The Real Estate Management System

[1]Mr. Shri Ram B, [2]Mr. Arun Karthik V, [3]Ms. Baranipriya R, [4]Mr. Akilesh S
[1,2]Assistant Professor, [3,4] Students
Department of Software Systems Sri Krishna Arts and Science College Coimbatore, India

Abstract: The Real Estate Management System is a web-based platform built with PHP and MySQL to streamline real estate operations. This system empowers users to manage property data, including adding, updating, and deleting records, and is ideal for firms handling various property types such as apartments, villas, and commercial spaces. Administrators can modify critical data on sales, purchases, and cancellations, ensuring accuracy for better decision- making. With features like detailed property listings, user management, analytics, and communication tools, it enhances market visibility and operational efficiency, providing real estate businesses with a centralized tool to optimize their services and client interactions.

Key Words: Real Estate Management System, PHP, MySQL, property management, sales, purchases, cancellations, property listings, user management, analytics, communication tools, operational efficiency, client interactions.

1. INTRODUCTION

The Real Estate Management System is a dynamic, web-based solution developed with PHP and MySQL to streamline real estate operations. Tailored for organizations handling diverse property types—such as residential, commercial, apartments, hotels, and villas—it enables efficient management of property data, including additions, updates, and deletions. The platform enhances property visibility by allowing businesses and agents to list properties with descriptions, images, and pricing. It also supports role-based access, user management, analytics, and communication tools, promoting seamless client interactions and informed decision-making. This system empowers real estate professionals to enhance operational efficiency, market reach, and service quality.

2. MODULES DESCRIPTION

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.

1. Admin Module
2. User Module
   a. Property Owner
   b. Broker
   c. Buyer (Simple user)

Admin Module:

The admin dashboard provides a summary of all key metrics, including total property types, locations (countries, states, cities), agents, owners, buyers, and listed properties. The admin can manage various sections: adding or updating property types, countries, states, and cities, as well as viewing details of owners, agents, and users. Property listings and reviews are accessible, with options to approve, disapprove, or delete reviews. Admins can also manage "About Us" and "Contact Us" pages, and search properties by ID, name, or contact. Profile updates, password changes, and recovery options are also available for admin convenience.

User Module:

Property Owner

The owner's dashboard includes several key sections for managing their experience on the platform. The Home Page gives access to the main features, while About and Contact Us pages provide general information. In Properties, owners can browse all property listings by type, status, and city. My Account offers several tools: under User Profile, owners can edit their profile, change their password, add properties, view their listings, and respond to inquiries. There are also separate sections to Change Password and Logout. These tools make it easy for owners to manage their listings and account details efficiently. Broker:

The agent's dashboard provides easy access to manage their profile and property listings. The Home Page allows agents to explore the platform's main features, with About and Contact Us pages offering general information. In Properties, agents can view listings by type, status, and location. My

Account is divided into three sections: under User Profile, agents can edit their profile, change passwords, add new properties, view their listed properties, and respond to inquiries. There are also dedicated sections for Change Password and Logout, enabling agents to manage their account and listings effectively.

Buyer:

The user interface includes several features for easy navigation and engagement. On the Home Page, users can explore the main features, while the About and Contact Us pages provide essential information. In Properties, users can browse listings by type, status, and city, and submit inquiries on any property of interest. Under My Account, users can manage their profile by editing their details, changing their password, and logging out. These tools ensure a streamlined experience, allowing users to easily view and inquire about properties, update their account information, and access key pages on the platform.

3. SYSTEM STUDY

Existing System:

The current property management systems used within the real estate industry are typically disjointed and heavily reliant on manual processes, which create significant operational challenges. Many real estate organizations still use outdated software solutions, often supplemented with spreadsheets and physical documents. These systems are not integrated with one another, resulting in various inefficiencies and challenges that hinder the smooth functioning of real estate operations.

Limitations:

- Data Inconsistency
- Manual Errors
- Lack of Real-Time Data
- Limited Client Interaction

Proposed System:

The Real Estate Management System is designed to overcome the limitations of existing property management practices by providing a fully integrated, web-based platform. This modern solution streamlines workflows, automates routine tasks, and enhances data management.

Advantages:

- Real-Time Property Updates:
- Automation of Administrative Tasks
- Improved Client Experience
- Role-Based Access Control
- Data Analytics and Reporting

4. SYSTEM DESIGN

Input design:

The input design simplifies data entry while ensuring accuracy. Web forms enable property managers, agents, and buyers to enter details like location, price, type (residential, commercial), and features such as square footage and amenities. Built-in validation checks ensure required fields are completed correctly, with numeric fields (e.g., price, area) restricted to valid characters. For buyers, intuitive search and filter options allow sorting by price, type, location, and status (available, sold, rented). The system remembers frequently used inputs and past searches to streamline tasks.

