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RENTSPHERE: SMART LEASING & TENANT MANAGEMENT

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ABSTRACT
This abstract introduces a Rental House Management System, designed to streamline the process of managing rental properties for landlords and property managers. The system aims to automate various tasks involved in property management, enhancing efficiency, accuracy, and overall tenant satisfaction. The Rental House Management System offers a comprehensive suite of features including property listing management, tenant management, rent collection, maintenance tracking, and financial reporting. Landlords and property managers can easily add new properties to the system, upload property details, and publish listings across various platforms. Tenants can search for available properties, schedule viewings, and submit rental applications online, simplifying the rental process for both parties. The system facilitates seamless communication between landlords, property managers, and tenants through built-in messaging features, ensuring timely responses to inquiries, maintenance requests, and other concerns. Maintenance tracking functionalities allow landlords and property managers to schedule and monitor property maintenance tasks efficiently. Tenants can submit maintenance requests through the system, enabling prompt resolution of issues and fostering positive tenant-landlord relationships. Furthermore, the Rental House Management System offers robust financial reporting capabilities, providing landlords with insights into rental income, expenses, occupancy rates, and other key metrics. Detailed financial reports help landlords make informed decisions to optimize property performance and maximize profitability. Overall, the Rental House Management System provides a user-friendly and feature-rich platform for landlords, property managers, and tenants to streamline rental property operations, enhance communication, and improve overall satisfaction for all stakeholders involved.

1. INTRODUCTION
One of the key features of the Rental House Management System is its property listing management functionality. Landlords and property managers can easily add new properties to the system, upload detailed property information, and publish listings across various online platforms. This streamlined process not only saves time but also expands the reach of property listings, attracting potential tenants and maximizing occupancy rates. Furthermore, the system facilitates seamless communication between landlords, property managers, and tenants through built-in messaging features. Tenants can submit inquiries, schedule viewings, and even submit rental applications online, eliminating the need for time-consuming phone calls or in-person visits. Landlords and property managers can efficiently respond to inquiries, address maintenance requests, and communicate important updates in real-time, fostering positive tenant-landlord relationships and ensuring tenant satisfaction. Another critical aspect of the Rental House Management System is its financial management capabilities. Landlords can easily track rental income, monitor expenses, and generate detailed financial reports with just a few clicks. Automated rent collection mechanisms enable landlords to set up recurring payments, ensuring consistent cash flow and minimizing the risk of late payments or missed rent.
In today's dynamic real estate landscape, the management of rental properties demands precision, efficiency, and seamless communication between landlords, property managers, and tenants.

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Traditional methods of property management often involve manual processes, leading to inefficiencies, errors, and frustrations for all parties involved.

However, the advent of technology has ushered in a new era of property management, offering innovative solutions to streamline operations and enhance the rental experience. The Rental House Management System represents a pivotal advancement in the field of property management, offering a comprehensive platform designed to revolutionize the way rental properties are managed.

1.1 Problem Definition

Many individuals and property managers struggle to efficiently manage rental properties. This can involve tasks such as tracking rental payments, managing maintenance requests, handling tenant inquiries, and ensuring compliance with legal regulations. Without a centralized system, these tasks can become overwhelming and lead to inefficiencies, errors, and tenant dissatisfaction.

1.2 EXISTING APPLICATIONS

Currently, rental property management may involve manual processes such as paper-based record-keeping, spreadsheets, or basic software solutions. These methods often lack integration, real-time updates, and user-friendly interfaces, making it challenging to keep track of important information and provide timely responses to tenants and property owners.

1.3 PROPOSED WEB APPLICATION

The proposed rental house management system aims to streamline and automate various aspects of property management. It will feature separate interfaces for landlords/property managers and tenants, offering the following functionalities:

1. **Property Listings:** Landlords can list their properties with detailed descriptions, photos, and rental terms.
2. **Tenant Management:** Landlords can manage tenant information, including lease agreements, rental payments, and tenant communications.
3. **Maintenance Requests:** Tenants can submit maintenance requests through the platform, which landlords can track and address promptly.
4. **Financial Tracking:** The system will track rental payments, generate invoices, and provide financial reports for landlords.
5. **Communication:** Built-in messaging systems will facilitate communication between landlords and tenants, improving responsiveness and transparency.
6. **Document Management:** The platform will store important documents such as lease agreements, rental applications, and property inspection reports securely.
7. **Reminders and Notifications:** Automated reminders for rent payments, lease renewals, and maintenance appointments will help both landlords and tenants stay organized.
8. **Compliance Monitoring:** The system will help landlords stay compliant with local regulations by providing reminders and checklists for legal requirements such as property inspections and tenant screenings.

1.4 REQUIREMENTS SPECIFICATION

Requirement Specifications describe the articraft of Software Requirements and Hardware Requirements used in this project.

Software Requirements

OS to build: 64-bit version of Microsoft Windows 10 or later

1. **IDE:** Visual Studio and JavaScript runtime environment
2. **Text editor:** Visual Studio Code 1.77 or later
3. **Framework:** HTML, CSS and JAVASCRIPT for frontend and PHP for backend development
4. **Server : XAMPP**
5. **Target OS(s):** iOS 15 or later and Android 12 or later

Hardware Requirements

1. **Computer requirements to develop:**

a. x86_64 CPU Cores: 8

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b. Memory in GB: 8
c. Display resolution in pixels: 1366 x 768
d. Free disk space in GB: 10

2. Target Mobile device requirements:

a. RAM: 4GB or more
b. Storage: 1GB or more
c. Screen type: Touch
d. Screen size: 5 inches or more
e. Connectivity: Wi-Fi (2.4Ghz/5Ghz) or cellular network (5G/4G/LTE)

2. LITERATURE SURVEY

[1] **D. Xu, S. Peng, and Y. Du advocate for the development of a "House Rental Management System"** using the SSM (Spring, Spring MVC, MyBatis) framework to enhance the efficiency and effectiveness of managing rental properties. Their system aims to streamline various property management tasks, including the administration of tenant information, rental payments, maintenance requests, and lease agreements. By leveraging the SSM framework, the proposed solution offers a robust and scalable platform for landlords and property managers, facilitating better organization, accurate record-keeping, and improved overall management of rental properties.

