

# **REAL ESTATE MANAGEMENT**

## **INTERDISCIPLINARY PROJECT**

Submitted in partial fulfillment of the requirements for the award of Bachelor of  
Technology in Information Technology

by

**Krishna Patel (Reg.no- 41120098)**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**SCHOOL OF COMPUTING**

# **SATHYABAMA**

**INSTITUTE OF SCIENCE AND TECHNOLOGY(DEEMED TO  
BE UNIVERSITY)**

**CATEGORY-1 UNIVERSITY BY UGC**

**Accredited "A++" by NAAC**

**12B Status by UGC |Approved by AICTE**

**JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI-600119**

**MAY 2024**



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

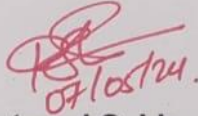
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## DEPARTMENT OF INFORMATION TECHNOLOGY

### BONAFIDE CERTIFICATE

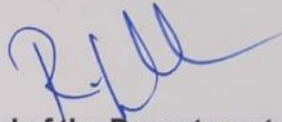
This is to certify that this Project Report is the bonafide work of **KRISHNA PATEL (41120098)** who carried out the project entitled "Real Estate Website" under my supervision from January 2024 to May 2024.



07/05/24

Internal Guide

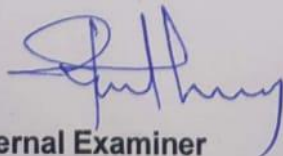
Ms. P. Shamili. M.Tech.,



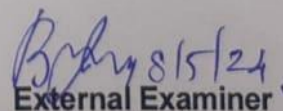
Head of the Department

Dr.R. Subhashini, M.E., Ph.D.,

Submitted for Viva- voce Examination held on 8.5.24



Internal Examiner



8/5/24  
External Examiner

## DECLARATION

I Krishna Patel (41120098) hereby declare that the Project Report entitled "Real Estate Website" done by me under the guidance of Ms. P. SHAMILI. M.Tech., is submitted in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Information Technology.

DATE: 8.5.24

PLACE: CHENNAI

*Krishna Patel*

SIGNATURE OF THE CANDIDATE

## ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to **Board of Management of SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. T.Sasikala M.E., Ph.D., Dean**, School of Computing **Dr.R.Subhashini M.E.,Ph.D.**,Head of the Department of Information Technology for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Ms. P. SHAMILI. M.Tech.**, for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Information Technology** who were helpful in many ways for the completion of the project.

# CERTIFICATION



## NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**KRISHNA PATEL M**

for successfully completing the course

**Data Base Management System**

with a consolidated score of **56** %

|                    |         |                |          |
|--------------------|---------|----------------|----------|
| Online Assignments | 17.5/25 | Proctored Exam | 38.25/75 |
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Total number of candidates certified in this course: **6225**

**Jan-Mar 2024**

(8 week course)

**Prof. Haimanti Banerji**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



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To verify the certificate



No. of credits recommended: 2 or 3

## **ABSTRACT**

The Real Estate Management Website project aims to develop a comprehensive online platform to facilitate property management, sales, and rentals. The website provides functionalities for users, agents, and administrators to interact seamlessly in the real estate ecosystem. Key features of the system include property listing, user authentication, transaction management, messaging, and administrative controls. Users can search for properties based on criteria such as location, type, and price range. Registered users, including buyers and sellers, can manage their property listings, view property details, and communicate with agents. Agents play a crucial role in the system, managing property listings, interacting with users, and facilitating transactions. They have access to tools for property valuation, scheduling property viewings, and negotiating deals. Transactions between users and properties are recorded to track sales, rentals, and other real estate activities. The administrative module empowers administrators to manage user accounts, monitor transactions, analyze market trends, and oversee overall system operations. Security measures such as user authentication, data encryption, and access control mechanisms are implemented to ensure data privacy and system integrity. The Real Estate Management Website project leverages modern web technologies, database management systems, and user interface design principles to deliver a user-friendly and robust platform for real estate stakeholders. Future enhancements may include data analytics, mobile app integration, and expanded collaboration features to further enhance the real estate experience for users and agents.

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## LIST OF ABBREVIATIONS

| ABBREVIATION | EXPANSION                           |
|--------------|-------------------------------------|
| HTML         | - Hyper Text Markup Language        |
| CSS          | - Cascading Style sheets            |
| JS           | - JavaScript                        |
| RWD          | - Responsive Website Development    |
| CMS          | - Content Management System         |
| GIF          | - Graphical Interchange Format      |
| PHP          | - Hypertext Preprocessor            |
| XML          | - Extensible Markup Language        |
| API          | - Application Programming Interface |

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1. PROJECT PURPOSE**

This website is a Online real estate business website through which a user can access its information and manage all the adding, updating, deleting the assets and some of its tasks. The Admin user can change the update the information regarding property selling and buying and cancellation. The system is very useful for the companies who developed apartments, hotels, villa, residential properties and commercial properties. Companies or individual agents can also advertise their property.

### **1.2. PROJECT SCOPE**

The real of World Wide Web have spread across millions of household, so naturally, Internet has become by far the best platform for real estate marketing today. Now days when everything is online, how is it possible that real estate left web application behind. There are lots of real estate companies who advertise their property online so idea behind developing this application is that their property can also sell, or buy rental property using this. These applications are not widely popular but in future, they have large scope of growth. This website is a online real estate management through which individual agents or buyer can maintain their property document keeping and managing property registration and also access its information and manage all the adding, updating, deleting the as and some of its tasks.

### **1.3.PROJECT OBJECTIVES**

- The system should have a login. A login box should appear when the system is invoked.
- The Admin should have all the type of authority.
- The Admin should maintain property.
- Admin identify property type as it is residential or commercial property.
- The Admin user can inform their agents for regarding to property and update the information regarding property and cancellation of property or changing buyer choice.
- The user should book the property for sell or rent with detail of property.
- The system is very useful for the companies or builders that can post and edit their properties and their personal info and admin can monitor records of all of them.
- The system is also useful which also keeps track of Account details of buyers and Investors and also RES Industry.

### **1.4. PROJECT GOALS**

- Planned approach towards working: - The working in the organization will be well planned and organized.
- Accuracy: - The level of accuracy in the proposed system can not be decided.
- Reliability: - The reliability of the proposed system will be high due to the above stated reasons.

## **CHAPTER 2**

### **SYSTEM REQUIREMENT SPECIFICATIONS**

#### **2.1.SCOPE:**

The real of World Wide Web have spread across millions of household, so naturally, Internet has become by far the best platform for real estate marketing today. Now a days when everything is online, how is it possible that real estate left web application behind? There are lots of real estate companies who advertise their property online so idea behind developing this application is that their property can also sell, or buy or even rent property using this. These applications are not widely popular but in future, they have large scope of growth. This website is an online real estate management through which individual agents or buyer can maintain their property document keeping and managing property registration and also access its information and manage all the adding, updating, deleting the ads and some of its tasks. The Admin user can inform their agents for regarding to property and update the information regarding property and cancellation of property or changing buyer choice. The system is very useful for the companies or builders that can post and edit the information of their properties and their personal info and admin can monitor records of all of them. The system is also useful which also keeps track of Account details of buyers and Investors and also RES Industry.