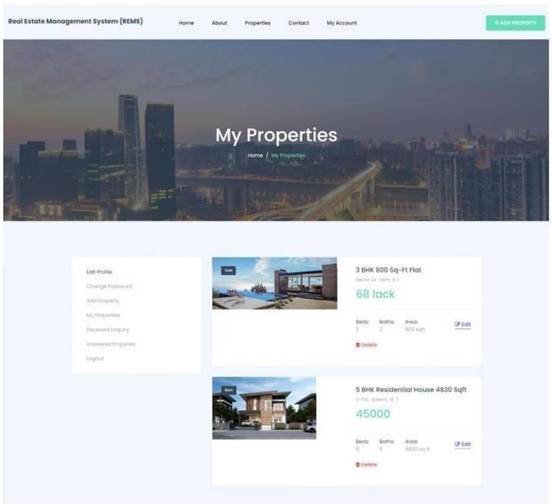

Figure 1

Error handling provides feedback on incorrect entries, enhancing data integrity and user experience descriptions, images, availability status, prices, and contact information, dynamically filtered to match their preferences. Buyers also receive transaction summaries, including inquiries and saved properties. Real estate agents benefit from detailed reports on client interactions, sales progress, and performance metrics, offering a comprehensive view of their sales activities and pipeline.

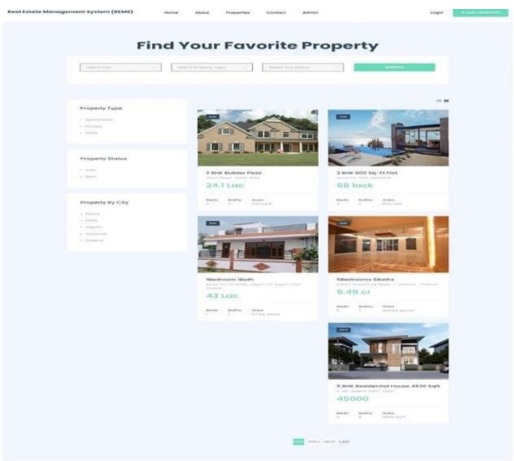

Figure 2

Output Design:

The output design organizes data to provide clear, actionable insights for users, including property managers, agents, and clients. Property managers and administrators have a dashboard summarizing essential metrics like property counts, inquiries, transactions, and sales performance, enabling quick, informed decisions. Buyers and tenants see user-friendly property listings with

Use Diagram:

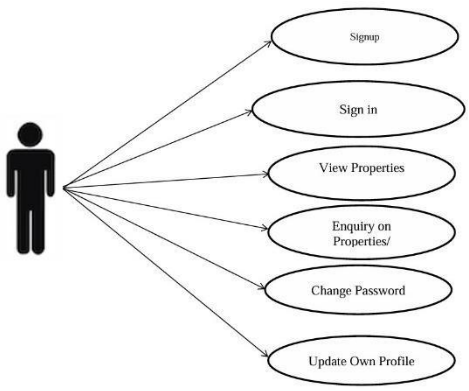

Figure 3

5. SYSTEM IMPLEMENTATION:

- Server Setup: Configure the server (Apache), deploy application code (PHP), and connect to the MySQL database.
- Security Measures: Implement SSL for encrypted communication, firewalls, and access controls to protect against cyber threats.
- Beta Testing: Conduct a trial phase with a limited group of users to identify functionality or usability issues that may have been missed in earlier testing.
- Feedback and Optimization: Use beta feedback to make adjustments, improving performance and user experience.
- Full Deployment: Once stable, roll out the live version to all users— property managers, agents, and buyers—providing complete access to the system's features.

6. CONCLUSION

The Real Estate Management System boosts efficiency and accuracy in property management by automating tasks, minimizing errors, and reducing time spent on manual processes. This automation streamlines property management, transactions, and inquiries, allowing professionals to focus on strategic activities. Cost savings are achieved by cutting down on paperwork and duplicate data, while secure authentication and role-based access protect sensitive information. Real-time data access keeps property details up-to-date, enabling clients to make informed decisions. Property managers also benefit from timely insights into property availability and inquiries, enhancing decision-making, improving client satisfaction, and providing quick, reliable responses to buyers and tenants.

7. REFERENCE

For PHP

- https://www.w3schools.com/php/defaultap
- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL and XAMPP

- https://www.mysql.com/
- https://www.mysqltutorial. org
- https://www.apachefriends.org/do wnload.html