[2] **M. Kalbande, S. Sarkar, S. Farkase, and P. Verma propose the design and development of a "Smart House Rental Management System"** to enhance the management of rental properties through smart technology. Their system focuses on integrating advanced features for tracking rental payments, managing tenant information, handling maintenance requests, and automating lease agreements. By implementing smart technologies, the proposed system aims to provide a more efficient, user-friendly, and effective platform for landlords and property managers, thereby improving the overall management and organization of rental properties.

[3] **X. -q. Shan and X. -s. Ye explore the "public-private financing mode"** for public rental housing and its optimal selection. Their research examines various financing models and their applicability to the development and management of public rental housing. By analyzing the benefits and challenges of different financing approaches, they aim to identify the most effective strategies for leveraging public and private sector resources. Their work contributes to better decision-making in the funding and management of public rental housing projects, ultimately promoting more sustainable and efficient housing solutions.

[4] **W. Shiyun conducts research on a "Mobile APP Online Short-Term Rental System"** leveraging computer artificial intelligence technology. This study focuses on the development of a mobile application designed to manage short-term rental properties more efficiently. By incorporating AI technologies, the system aims to enhance functionalities such as booking management, tenant verification, dynamic pricing, and personalized recommendations. The proposed solution seeks to provide a more seamless and intelligent user experience for both property owners and tenants, ultimately improving the overall efficiency and effectiveness of short-term rental management.

[5] **J. Zhao, J. Zeng, Y. Liu, J. Zhang, H. Du, and Y. An design a "Smart Park Venue Rental System"** based on blockchain technology. Their system aims to enhance the efficiency and transparency of venue rentals by leveraging the immutable and secure nature of blockchain. This technology facilitates secure transactions, reduces fraud, and ensures reliable record- keeping, thereby improving the overall management and user trust in park venue rentals.

[6] **F. Aposika and N. F. Charles present the "Design and Implementation of a House Rental Management System: A Comprehensive Approach."** This study outlines a holistic solution for managing house rentals, focusing on streamlining the processes of tenant management, rental payments, maintenance tracking, and lease agreements. Their comprehensive approach aims to

enhance efficiency, accuracy, and user experience in house rental management.

[7] **R. Smith, L. Johnson, and P. Lee develop a "Cloud-Based Rental Property Management System"** aimed at enhancing the efficiency of rental property management through the integration of cloud computing. Their system focuses on key functionalities such as tracking rental payments, managing tenant information, handling maintenance requests, and automating lease agreements.

[8] **Y. Chen, X. Wang, L. Wu, and M. Liu develop a "Secure BlockchainBased Housing Rental Platform."** Their platform aims to provide a secure and efficient environment for housing rentals by using blockchain technology. This approach enhances the security and transparency of transactions, protects user data, and ensures the integrity of rental agreements, thereby improving the overall trust and reliability in housing rental processes

Table 2.1: Literature Survey Table

S. No	Author	Title	Year	Name of the Journal	Methodology/ concept used/summary	Merits	Demerits
[1]	D. Xu, S. Peng, and Y. Du	House Rental Management System	2022	Information Management, Communicates, Electronic and Automation Control Conference (IMCEC)	Web technologies such as HTML, CSS, jQuery, JavaScript, and SQL Server, SSM framework	robust and scalable platform for landlords and property managers	Maintenance is difficult
[2]	M. Kalbande, S. Sarkar, S. Farkase and P. Verma	Design and Development of Smart House Rental Management System	2023	International Conference on Sustainable Computing and Smart Systems (ICSCSS)	Tracking rental payments, managing tenant information, handling maintenance requests, and automating lease agreements	User friendly	Data Privacy Concerns
[3]	X. -q. Shan and X. -s. Ye	public-private financing mode of public rental housing and its selection	2012	The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences	Better decision-making in the funding and management of public rental housing projects.	leveraging public and private sector resources.	Risk of Misalignmet
[4]	W. Shiyun	Mobile APP Online Short-Term Rental System	2023	International Journal of Computer Applications	Computer artificial intelligence technology	focuses on the development of a mobile application	Data Privacy Issues
[5]	J. Zhao, J. Zeng, Y. Liu, J. Zhang, H. Du, and Y. An	Smart Park Venue Rental System	2019	Asian Association of Open Universities Journal	Blockchain technology	enhance the efficiency and transparency of venue rentals by leveraging.	Blockchain Complexity

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[6]	F. Aposika and N. F. Charles	Design and Implementation of a House Rental Management System	2023	Atlantis Press	comprehensive approach aims to enhance efficiency, accuracy, and user experience	streamlining the processes of tenant management, rental payments	User Training
[7]	R. Smith, L. Johnson, and P. Lee	Cloud-Based Rental Property Management System	2023	ICCSET 2014	cloud technology	secure, user-friendly platform	Technical Challenges
[8]	Y. Chen, X. Wang, L. Wu, and M. Liu	Secure Blockchain-Based Housing Rental Platform	2021	INTERNATIONAL JOURNAL OF STRATEGIC PROPERTY MANAGEMEN	blockchain technology	security and transparency of transactions, protects user data, and ensures the integrity of rental agreements.	Energy Consumption

3. METHODOLOGY OF RETAILSPHERE

In the development of the RentSphere Chat Application, a combination of modern technologies was utilized to ensure efficient communication between property owners and tenants. The following is an overview of the methodology adopted:

3.1 TECHNOLOGIES USED:

For the development of a Rental House Management System, various technologies are employed to ensure the system is robust, scalable, secure, and user-friendly. Here are the key technologies typically used:

Backend Technologies:

- **PHP:** The core server-side scripting language used in RentSphere. PHP is widely known for its ease of use and integration capabilities. It handles server-side logic, database interactions, and business rules of the system.
- **XAMPP**: A free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MySQL database, and interpreters for scripts written in PHP. XAMPP provides an easy-toinstall and configure environment for development and testing.