#### **2.2. OBJECTIVES**

- The system should have a login. A login box should appear when the system is invoked.
- The Admin should have all the type of authority.
- The Admin should maintain property. Admin identify property type as it is residential or commercial property.

- The Admin user can inform their agents for regarding to property and update the information regarding property and cancellation of property or changing buyer choice.
- The user should book the property for sell or rent with detail of property.
- The system is very useful for the companies or builders that can post and edit their properties and their personal info and admin can monitor records of all of them.
- The system is also useful which also keeps track of Account details of buyers and Investors and also RES Industry.

### **2.3. OVERALL DESCRIPTION :**

#### *Product Prospective:*

Real Estate Management System is a project which provides the facility where users can easily buy, sale and rent their properties such as land, houses and shops. In this project we use PHP and MySQL database. It has two modules.

- i) Admin Module
- ii) User Module
  - Property Owner
  - Broker
  - Buyer(Simple user)

## ADMIN MODULE

*Dashboard:* In this section, admin can see all detail in brief like total property type, total country, total state, total city, total agent, total owner, total buyer(user) and total property listed.

*Property Type:* In this section, admin can manage property type (add/update).

*Country:* In this section, admin can manage country (add/update).

*State:* In this section, admin can manage state (add/update).

*City:* In this section, admin can manage city (add/update).

*Owner:* In this section, admin can view the detail of owners.

*Agents:* In this section, admin can view the detail of agents.

*User:* In this section, admin can view the detail of user.

*List of properties:* In this section, admin can view details of property listed,

*Reviews:* In this section admin, can view reviews and also approved, disapproved and delete the reviews which is given by users.

*Pages:* In this section, admin can manage about us and contact us pages. 12. Search Property: In this section admin, can search the listed property by its property id, name and mobile number. Admin can also update his profile, change the password and recover the password.

## USER MODULE

### a. Property Owner

*Home Page:* Owner can view the home page of real estate management system

**About:** Owner can view about us page.

**Properties:** Owner can view own and other owner properties they can view property type wise, Status wise and city wise.

**Contact us:** Owner can view contact us page.

**My Account:** In this there is three section:

**User Profile:** In this section owner do the following activity

**Edit Profile:** Owner can edit his/her own profile.

**Change Password:** Owner can change his/her own password.

**Add Property:** Owner can add his/her own property.

**My Properties:** Owner can see his/her own listed properties.

**Received Enquiries:** Owner can view receive enquiries against his/her own listed properties and also answer the enquiries.

**Answer Enquiries:** Owner can views answer enquiries.

**Logout:** Owner can logout from own account.

**Change Password:** Owner can change his/her own password.

**Logout:** Owner can logout from own account.

## **2.Agents**

**Home Page:** Agents can view the home page of real estate management system.

**About:** Agents can view about us page.

**Properties:** Agents can view own and other owner properties they can view property type wise, Status wise and city wise.

**Contact us:** Agents can view contact us page.

My Account: In this there is three section:

**User Profile:** In this section Agents do the following activity.

i. **Edit Profile:** Agents can edit his/her own profile.

ii. **Change Password:** Agents can change his/her own password.

iii. **Add Property:** Agents can add his/her own property.

iv. **My Properties:** Agents can see his/her own listed properties.

v. **Received Enquiries:** Agents can view receive enquiries against his/her own listed properties and also answer the enquiries.

vi. **Answer Enquiries:** Agents can views answer enquiries.

vii. **Logout:** Agents can logout from own account.

**Change Password:** Agents can change his/her own password.

**Logout:** Agents can logout from own account.

**Buyer(simple user):**

**Home Page:** User can view the home page of real estate management system

**About:** User can view about us page.

**Properties:** User can view properties they can view property type wise, Status wise and city wise.

**My Account:** In this there is three section:

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**Edit Profile:** Agents can edit his/her own profile.

**Change Password:** Agents can change his/her own password.

**Logout:** Agents can logout from own account.

**Change Password:** Agents can change his/her own password.

**Logout:** Agents can logout from own account.

**PRODUCT FUNCTIONS:**

-  *Our system must save time and money:* Accurate upfront software requirements definition helps ensure your team works on the business problems that matter most.
-  *Reduce rework:* Early validation and agreement by stakeholder's means development and quality teams spend less time on rework.
-  *Improve requirement accuracy:* Industry-unique collaborative story boarding improves accuracy by promoting effective communication.

**ASSUMPTIONS AND DEPENDENCIES:***Assumptions:*

- The code should be free with compilation errors/syntax errors.
- The product must have an interface which is simple enough to understand.

#### *Dependencies:*

- All necessary hardware and software are available for implementing and use of the tool.
- The proposed system would be designed, developed and implemented based on the software requirements specifications document.
- End users should have basic knowledge of computer and we also assure that the users will be given software training documentation and reference material.
- The system is not required to save generated reports.

## **2.4. SPECIFIC REQUIREMENTS:**

#### **Software requirements:**

- Any Version of browser after Mozilla Firefox 4.0, Internet Explorer 6.0
- Adobe Flash Player 10.0.

#### **Hardware requirements:**

- Any processor after Pentium 4.
- Any version of Windows XP or later.
- Processor speed: 2.0 GHz
- RAM : 1GB
- Hard disk: 40GB to 80 GB.

#### **Software requirements:**

- Database : MySQL
- Server : Apache
- Front-end : HTML
- Scripting Language : JavaScript
- IDE : Sublime.

## **2.5. FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS:**

### **Functional Requirements:**

Since this project uses database and control, it needs the retrieval of information from database. It needs access of Database from a front end, as ASP.net is a Microsoft Family product, it provides easy linking to the database, along with the flexibility required to develop a user-friendly front end.

### **Usability:**

The interface should use terms and concepts, which are drawn from the experience of the people who will make most of the system.

### **Efficiency:**

The system must provide easy and fast access without consuming more cost.

### **Reliability:**

User should never be surprised by the behavior of the system and it's easy to use to stored data and easy to used transference data (only .wav files)

## **2.6.SYSTEM ATTRIBUTES:**

### **Reliability:**

This system is designed to have very simple database just to cater the exact need of real estate management. It is tested for all the constraints at development stage.

### **Availability:**

This system will only available till the system on which it is installed is running.

### **Security:**

This system is provided with authentication without which no user can pass. So only the legitimate users are allowed to use the application. If the legitimate users share the authentication information then the system is open to outsiders.

### **Maintainability:**

There will be no maintenance required for the software. The database is providedby the end-user and therefore is maintained by this user.

## **CHAPTER 3**

### **SYSTEM DESIGN**

#### **3.1. Unified Modelling Language Diagrams(UML):**

- The unified modelling language allows the software engineer to express an analysis model using the modelling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.

##### **User Model View:**

- i) This view represents the system from the user's perspective.
- ii) The analysis representation describes a usage scenario from the end-users perspective.

##### **Structural model view:**

- In this model the data and functionality are arrived from inside the system.
- This model view models the static structures.

