use case number	11
Use case Description	Allows Customers to apply for House for rental
Participator actor	Customer / Tenant

Use case name	**Admin Login**
Use case number	12
Use case Description	Allows the admin to manage users , create agents account and granted agents privilege
Participator actor	administrator
Pre-conditions	The user should open House Rental Management system Website.
Flow of events	The admin inputs admin username and password for validating.

Use case name	**User Management**
Use case number	14
Use case Description	Allows the admin to create, remove, ban , edit ,reset any other accounts.
Participator actor	Administrator
Pre-conditions	The admin should be logged in to the system.

<u>TESTING</u>

UNIT TESTING:

Unit testing focuses on the modules independently locate the errors. This enables the tester to detect errors in coding. It is the process of taking a module and running it in isolation from rest of the software product by using prepared test cases and comparing the actual result with the result redirected with the specifications and design of the module. One purpose of testing is to find and remove as many errors in the software as practical. There are number of reason in support of unit testing-:

- The size of module single module is small that we can locate an error fairly easily.
- The module is small enough that we can attempt to test it in some demonstrably exhaustive fashion.
- Confusing interactions of multiple errors in widely different parts of software are eliminated.

INTEGRATION TESTING:

- This is a systematic technique for constructing the program structure while at the same time to uncover the errors associated with the interface. The objective is to take unit tested module and build a program structure that has been detected by designing. The main purpose of integration testing is to determine that the interfaces between modules are correct or not.

STRUCTURAL TESTING:

- Structural Testing takes into account the internal mechanism of a system or component. Fatigue Testing is carried out with the objective of determining the relationship between the stress range and the number of times it can be applied before causing failure. So when your product's structural durability needs to be predicted, verified and validated, turn to DTB's Structural Testing and Fatigue Testing experts. We provide you with the necessary structural testing and fatigue testing equipment and personnel to test the design and manufacturing integrity of your product. Call upon our vast experience in commercial and military applications.

FUNCTIONAL TESTING:

- This will give a walkthrough on how to create a Test Plan as we incorporate and/or configure its elements to support functional testing. This created a Test Plan for a specific target web server. We will begin the chapter with a quick overview to prepare you with a few expectations; we will create a new Test Plan, only smaller. The Test Plan we will create and run at the end of this chapter will incorporate elements that support functional testing, exclusively.

Post implementation review

Class diagrams are the most popular UML diagrams used by the object oriented community. It describes the objects in a system and their relationships. Class diagram consists of attributes and functions. This is one of the most important of the diagrams in development. The diagram breaks the class into three layers. One has the name, the second describes its attributes and the third its methods. The private attributes are represented by a padlock to left of the name. The relationships are drawn between the classes. Developers use the Class Diagram to develop the classes. Analyses use it to show the details of the system

ADVANTAGES OF PROPOSED SYSTEM

The system is very simple in design and implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features

1) Ensure data accuracy.

2) Minimize manual data entry.

3) Minimum time needed for the various processing.

4) Greatest efficiency

5) Better service

6) Minimum time required.

LIMITATION

- In this system after completion of successful Registration from entries and user which service selected it will only display the out in formatted in table report.

- It doesn't show any tips and video for user.

- Less security provide by the forget password. It is not support OTP (one time password) verification process. Increases storage capacity.

<u>CONCLUSION</u>

Effectively resolving the apartment issues is important to the buyer's long-term future, the Home Rental Project will be an important tool for creating rental housing stability by helping tenants speak with greater credibility through initiating and documenting communications and building productive relationships with sellers. Home Rental project provides buyers of specific housing associations and social sellers International Journal of Pure and Applied Mathematics Special Issue 1681 with a simple way to report and arrange repairs to properties. Finally, the goal of the project is to create a better relationship between tenants and a sellers which can be achieved through this project.

FUTURE ENHANCEMENTS

In future our project is meant to satisfy the needs of rental house owners. Several user friendly interfaces have also been adopted. This package shall prove to be a powerful in satisfying all the requirements of the users. It is with utmost faith that I present this software to you hoping that it will solve your problems and encourage you to continue appreciating technology because it is meant to change and ease all our work that seems to be very difficult. I don't mean that my project is the best or that I have used the best technology available it just a simple and a humble venture that is easy to understand. In extent we can add GPS system in build and can give live chat online option to users. This project can also be extended to IOS Platform and several state Database can be included. Could also allow local business to push deals/coupons within a certain geographic area.

<u>BIBLOGRAPHY</u>

This document contains provisions which, through reference in this text, constitute provisions of the present document.

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