Front-End Technologies:

- **HTML5**: Used to structure the web content, HTML5 provides the framework for the various forms and interfaces within RentSphere.
- **CSS3**: CSS3 is used to style the HTML elements, providing the system with a visually appealing and responsive design.
- **JavaScript**: Essential for adding interactivity to the web application. It enhances the user experience by enabling dynamic content updates and form validations.
- **Bootstrap**: A CSS framework that provides pre-designed components and a responsive grid system, facilitating the rapid development of a consistent and responsive user interface.

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Database Technologies:

• **MySQL:** The relational database management system (RDBMS) used to store and manage all the data related to properties, tenants, transactions, and user information.

MySQL is chosen for its robustness, performance, and ease of integration with PHP.

Server and Hosting Technologies:

• **Apache:** Part of the XAMPP stack, Apache is used as the web server to host and serve the PHP application. It is highly configurable and supports various modules for enhanced functionality.

• **phpMyAdmin:** Included in XAMPP, phpMyAdmin is a tool to manage the MySQL database through a web-based interface, making database operations easier for developers and administrators.

3.2 Development Process:

In this phase, the system is built according to the design specifications. Key steps include:

• **Setting Up the Environment:** Installing and configuring XAMPP on local development machines to create a consistent environment for coding and testing.

• **Backend Development:** Writing PHP scripts to implement the server-side logic, handle user requests, and interact with the MySQL database.

• **Frontend Development:** Using HTML, CSS, and JavaScript to create the user interface and ensure responsiveness and usability.

• **Form Handling and Data Validation**: Implementing form handling in PHP to process user inputs securely and validate data before it's stored in the database.

• **Testing:** Testing is critical to ensure RentSphere operates as expected and is free from critical bugs. This phase includes:

○ **Unit Testing:** Testing individual functions and modules to ensure they work as intended.

○ **Integration Testing:** Verifying that different parts of the system work together seamlessly, such as PHP scripts interacting with MySQL.

○ **System Testing:** Conducting end-to-end testing to check the overall functionality and user experience.

• **Deployment:** Deployment involves setting up the system in a production environment and making it available for use. Steps include:**Server Configuration:** Setting up the production server, which includes configuring Apache and MySQL on the host machine.

○ **Code Deployment:** Transferring the PHP codebase to the production server and setting up necessary configurations.

○ **Database Migration**: Ensuring the database is initialized correctly with the necessary tables and data.

By continuously evolving and incorporating these advancements, RentSphere will remain at the forefront of rental property management solutions, delivering value and convenience to its users.

4. DESIGN FOR RETAILSPHERE

4.1 DESIGN:

Figure 4.1 provides the total use case diagram of the system. The system has three types of users: admin, owners and tenants. This system can be used by owners and tenants after a successful and verified registration. For admin, the system is open for extension and modification. Total system will be monitored by the admin. For owners or tenant users, it is open for extension and closed for modification. That means owners could post house advertisements and tenants could start a conversation with the owner in a dedicated chat box.

1. **Admin:**

□ Contains the admin use case diagram of the system. It shows what types of process in the system are done by an admin. Here, admin can log in to the system after registration. Admin can control the database like delete something or update something from the database. Also, they can see the Google map and, using the conversation system, they can easily contact others. Admin also reset the password and refresh the page.

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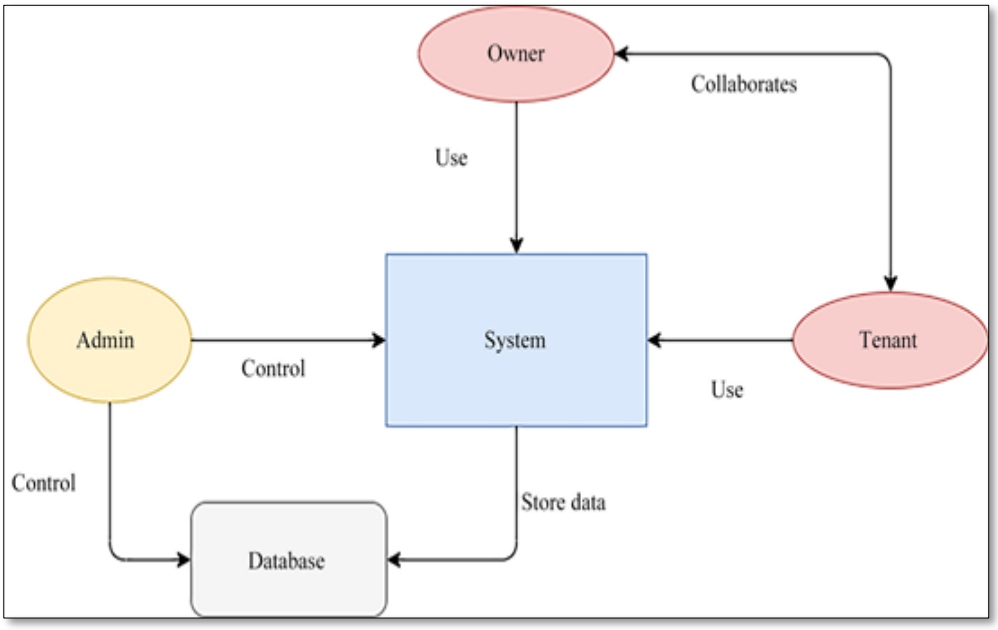

Figure 4.1: Design of RentSphere

2. **Owner:**

□ It shows what types of processes in the system are done by an owner. Here, owner can register in the system and log into the system. Also, could initialize a conversation with tenants and could add or delete the advertise of his/her house.