##### **Behavioural Model View:**

- It represents the dynamic of behavioural as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

##### **Implementation Model View:**

- In this the structural and behavioural as parts of the system are represented as they are to be built.

### Environmental Model View:

In this the structural and behavioural aspects of the environment in which the system is to be implemented are represented. UML is specifically constructed through two different domains they are UML Analysis modelling, which focuses on the user model and structural model views of the system. UML design modeling, which focuses on the behavioral modeling, implementation modeling and environmental model views

### User:

Users are typically individuals looking to buy or sell properties. Their interactions with the system revolve around searching for properties based on various criteria, viewing property details such as images and descriptions, contacting brokers or owners for inquiries, saving favorite properties for future reference, and managing their user profile as shown in figure 3.1.

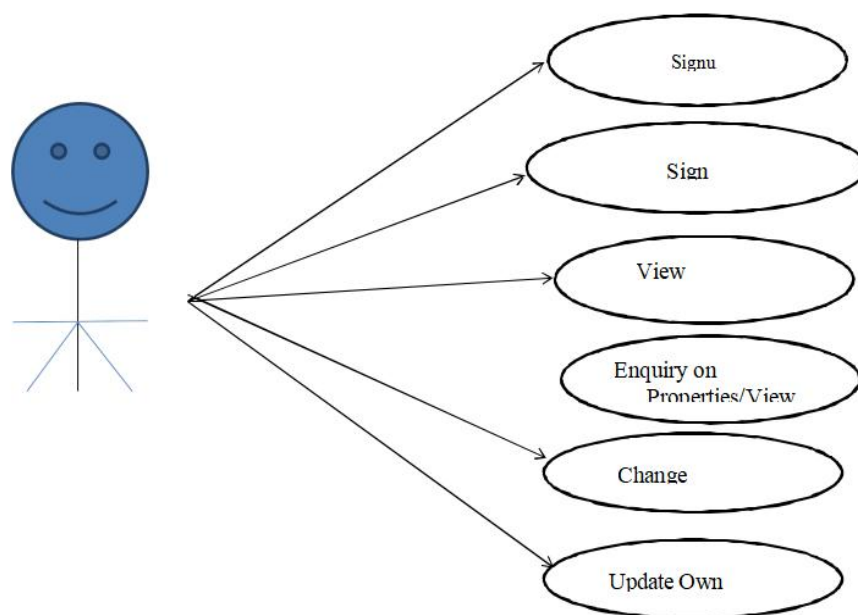


Fig 3.1 Use Case Diagram for User

### Brokers/owners:

Brokers or owners of real estate listings have more administrative privileges. They can add, edit, or delete property listings, respond to inquiries from users, manage their profiles and listings, view analytics if provided by the system, and communicate with the admin for any system-related issues or updates as shown in figure 3.2.

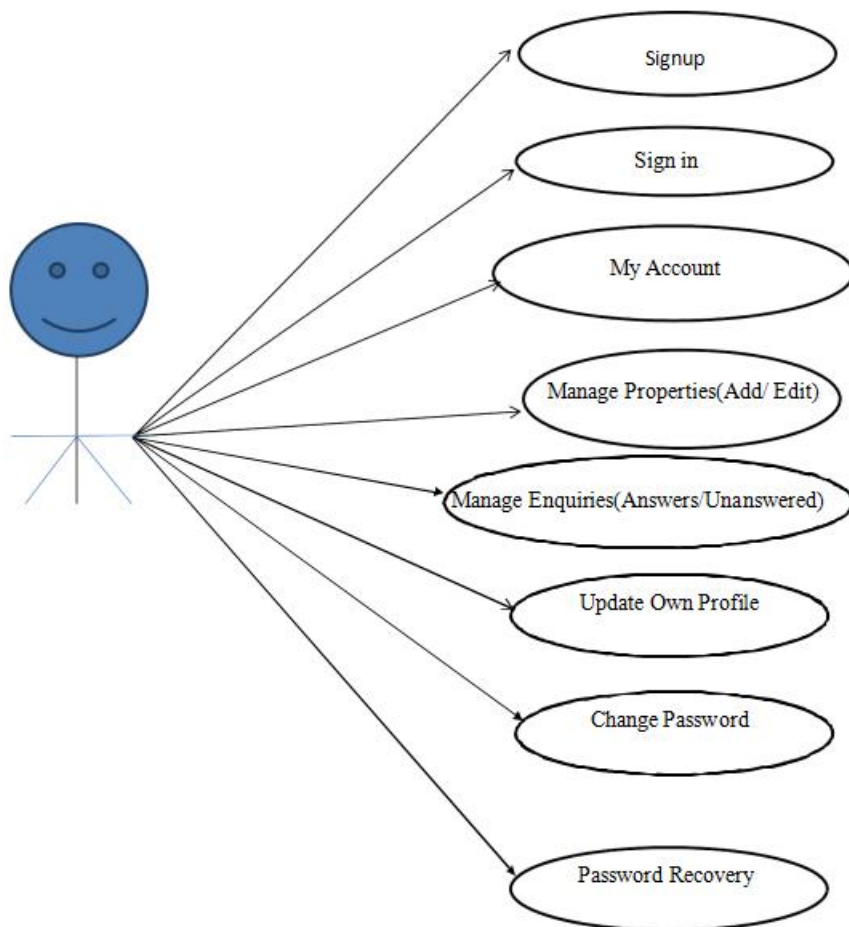


Fig 3.2 Use Case diagram for brokers and owners.

### Admin:

Admins have overall control and responsibility for the real estate website management system. Their use cases include managing user accounts (both regular users and brokers/owners), monitoring system activities for performance and security purposes, resolving any issues or disputes that arise, and generating reports to analyze system usage and trends as shown in figure 3.3