3. **Tenant:**

□ It shows what types of processes are done by a tenant. Here, tenants can log in to the system after their registration. Tenants can set their own profile and reset the password. Also, contact with others using a conversation system and refresh the page.

This structure ensures a smooth, secure, and efficient operation of the Rental House Management System, providing a robust solution for property management needs.

4.2 PROCESS FLOW DIAGRAM

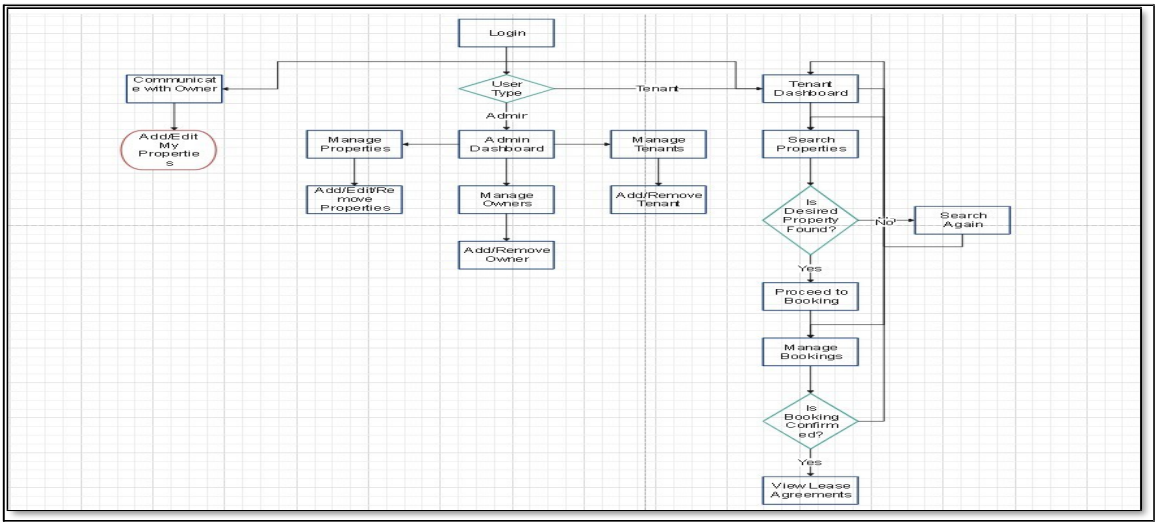

Figure 4.2: Process flow Diagram of RentSphere

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Figure 4.2 shows the flowchart of RentSphere. In the flowchart every user needs to login with their login mail and password. After the login the user can navigate throught the website according to their need and then can logout.

1. Start:

□ The flow begins with the user visiting the "RentSphere" homepage. This is the entry point into the system.

2. User Chooses an Option:

□ Upon visiting the homepage, users have several choices**: Login:** Users authenticate with their credentials.

Register: New users provide details to create an account.

Browse Properties: Allows exploring listings without logging in.

3. User Authenticated:

- **Successful Login:** Redirected to their dashboard.
- **Registration Complete:** New users are logged in and directed to their dashboard.

4. Perform Actions:

Actions trigger backend processes like:

- **Database Updates**: Save changes to the database.
- **Notifications**: Send updates to users.
- **Payment Processing**: Handle rental payments.

5. Return to Dashboard:

□ After completing actions, users return to their dashboard to continue managing their tasks.

6. Logout:

□ Users can log out, ending their session and returning to the homepage.

The "RentSphere" flowchart provides a clear map of user interactions, from entering the system to managing properties, handling transactions, and logging out. Each step ensures a smooth and user-friendly experience for tenants, owners, and admins within the rental house management system.

4.3. SYSTEM ARCHITECTURE:

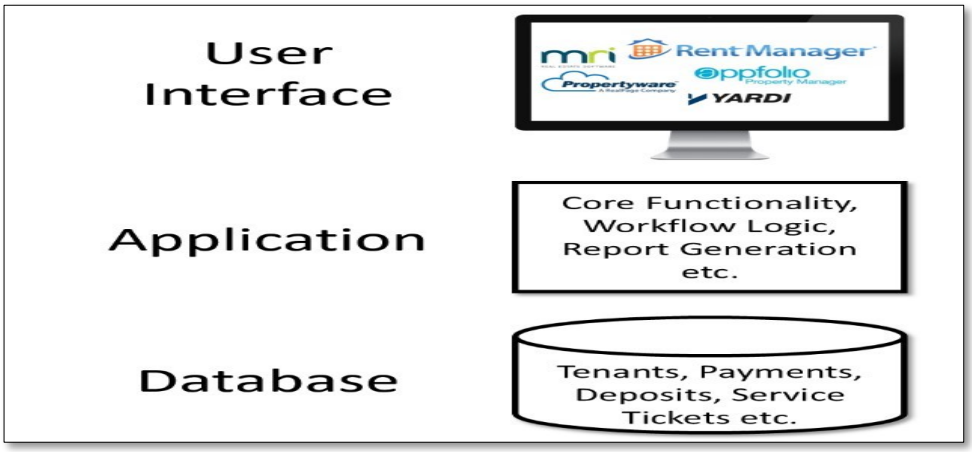

Figure 4.3: System Architecture of RentSphere

Figure 4.3 shows the system architecture of RentSphere, which is a rental house management system, operates with a three-tier architecture. Its frontend comprises HTML, CSS, and JavaScript for a user-friendly interface. PHP scripts manage core functionalities like user authentication and property management in the application layer. Data is stored securely in MySQL at the backend, ensuring efficient data handling and scalability. This setup enables RentSphere to deliver reliable rental property management solutions effectively.