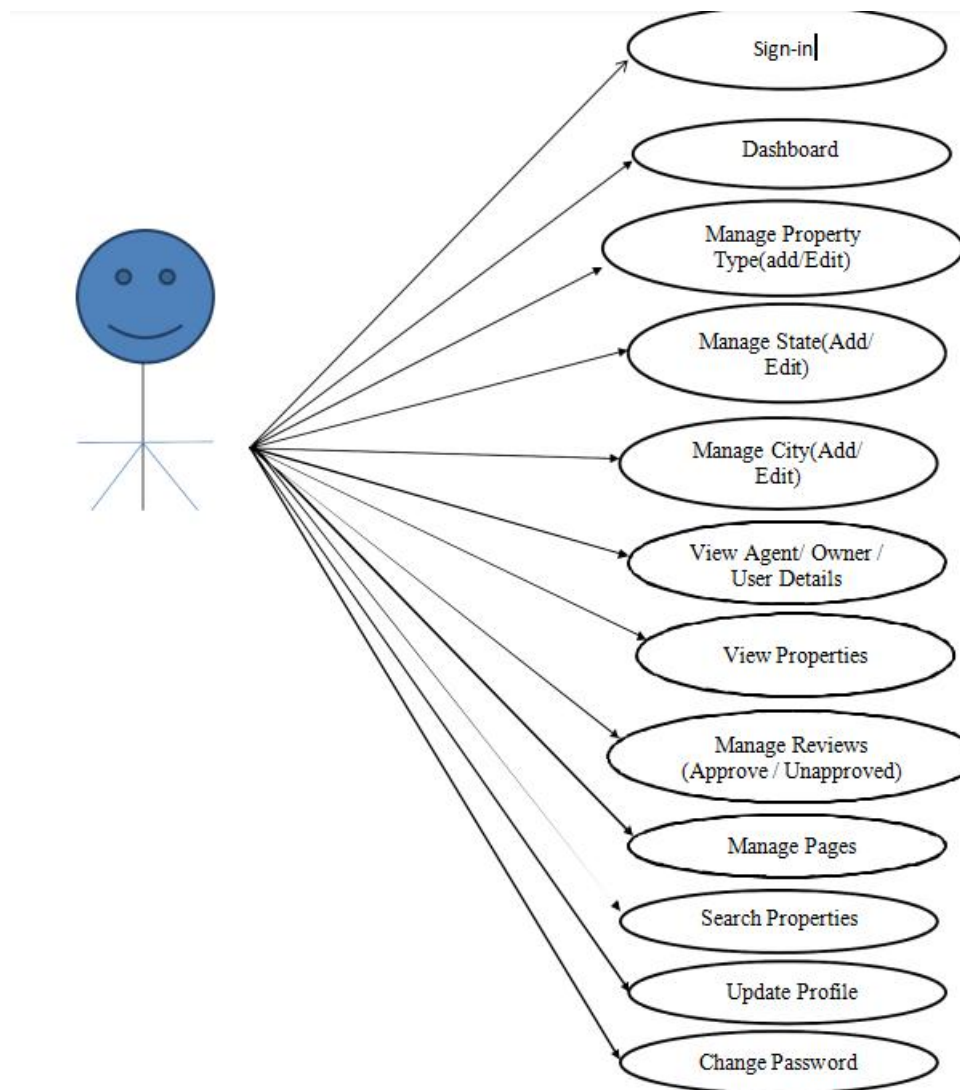


Fig 3.3 Use Case Diagram for admin

### 3.2. ENTITY-RELATIONSHIP DIAGRAMS:

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table as shown in figure 3.4.

The symbols used in E-R diagrams are:

| <u>SYMBOL</u>                                                                       | <u>PURPOSE</u>               |
|-------------------------------------------------------------------------------------|------------------------------|
|    | Represents Entity sets.      |
|    | Represent attributes.        |
|    | Represent Relationship Sets. |
|  | Line represents flow         |

Fig 3.4 ER Diagram

Structured analysis is a set of tools and techniques that the analyst. To develop a new kind of a system: The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal considerations.

### 3.3. DATABASE DESIGN:

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant database as shown in figure.3.4 to 3.10.

**Real Estate Management System (erms ) contains 10 MySQL tables :**

**tbladmin table Structure :** This table store the login details of admin

| # | Name                                                                                   | Type        | Collation         | Attributes | Null | Default           | Comments | Extra          |
|---|----------------------------------------------------------------------------------------|-------------|-------------------|------------|------|-------------------|----------|----------------|
| 1 | ID  | int(11)     |                   |            | No   | None              |          | AUTO_INCREMENT |
| 2 | AdminName                                                                              | varchar(50) | latin1_swedish_ci |            | Yes  | NULL              |          |                |
| 3 | AdminuserName                                                                          | varchar(50) | latin1_swedish_ci |            | Yes  | NULL              |          |                |
| 4 | Password                                                                               | varchar(45) | latin1_swedish_ci |            | Yes  | NULL              |          |                |
| 5 | AdminRegdate                                                                           | timestamp   |                   |            | Yes  | CURRENT_TIMESTAMP |          |                |

Fig.3.4 tblcountry table Structure: This table stores the country details.

| # | Name                                                                                   | Type         | Collation         | Attributes | Null | Default             | Comments | Extra                         |
|---|----------------------------------------------------------------------------------------|--------------|-------------------|------------|------|---------------------|----------|-------------------------------|
| 1 | ID  | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT                |
| 2 | CountryName                                                                            | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                               |
| 3 | EnterDate                                                                              | timestamp    |                   |            | No   | current_timestamp() |          | ON UPDATE CURRENT_TIMESTAMP() |

Fig.3.5 tblstate table Structure: This table stores the state details.

| # | Name                                                                                 | Type         | Collation         | Attributes | Null | Default             | Comments | Extra          |
|---|--------------------------------------------------------------------------------------|--------------|-------------------|------------|------|---------------------|----------|----------------|
| 1 | ID  | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT |
| 2 | CountryID                                                                            | int(5)       |                   |            | Yes  | NULL                |          |                |
| 3 | StateName                                                                            | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 4 | EnterDate                                                                            | timestamp    |                   |            | No   | current_timestamp() |          |                |

Fig.3.6 tblcity table Structure: This table stores the city details.

| # | Name                                                                                 | Type         | Collation         | Attributes | Null | Default             | Comments | Extra                         |
|---|--------------------------------------------------------------------------------------|--------------|-------------------|------------|------|---------------------|----------|-------------------------------|
| 1 | ID  | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT                |
| 2 | CountryID                                                                            | int(5)       |                   |            | Yes  | NULL                |          |                               |
| 3 | StateID                                                                              | int(5)       |                   |            | No   | None                |          |                               |
| 4 | CityName                                                                             | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                               |
| 5 | EnterDate                                                                            | timestamp    |                   |            | No   | current_timestamp() |          | ON UPDATE CURRENT_TIMESTAMP() |

Fig.3.7 tbluser table Structure: This table stores the user personal and login details.

| # | Name                                                                                 | Type         | Collation         | Attributes | Null | Default             | Comments | Extra                         |
|---|--------------------------------------------------------------------------------------|--------------|-------------------|------------|------|---------------------|----------|-------------------------------|
| 1 | ID  | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT                |
| 2 | FullName                                                                             | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                               |
| 3 | Email                                                                                | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                               |
| 4 | MobileNumber                                                                         | bigint(10)   |                   |            | Yes  | NULL                |          |                               |
| 5 | Password                                                                             | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                               |
| 6 | UserType                                                                             | int(5)       |                   |            | Yes  | NULL                |          |                               |
| 7 | PostingDate                                                                          | timestamp    |                   |            | Yes  | current_timestamp() |          |                               |
| 8 | Aboutme                                                                              | mediumtext   | latin1_swedish_ci |            | No   | None                |          |                               |
| 9 | UpdateDate                                                                           | timestamp    |                   |            | No   | 0000-00-00 00:00:00 |          | ON UPDATE CURRENT_TIMESTAMP() |

Fig.3.8 tblpropertytype table Structure: This table stores the property type details.

| # | Name                                                                                   | Type         | Collation         | Attributes | Null | Default             | Comments | Extra          |
|---|----------------------------------------------------------------------------------------|--------------|-------------------|------------|------|---------------------|----------|----------------|
| 1 | ID  | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT |
| 2 | PropertType                                                                            | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 3 | EnterDate                                                                              | timestamp    |                   |            | Yes  | current_timestamp() |          |                |

Fig.3.9 tblproperty table Structure: This table stores the full property details.