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5. IMPLEMENTATION

Implementation of RentSphere involves setting up a three-tier architecture where each tier plays a crucial role in the functionality and performance of the rental house management system. Here's how RentSphere can be implemented:

5.1 FRONTEND DEVELOPMENT:

- **Technologies:** HTML, CSS, JavaScript
- **Description:** The frontend is responsible for the user interface where owners and tenants interact. HTML provides the structure, CSS handles the presentation and layout, and JavaScript manages client-side interactions and validations. This tier ensures a responsive and intuitive user experience.

5.2 APPLICATION LAYER(BACKEND):

- **Technology:** PHP.
- **Description:** PHP scripts handle the application logic. This includes user authentication, property management (such as adding, editing, deleting properties), and processing user requests. PHP interacts with the MySQL database to retrieve and store data, ensuring seamless functionality and data integrity.

5.3 DATABASE MANAGEMENT:

- **Technology:** MySQL
- **Description:** MySQL is used to store and manage data related to properties, users, transactions, and other system information. It provides robust data storage, retrieval, and management capabilities. The database schema is designed to optimize performance, ensure data consistency, and support scalability as the system grows.

5.4 INTEGRATION AND TESTING:

- **Description:** MySQL is used to store and manage data related to properties, users, transactions, and other system information. It provides robust data storage, retrieval, and management capabilities. The database schema is designed to optimize performance, ensure data consistency, and support scalability as the system grows.

5.5 DEPLOYMENT AND MAINTENANCE:

- **Description:** Once tested, the system is deployed on a web server (such as Apache) using XAMPP or similar platforms. Regular maintenance includes monitoring system performance, applying security patches, and updating features based on user feedback and changing requirements.

6. TESTING AND RESULTS

1. Admin login page:

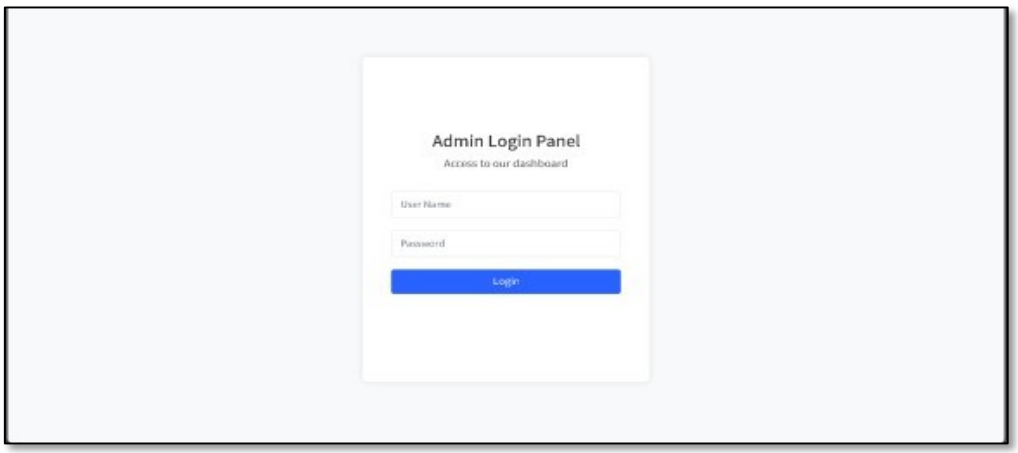

Figure 6.1: Admin login page

Figure 6.1 illustrates the admin login page, a crucial entry point for administrators to manage the rental house management system. Admin oversee data updates, account deletions, and house detail

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additions from owners, ensuring system integrity and accurate property listings. This functionality empowers admin to maintain the platform's reliability and support the needs of property owners and tenants effectively.

2. Admin Dashboard:

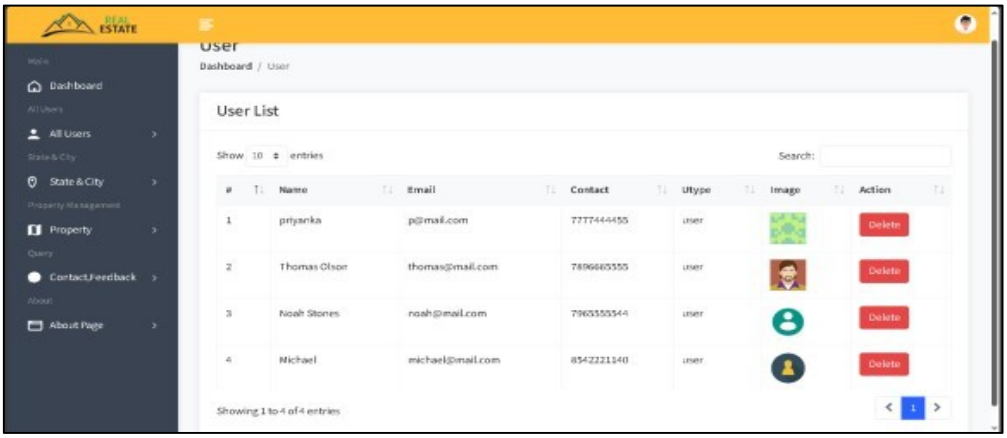

Figure 6.2: Admin Dashboard

Figure 6.2 displays the user list managed by administrators, including both property owners and tenants. Admin oversee website security and functionality, ensuring smooth operations and user management. They handle tasks such as adding, updating, and removing user details to maintain the rental house management system's reliability and effective functioning.

3. User Home Page:

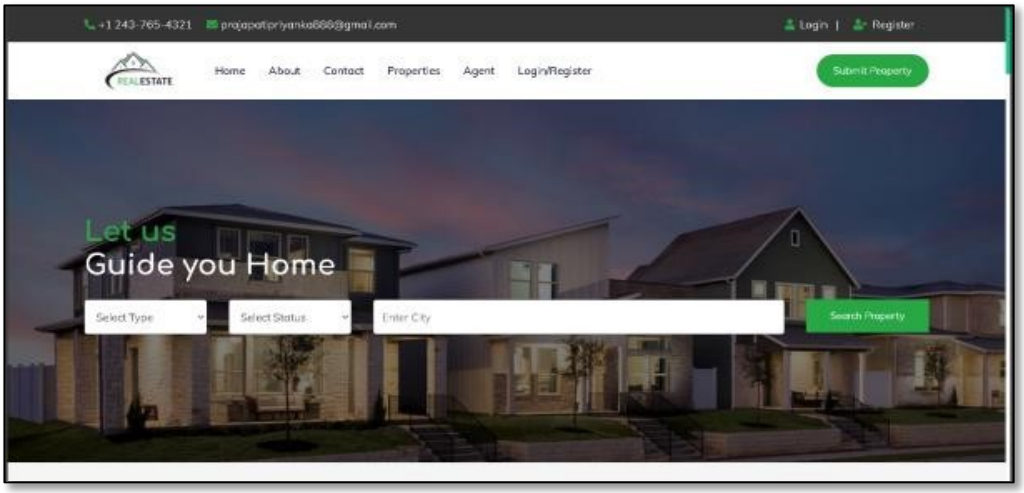

Figure 6.3: User Home page

Figure 6.3 illustrates the homepage, providing options for user login, registration, and access to additional features like About Us and Contact Us. It serves as the central hub where users can initiate their interaction with the website, exploring various functionalities and information. This page plays a crucial role in user engagement, facilitating seamless navigation and access to essential resources for both new and returning visitors.

4. User Registration Page:

Figure 6.4 displays the user registration page where new users can sign up to become either owners or tenants on the website. This page enables individuals to create accounts, providing access to various features and functionalities. It serves as the initial step for users to engage with the platform, facilitating their integration into the rental house management system's community.

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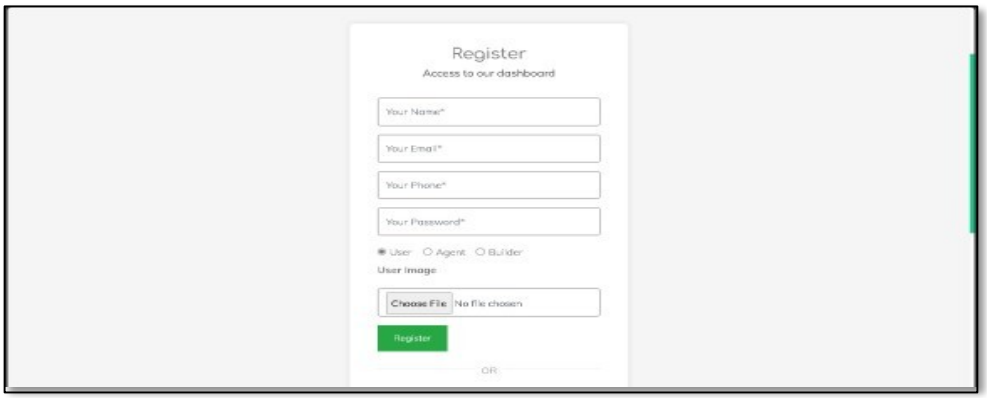

Figure 6.4: User Registration page

4. User login Page:

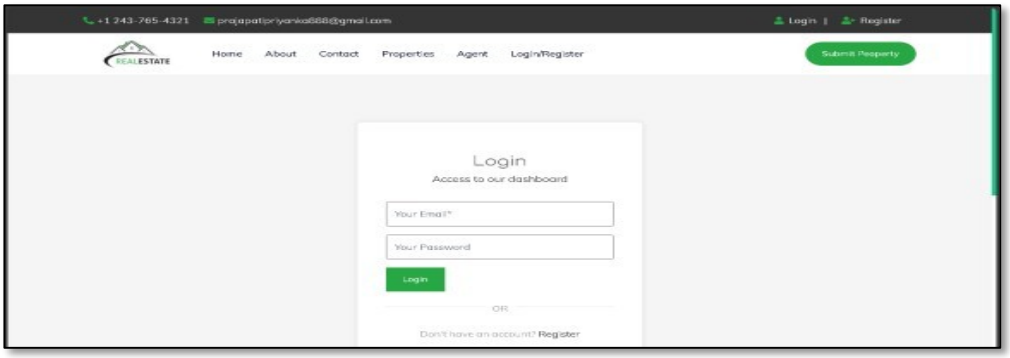

Figure 6.5: User login page

Figure 6.5 illustrates the login page designed for users who have registered on the website. Here, registered users can securely log in to access and utilize various features and services offered. It serves as the gateway for users to manage their account.

5. Owner WebPages:

Figure 6.6: Owner home page

Figure 6.6 displays the owner home page, offering owners convenient access to manage their uploaded property details. Owners can navigate through various sections to view, update, or modify property information. This page serves as a central hub for owners to oversee their listings.

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Figure 6.7: Owner Profile page

Figure 6.7 depicts the owner profile page where owners can easily update their personal details and preferences. This section allows owners to maintain accurate information about themselves, ensuring that their profiles remain up-to-date for potential tenants or administrative purposes.