| #  | Name                | Type         | Collation         | Attributes | Null | Default             | Comments | Extra          |
|----|---------------------|--------------|-------------------|------------|------|---------------------|----------|----------------|
| 1  | ID 📌                | int(10)      |                   |            | No   | None                |          | AUTO_INCREMENT |
| 2  | UserID              | char(20)     | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 3  | PropertyTitle       | mediumtext   | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 4  | PropertyDescription | mediumtext   | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 5  | Type                | varchar(50)  | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 6  | Status              | varchar(100) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 7  | Location            | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 8  | Bedrooms            | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 9  | Bathrooms           | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 10 | Floors              | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 11 | Garages             | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 12 | Area                | varchar(50)  | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 13 | Size                | varchar(50)  | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 14 | RentorsalePrice     | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 15 | BeforePricelabel    | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 16 | AfterPricelabel     | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 17 | PropertyID          | varchar(120) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 18 | CenterCooling       | int(4)       |                   |            | Yes  | NULL                |          |                |
| 19 | Balcony             | int(4)       |                   |            | Yes  | NULL                |          |                |
| 20 | PetFriendly         | int(4)       |                   |            | Yes  | NULL                |          |                |
| 21 | Barbeque            | int(4)       |                   |            | Yes  | NULL                |          |                |
| 22 | FireAlarm           | int(4)       |                   |            | Yes  | NULL                |          |                |
| 23 | ModernKitchen       | int(4)       |                   |            | Yes  | NULL                |          |                |
| 24 | Storage             | int(4)       |                   |            | Yes  | NULL                |          |                |
| 25 | Dryer               | int(4)       |                   |            | Yes  | NULL                |          |                |
| 26 | Heating             | int(4)       |                   |            | Yes  | NULL                |          |                |
| 27 | Pool                | int(4)       |                   |            | Yes  | NULL                |          |                |
| 28 | Laundry             | int(4)       |                   |            | Yes  | NULL                |          |                |
| 29 | Sauna               | int(4)       |                   |            | Yes  | NULL                |          |                |
| 30 | Gym                 | int(4)       |                   |            | Yes  | NULL                |          |                |
| 31 | Elevator            | int(4)       |                   |            | Yes  | NULL                |          |                |
| 32 | DishWasher          | int(4)       |                   |            | Yes  | NULL                |          |                |
| 33 | EmergencyExit       | int(4)       |                   |            | Yes  | NULL                |          |                |
| 34 | FeaturedImage       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 35 | GalleryImage1       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 36 | GalleryImage2       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 37 | GalleryImage3       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 38 | GalleryImage4       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 39 | GalleryImage5       | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 40 | Address             | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 41 | Country             | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 42 | City                | varchar(220) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 43 | State               | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 44 | ZipCode             | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 45 | Neighborhood        | varchar(200) | latin1_swedish_ci |            | Yes  | NULL                |          |                |
| 46 | ListingDate         | timestamp    |                   |            | Yes  | current_timestamp() |          |                |

Fig.3.10 tblenquiry table Structure: This table stores the property enquiries.

### 3.4. CLASS DIAGRAM:

The class diagram shows a set of classes, interfaces, collaborations and their relationships. These classes represent the core entities in a real estate management system. The relationships between these classes (such as associations, aggregations, or compositions) can be depicted in the class diagram to show how they interact within the system as shown in the figure 3.12.

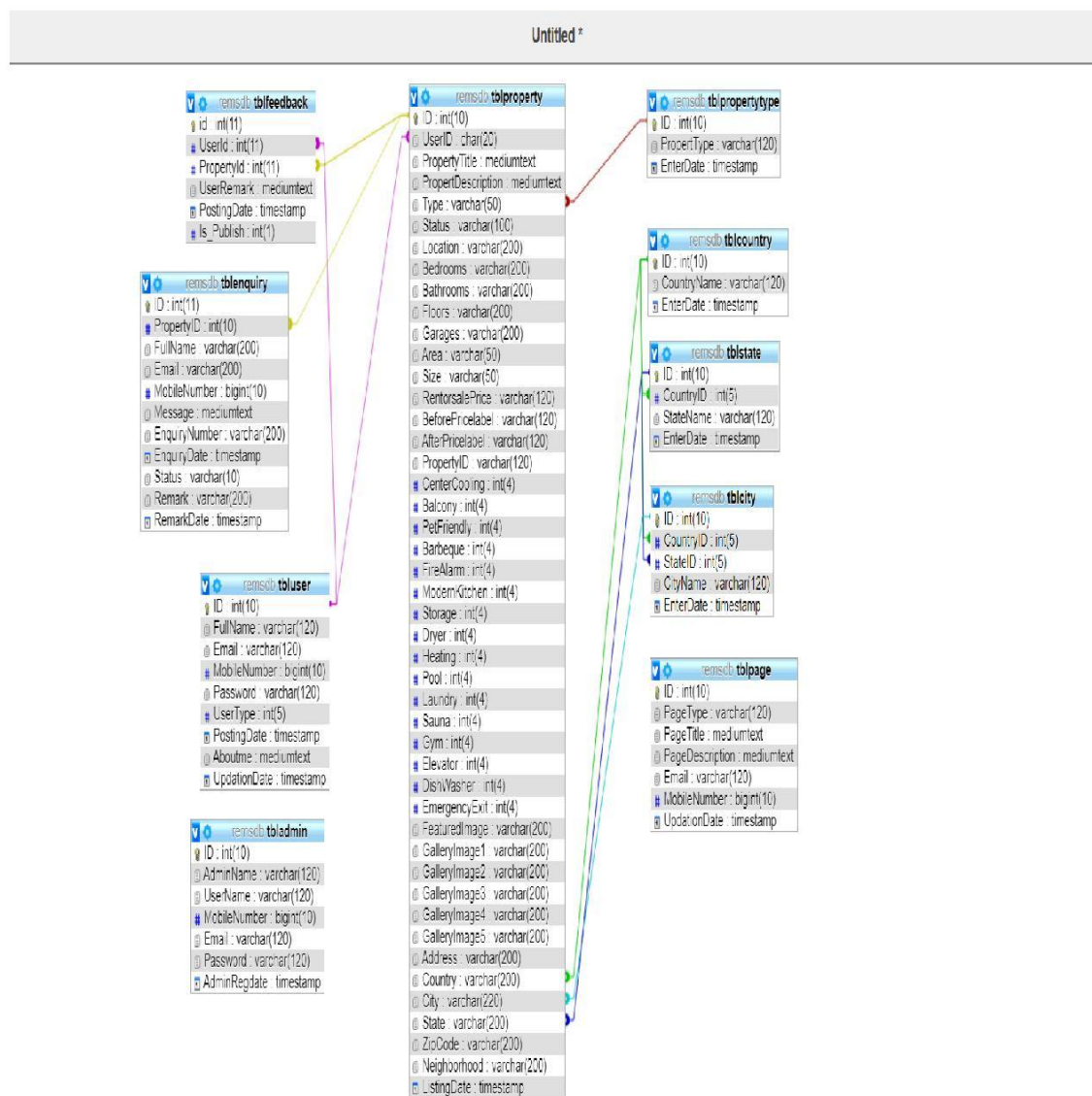


Fig 3.12 Class Diagram

## CHAPTER 4

### RESULTS & DISCUSSION

#### 4.1 RESULTS

##### **Results of the Real Estate Website Management Project:**

1. *User-Friendly Interface:* One of the key results of this project is the development of a user-friendly interface for different types of users. This includes easy property search functionalities, intuitive property listing management for brokers/owners, and smooth communication channels between users and property stakeholders.
2. *Efficient Property Management:* Brokers/owners can efficiently manage their property listings through features such as adding, editing, and deleting listings. This results in an up-to-date and accurate representation of available properties, which enhances user satisfaction and engagement.
3. *Enhanced User Experience:* Users can easily search for properties based on their preferences, view detailed property information including images and descriptions, save favorite properties for later reference, and contact brokers/owners for inquiries. These functionalities contribute to an enhanced user experience, leading to increased user retention and engagement.
4. *Administrative Control:* The admin dashboard provides administrative control over user accounts, broker/owner accounts, system activities monitoring, issue resolution, and report generation. This centralized control ensures system integrity, security, and smooth operation.
5. *Analytics and Insights:* Optional analytics features can provide valuable insights into user behavior, popular property types, geographical preferences, and more. These insights enable stakeholders to make data-driven decisions for marketing strategies, improving user experience, and enhancing overall system performance.

## 4.2. DISCUSSION

### Discussion of Project Implications

1. *Market Competitiveness:* A well-designed and functional real estate website management system can give a competitive edge in the market. It attracts more users, encourages property listings from brokers/owners, and positions the platform as a reliable and convenient option in the real estate industry.

2. *Scalability and Customization:* The project's architecture and design considerations should allow for scalability as the user base and property listings grow. Additionally, offering customization options for brokers/owners to showcase their listings uniquely can further differentiate the platform.

3. *Data Security and Privacy:* Given the sensitive nature of real estate transactions and user data, ensuring robust data security measures and compliance with privacy regulations (such as GDPR or CCPA) is crucial. This includes secure data storage, encryption, access controls, and transparent privacy policies.

4. *Customer Support and Feedback:* Incorporating efficient customer support channels and gathering user feedback regularly are essential for continuous improvement. Addressing user concerns promptly, updating features based on feedback, and providing excellent customer service contribute to long-term success.

5. *Business Model and Revenue Streams:* Consideration of the business model, such as subscription plans for brokers/owners, advertising opportunities, or transaction-based fees, is vital for sustainable revenue generation. Balancing user value with monetization strategies is key to the project's financial success.

## CHAPTER 5

### CONCLUSION & FUTURE WORK

Concluding a real estate website management project involves summarizing its achievements, reflecting on challenges overcome, discussing potential areas for improvement, and outlining future prospects. Here is a detailed conclusion for such a project:

#### 5.1. CONCLUSION

##### **Achievements and Key Findings:**

1. *Functional System Development:* The project successfully developed a comprehensive real estate website management system that caters to the needs of users, brokers/owners, and administrators. Key functionalities such as property search, listing management, communication tools, and analytics have been implemented effectively.
2. *User Experience Enhancement:* By focusing on creating a user-friendly interface and intuitive workflows, the system has significantly enhanced the overall user experience. Users can easily find properties of interest, interact with brokers/owners, and manage their preferences, leading to increased user engagement and retention rates.
3. *Administrative Control and Insights:* The inclusion of robust administrative features empowers admins to manage user accounts, monitor system activities, resolve issues efficiently, and gain valuable insights through analytics. This centralized control ensures system integrity, security, and performance optimization.
4. *Market Competitiveness:* The project has positioned the real estate platform competitively in the market by offering a reliable, feature-rich solution that meets industry standards and user expectations. Continuous monitoring of market trends and user feedback has contributed to ongoing improvements and relevance.

5. *Compliance and Security:* Adherence to data security standards and privacy regulations has been a priority throughout the project. By implementing secure data handling practices, encryption mechanisms, and privacy policies, the system maintains user trust and compliance with legal requirements.

### **Challenges and Areas for Improvement:**

1. *Scalability Considerations:* As the user base and property listings grow, scalability challenges may arise. Future iterations of the system should focus on optimizing performance, database scalability, and resource management to accommodate increased traffic and data volumes.

2. *Enhanced Analytics and AI Integration:* While basic analytics features are in place, integrating advanced analytics tools and AI-driven functionalities can provide deeper insights into user behavior, predictive property recommendations, and trend analysis. This can further personalize user experiences and improve decision-making processes.

3. *Mobile Responsiveness and Accessibility:* Ensuring seamless user experiences across various devices, particularly mobile platforms, is crucial in today's digital landscape. Enhancements in responsive design, mobile app development, and accessibility features can broaden the user reach and engagement levels.

4. *Continuous Innovation and Feature Expansion:* Staying competitive in the real estate technology sector requires ongoing innovation and feature expansion. Collaborating with industry experts, incorporating emerging technologies (such as VR/AR for property tours), and exploring new revenue streams can fuel long-term growth and sustainability.

## 5.2. FUTURE WORK

### Future Prospects and Recommendations:

1. *User Feedback Iterations:* Continuously gathering user feedback and conducting usability testing cycles will inform iterative improvements and feature enhancements. Implementing agile development methodologies ensures flexibility and responsiveness to changing market demands.
2. *Partnerships and Integration:* Collaborating with real estate agencies, property developers, financial institutions, and technology partners can expand the platform's ecosystem, offering added value services such as mortgage calculators, property valuation tools, or legal assistance integrations.
3. *Global Expansion Strategies:* Exploring opportunities for global market expansion, localization efforts, and multilingual support can tap into diverse real estate markets worldwide, fostering growth and establishing a strong international presence.
4. *AI and Automation Advancements:* Investing in AI-driven chatbots for customer support, automated property valuation algorithms, predictive analytics for market trends, and smart recommendation engines can elevate the platform's intelligence and user engagement levels significantly.

## REFERENCES

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4. Xiaohui Li, Lixia Zhang, & Xiang Wang, "Design and Implementation of Real Estate Management System Based on Web Services and AJAX Technology", Publisher: IEEE, 2023, DOI: 10.1109/ICCSEE.2012.426
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## APPENDICES