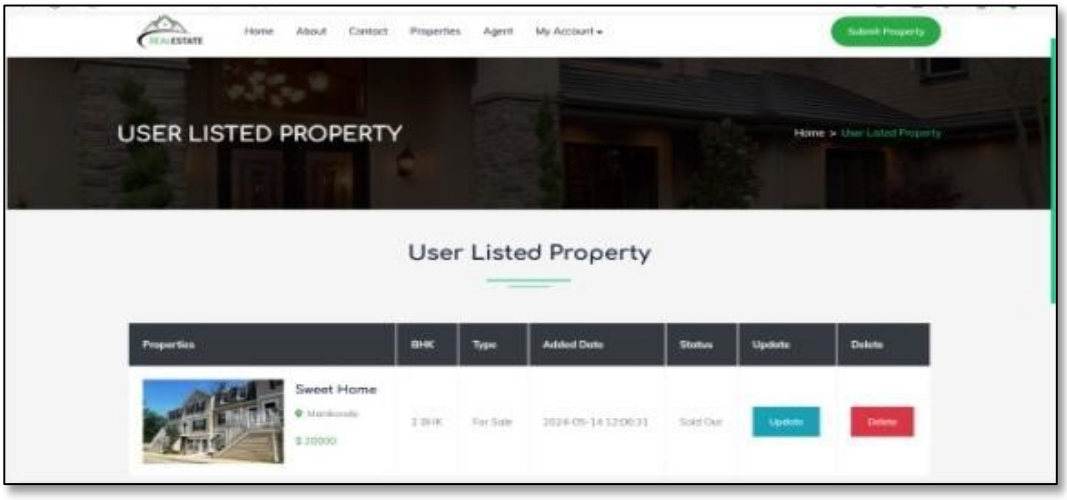

Figure 6.8: Owner Property list page

Figure 6.8 illustrates the list of properties belonging to an owner, offering options to update or delete listings as needed. This feature empowers owners with full control over their property portfolio, allowing them to manage details such as rental prices, property descriptions, and availability status directly from the platform. Owners can ensure their listings are always accurate and relevant to potential tenants.

6. Owner WebPages:

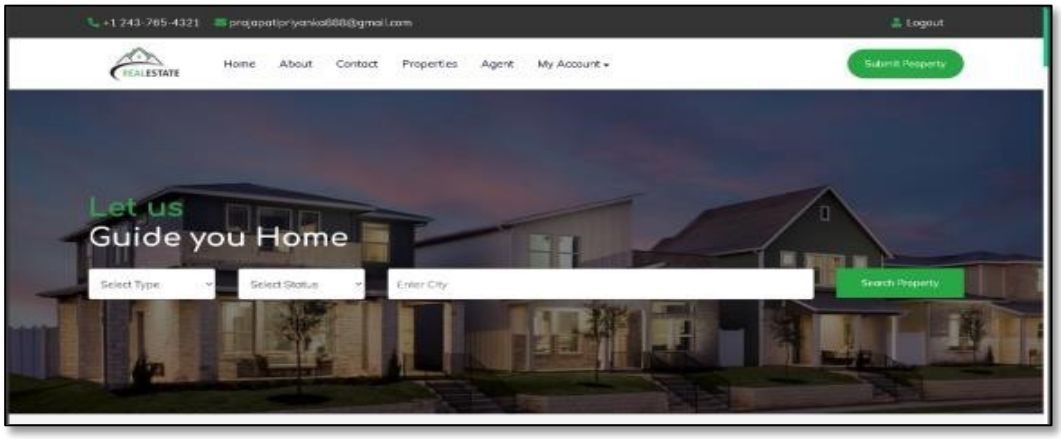

Figure 6.9: Owner Property list page

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Figure 6.9 displays the tenant home page, providing a gateway for tenants to search rental or sale properties in their preferred locations. Users can easily navigate to different sections like property listings, contact information, and more. This intuitive interface enhances user experience by enabling quick access to relevant information, ensuring tenants can find suitable housing options efficiently.

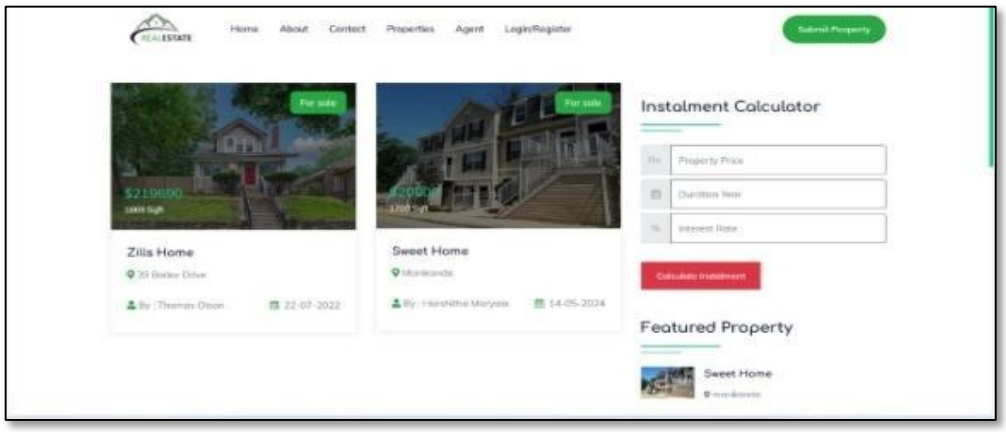

Figure 6.10: Property details page

Figure 6.10 presents the property details accessible to tenants. This page provides comprehensive information about available properties, including photos, descriptions, and rental terms. Tenants can view specifics such as location, size, amenities, and pricing, helping them make informed decisions. This detailed overview ensures tenants have all necessary information at their fingertips to choose the best property for their needs.