### A. SOURCE CODE

```
C:\> Users > krish > Downloads > RealeState > RealeState > SQL File > remddb.sql

29 --
30
31 CREATE TABLE `tbladmin` (
32   `ID` int(10) NOT NULL,
33   `AdminName` varchar(120) DEFAULT NULL,
34   `UserName` varchar(120) DEFAULT NULL,
35   `MobileNumber` bigint(10) DEFAULT NULL,
36   `Email` varchar(120) DEFAULT NULL,
37   `Password` varchar(120) DEFAULT NULL,
38   `AdminRegdate` timestamp NOT NULL DEFAULT current_timestamp()
39 ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
40
41 --
42 -- Dumping data for table `tbladmin`
43 --
44
45 INSERT INTO `tbladmin` (`ID`, `AdminName`, `UserName`, `MobileNumber`, `Email`, `Password`, `AdminRegdate`) VALUES
46 (1, 'Admin', 'admin', 8989898980, 'admin@gmail.com', 'f925916e2754e5e03f75dd58a5733251', '2019-08-05 07:15:32');
47
48 -----
49
50 --
51 -- Table structure for table `tblcity`
52 --
53
54 CREATE TABLE `tblcity` (
55   `ID` int(10) NOT NULL,
56   `CountryID` int(5) DEFAULT NULL,
57   `StateID` int(5) NOT NULL,
58   `CityName` varchar(120) DEFAULT NULL,
59   `EnterDate` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
60 ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
61
62
```

```
index.php X
C:\> Users > krish > Downloads > RealeState > RealeState > pycharm qr code g

1 <?php
2 include "qrcode.php";
3 // Create QRcode object
4 $qc = new QRCODE();
5
6 // create text QR code
7 $qc->URL('www.techiesbadi.in');
8
9 // render QR code
10 $qc->QRCODE(400,"URL.png");
11 ?>
```

```

--
INSERT INTO `tblcity` (`ID`, `CountryID`, `StateID`, `CityName`, `EnterDate`) VALUES
(1, 1, 2, 'Aligarh', '2020-06-07 07:19:38'),
(2, 1, 2, 'Varanasi', '2020-06-07 07:19:38'),
(3, 1, 2, 'Allahabad', '2020-06-07 07:19:38'),
(4, 1, 2, 'Ghaziabad', '2020-06-07 07:19:38'),
(5, 2, 2, 'New Castle', '2020-06-07 07:19:38'),
(6, 1, 2, 'Varanasi', '2020-06-07 07:19:38'),
(7, 2, 2, 'Mount Gambier', '2020-06-07 07:19:38'),
(8, 2, 2, 'Whyalla', '2020-06-07 07:19:38'),
(9, 2, 2, 'Brisbane', '2020-06-07 07:19:38'),
(10, 16, 16, 'Los Angeles', '2020-06-07 07:19:38'),
(11, 16, 16, 'San Francisco', '2020-06-07 07:19:38'),
(12, 16, 16, 'Miami', '2020-06-07 07:19:38'),
(13, 16, 16, 'Orlando', '2020-06-07 07:19:38'),
(14, 16, 16, 'queens', '2020-06-07 07:19:38'),
(15, 7, 18, 'ABC', '2020-06-07 07:19:38'),
(16, 1, 1, 'Patna', '2020-06-07 07:19:38'),
(18, 1, 4, 'New Delhi', '2020-06-07 07:19:38'),
(19, 1, 19, 'Udupi', '2020-07-26 06:53:55'),
(20, 1, 19, 'Bangalore', '2020-07-26 06:54:18'),
(21, 1, 19, 'Mysore', '2020-07-26 06:54:54'),
(22, 1, 19, 'Belagavi', '2020-07-26 06:55:14'),
(23, 1, 19, 'Uttara Kannada', '2020-07-26 06:55:41'),
(24, 1, 19, 'Chikkamangalore', '2020-07-26 06:57:58'),
(25, 1, 1, 'Kasargod', '2020-07-26 06:58:23'),
(26, 1, 19, 'Mangalore', '2020-07-26 10:34:16'),
(27, 1, 19, 'mangalore', '2020-08-02 09:21:35'),
(28, 1, 20, 'mangalore', '2020-08-02 09:26:39');

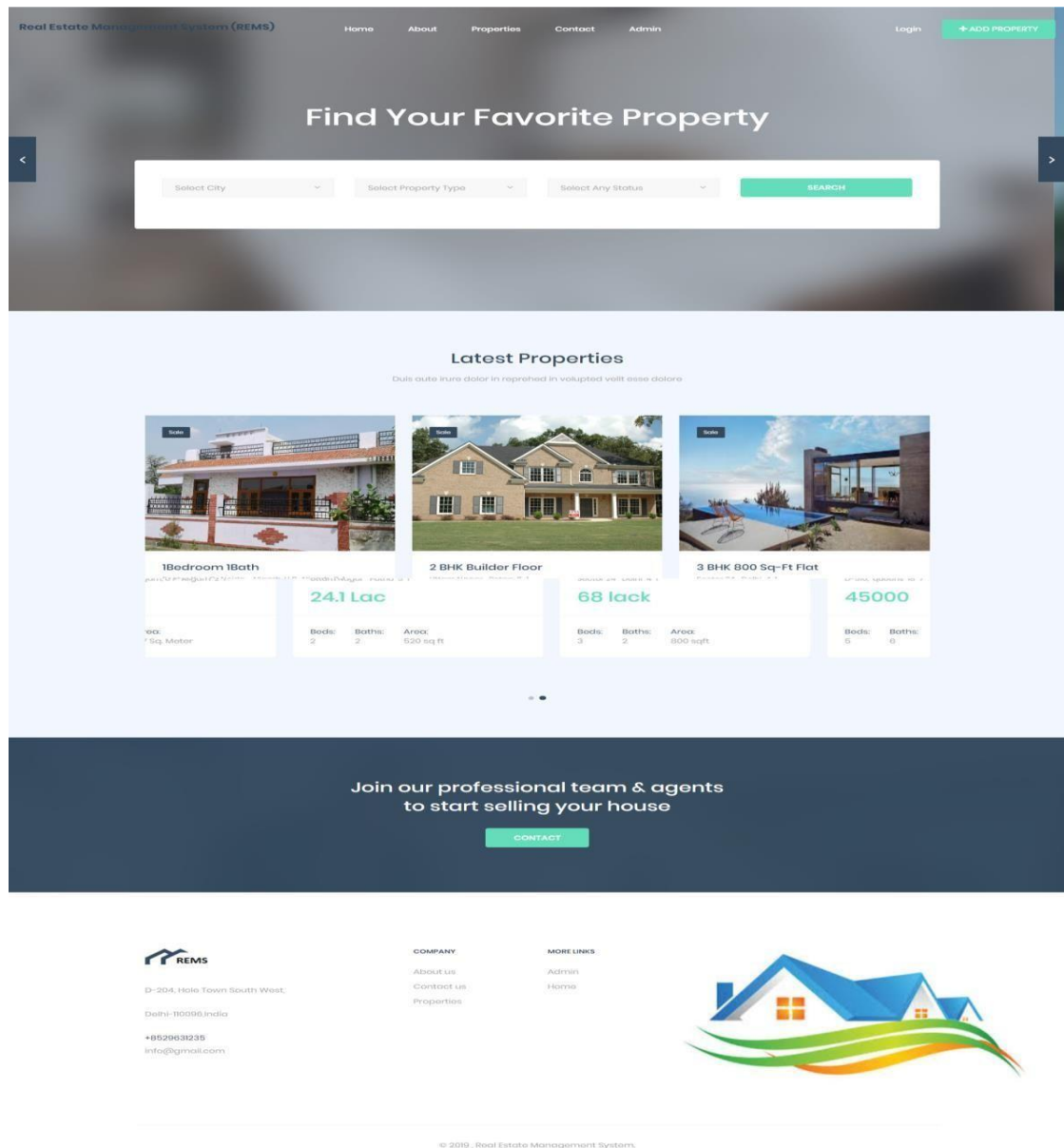
```

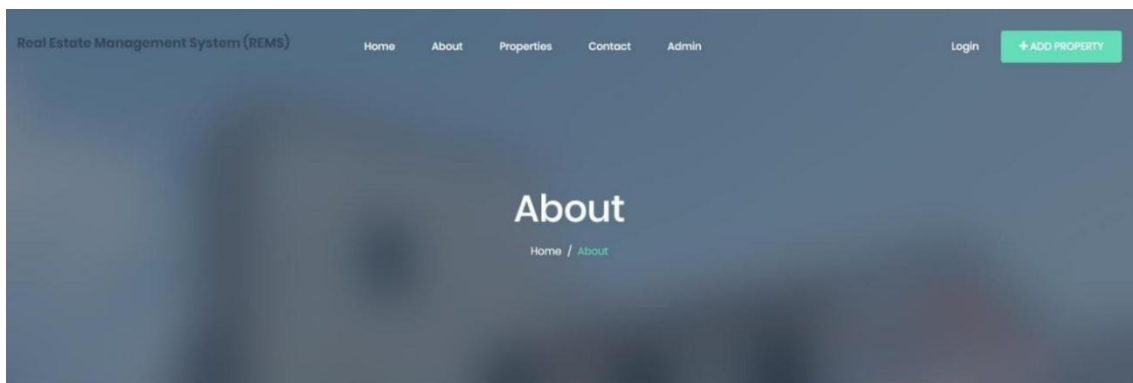
```

1 <!-- IE Hack -->
2 <html dir="ltr" lang="en-US">
3
4 <head>
5     <!-- Document Meta
6         ===== -->
7     <meta charset="utf-8">
8     <meta http-equiv="X-UA-Compatible" content="IE=edge">
9     <link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i,800,800i%7CPoppins:100,100i,200,200i,300,300i,400,400i,500,500i,600,600i,700,700i,800,800i%7C&subset=latin,latin-ext" rel="stylesheet">
10    <link href="assets/css/external.css" rel="stylesheet">
11    <link href="assets/css/bootstrap.min.css" rel="stylesheet">
12    <link href="assets/css/style.css" rel="stylesheet">
13    <title>Real Estate Management System | Properties Grid</title>
14 </head>
15
16 <body>
17     <!-- Document Wrapper
18         ===== -->
19     <div id="wrapper" class="wrapper clearfix">
20         <header id="navbar-spy" class="header header-1 header-light header-fixed">
21             <?php include_once('includes/header.php');?>
22
23         </header>
24         <!-- map
25             ===== -->
26         <?php include_once('includes/header-search.php');?>
27         <!-- #map end -->
28     </div>
29 </body>
30 </html>

```

## B. SCREENSHOTS





## About Us

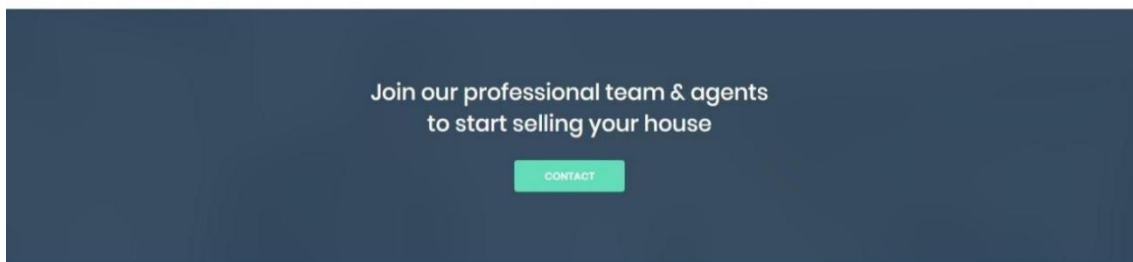
### Real Estate Management System

#### Our Vision:

Propin ipsum dolor sit amet, consectetur adipiscing elit. Elit elusmod tempore incididunt ut labor et dolore magna aliquat enim ad minim veniam.

#### Our Goal:

Duis aute violo inure dolor in reprim volupta velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaec cupidat non proident.



D-204, Holo Town South West,

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Select Property Type

Select Any Status

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- > Houses
- > Villas

## Property Status

- > Sale
- > Rent

## Property By City

- > Patna
- > Delhi
- > Aizawl
- > Varanasi
- > Queens



## 2 BHK Builder Floor

Uttam Nagar, Patna Bihar India

24.1 Lac

Beds: 2 Baths: 2 Area: 500 sq ft



## 3 BHK 800 Sq-Ft Flat

Sector 14, Gurgaon Haryana India

68 lack

Beds: 3 Baths: 3 Area: 800 sqft



## 1 Bedroom 1 Bath

Sector 14-1 D Huda, Gurgaon H P, Aizawl, Uttar Pradesh India

43 Lac

Beds: 1 Baths: 1 Area: 67 sq. Meter



## 5 Bedroom 7 Bath

A Block, Southern Line Phase - 1 Varanasi, Uttar Pradesh India

5.99 cr

Beds: 5 Baths: 7 Area: 250.54 sq meter



## 5 BHK Residential House 4830 Sqft

D-555, Gurgaon, Tokyo Japan

45000

Beds: 5 Baths: 5 Area: 4830 sq ft

[1](#)
[2](#)
[3](#)
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Email Address

Mobile Number

Password

☒ Broker ☐ Owner ☐ User

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Home / Add Property

### Property Description

**Property Title\***

2 BHK Builder Floor

**Property Description\***

There two bed room with wide balcony.

2. Drawing room with full ceiling & Texture Paint

3. Modern and modular kitchen with chimney and other attachments.

4. two bath room with tile work upto roof height and branded.

**Type**

Apartments

**Status**

Ready

**Location**

Uttam Nagar East

**Bedrooms**

2

**Bathrooms**

2

**Floors**

1 (Out of 4 Floors)

**Garages**

1 Covered

**Area**

520 sq.ft

**Size**

500 sq.ft

**Sale or Rent Price\***

24.2 Lacs

**Before Price Label**

23 Lacs

**After Price Label**

25 Lacs

### Property Features

☐ Center Cooling
☐ Balcony
☐ Pet Friendly
☐ Barbeque

☒ Fire Alarm
☐ Modern Kitchen
☐ Storage
☐ Dryer

☐ Heating
☒ Pool
☒ Laundry
☐ Sauna

☒ Gym
☐ Elevator
☒ Dish Washer
☐ Emergency Exit

### Property Gallery

**Featured Image**

[Edit Image](#)

**Gallery Image1**

[Edit Image](#)

**Gallery Image2**

[Edit Image](#)

**Gallery Image3**

[Edit Image](#)

**Gallery Image4**

[Edit Image](#)

**Gallery Image5**

[Edit Image](#)

### Property Location

**Address\***

Uttam Nagar

**Country**

India

**State**

Bihar

**City**

Patna

**Zip/Postal Code**

80056

**Neighborhood**

Uttam nagar east metro station

SAVE SKITS



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 Delhi-80056,India  
 +9196303235  
 info@gmail.com

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