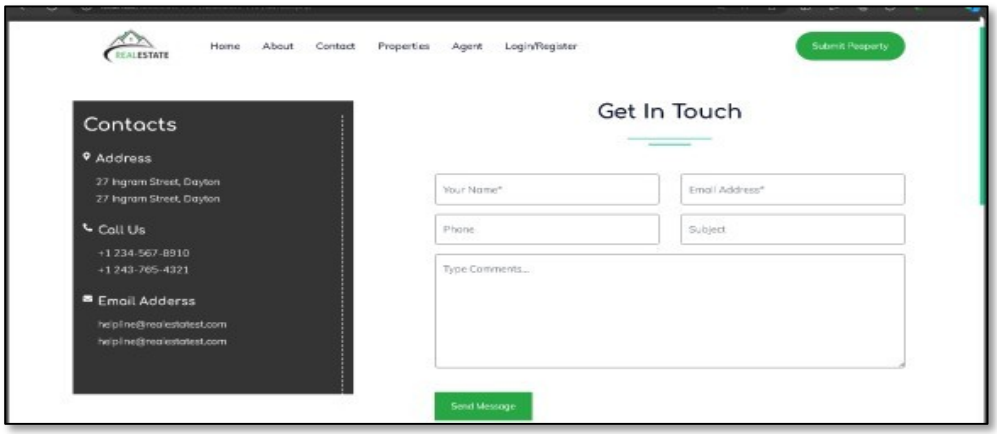

Figure 6.11: Contact Us page

Figure 6.11 displays the "Contact Us" page, where tenants can send their queries directly to the admin. This page allows tenants to communicate any issues or questions they might have regarding properties or the system itself. Additionally, tenants can find contact details, such as email addresses and phone numbers, to reach out to the admin or agent for more direct assistance, ensuring they receive timely support and information.

7. CONCLUSION AND FUTURE SCOPE

7.1 CONCLUSION

In conclusion, the developed rental house management system offers a robust platform for property owners to efficiently manage their properties. This system enables owners to add, edit, and delete property details, ensuring that all information remains current and accurate. By including comprehensive features such as detailed property information, rental specifics, and amenities, the

platform fosters improved communication and transparency between property owners and potential tenants. Additionally, the implementation of user authentication ensures that only registered users can access the system, enhancing security and user management. Overall, this system streamlines rental house management processes, making it easier for owners to maintain and market their properties.

7.2 FUTURE SCOPE

The future of the rental house management system holds promising enhancements across several key areas. Improving the user interface for intuitive navigation and visual appeal is crucial, catering to users of varying technical expertise. Advanced search and filtering options will enable quick property discovery based on location, price, and amenities, enhancing user convenience. Introducing a mobile app version would offer on-the-go property management and rental searches. Integration of payment gateways for online transactions, including rent payments and deposits, promises enhanced convenience. Automated notifications for lease renewals, rent due dates, and maintenance schedules would ensure timely actions and operational efficiency. Analytics tools for rental trends and financial insights would empower property owners with informed decision-making capabilities.

Enhancing the property viewing experience through virtual tours and augmented reality features would aid tenant decision-making. Implementing tenant screening and background checks would ensure reliable tenant selection and improve rental quality. A maintenance request system for efficient issue reporting and tracking, along with multilingual support for diverse users, would further enhance accessibility and user satisfaction.

BIBLIOGRAPHY

[1] D. Xu, S. Peng and Y. Du, "Design and Implementation of House Rental Management System Based on SSM Framework," 2022 IEEE 5th Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC), Chongqing, China, 2022, pp. 1711-1714, doi: 10.1109/IMCEC55388.2022.10020126.

[2] M. Kalbande, S. Sarkar, S. Farkase and P. Verma, "Design and Development of Smart House Rental Management System," 2023 International Conference on Sustainable Computing and Smart Systems (ICSCSS), Coimbatore, India, 2023, pp. 710-715, doi: 10.1109/ICSCSS57650.2023.10169613.

[3] X. -q. Shan and X. -s. Ye, "Research on public-private financing mode of public rental housing and its selection," 2012 International Conference on Management Science & Engineering 19th Annual Conference Proceedings, Dallas, TX, USA, 2012, pp. 1787-1793, doi: 10.1109/ICMSE.2012.6414414.

[4] W. Shiyun, "Research on Mobile APP Online Short-Term Rental System Based on Computer Artificial Intelligence Technology," 2023 IEEE 3rd International Conference on Electronic Technology, Communication and Information (ICETCI), Changchun, China, 2023, pp. 814- 818, doi: 10.1109/ICETCI57876.2023.10176664.

[5] J. Zhao, J. Zeng, Y. Liu, J. Zhang, H. Du and Y. An, "Design of Smart Park Venue Rental System based on Blockchain Technology," 2019 IEEE International Conference on Service Operations and Logistics, and Informatics (SOLI), Zhengzhou, China, 2019, pp. 88-93, doi: 10.1109/SOLI48380.2019.8955056.

[6] F. Aposika and N. F. Charles, "Design and Implementation of a House Rental Management System: A Comprehensive Approach," International Journal of New Research and Development, vol. 1, no. 1, pp. 11-19, 2023, doi: 10.5281/zenodo.10390901.

[7] R. Smith, L. Johnson, and P. Lee, "Development of a Cloud-Based Rental Property Management System," 2022 IEEE International Conference on Information Systems and Software Engineering (ISSE), Tokyo, Japan, 2022, pp. 154-159, DOI: https://doi.org/10.1109/ISSE-14.2015.38

DOI:10.46647/ijetms.2026.v10i02.062 ISSN: 2581-4621

[8] Yosof, N., et al. (2014). How does communication influence the perceived performance of maintenance services in multi-storey public housing? International Journal of Strategic Property Management, 18(4), 380-392.
DOI: https://doi.org/10.3846/1648715X.2014.971918