BUILDING RENTAL SYSTEM

A Project Report

Submitted to the APJ Abdul Kalam Technological University

in partial fulfillment of requirements for the award of degree

Bachelor of Technology

in

Computer Science and Engineering

by

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CERTIFICATE

This is to certify that the report entitled **BUILDING RENTAL SYSTEM** submitted by **CHINMAI** (KSD20CS036), **AYSHA ANOOFA PERLA** (KSD20CS034), **HAVVA MARIYAM HANNA HM** (KSD20CS054) & **MUHAMMED SHAAHID LATHEEF** (MEA20CS064) to the APJ Abdul Kalam Technological University in partial fulfillment of the B.Tech. degree in Computer Science and Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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We hereby declare that the project report **BUILDING RENTAL SYSTEM** , submitted for partial fulfillment of the requirements for the award of degree of Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by us under supervision of Dr. Smithamol M B

This submission represents our ideas in our own words and where ideas or words of others have been included, we have adequately and accurately cited and referenced the original sources.

We also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. We understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

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Abstract

The Building Rental Management System is an innovative software solution designed to revolutionize the management of rental properties. The system provides a comprehensive

platform that handles various aspects of property management, including rental agree- ments, tenant information, rent collection, and maintenance requests. Its primary objective

is to simplify the rental management process for property owners and managers while enhancing the tenant experience. In today's fast-paced world, people often need to relocate for various reasons, such as work commitments or personal matters. Finding suitable rental properties can be a challenging and timeconsuming task. The Building Rental Management System aims to address this issue by offering a user-friendly website where individuals can easily search for rental properties based on their specific requirements, such as property type, location, and rent amount. For property owners, the system provides an efficient platform to list their properties and manage all aspects of property rental. They can easily create and manage rental agreements, set reminders for agreement expiration and rent due dates, and track tenant information. The system also streamlines rent collection, making it convenient for property owners and tenants to manage payment transactions securely. Tenants benefit from the system by having access to a wide range of listed properties and the ability to search for their ideal rental home or apartment. They can view property details, submit rental applications, and track the status of their applications. Additionally, tenants can easily communicate maintenance requests to property owners or managers through the system, ensuring timely resolution of any issues. The project aims to develop an online building rental system that is easily accessible to the public. By implementing

this system, property owners can maximize their rental income while ensuring tenant satisfaction. The user-friendly interface and comprehensive features provided by the system contribute to a seamless rental management experience for all stakeholders involved. Overall, the Building Rental Management System simplifies and streamlines the rental management process, offering a convenient and efficient solution for property owners, tenants, and property managers. This project report presents the development and implementation of the system, highlighting its features, functionality, and benefits.

Acknowledgement

We take this opportunity to express my deepest sense of gratitude and sincere thanks to everyone who helped us to complete this work successfully. We express our sincere thanks to Prof . Anver S R, Head of Department,Computer Science and Engineering, LBS College of Engineering Kasaragod for providing us with all the necessary facilities and support.

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Finally I thank my family, and friends who contributed to the succesful fulfilment of this seminar work.

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Chapter 1

Introduction

TITLE: An Introduction to Rental Management Systems In today's fast-paced and interconnected world, the management of rental properties has evolved into a complex and demanding endeavor. Whether it's a small-scale residential apartment or an extensive commercial complex, the efficient management of rental properties requires a comprehensive and systematic approach. This is where Rental Management Systems (RMS) come into play, revolutionizing the way property owners, landlords, and property managers handle their assets. Understanding Rental Management Systems A Rental Management System (RMS) is a software solution designed to streamline and automate various aspects of property management, catering to the diverse needs of real estate professionals. From handling tenant applications and rent collection to property maintenance and financial reporting, an RMS encompasses a wide array of functions that significantly enhance the efficiency, transparency, and profitability of rental property operations. Key Features and Benefits The core features of a Rental Management System are tailored to address the challenges faced by property managers and landlords on a daily basis. These systems often include: Tenant Management: RMS offers tools to efficiently manage tenant applications,background checks, lease agreements, and rent payments. This minimizes the administra- tive burden and helps maintain accurate records.

Rent Collection: Automated rent collection and online payment options simplify the payment process for both tenants and property owners, reducing the likelihood of late or missed payments. Maintenance Tracking: A robust RMS enables property

managers to schedule and track maintenance requests, ensuring timely upkeep and enhancing tenant satisfaction. Financial Reporting: Detailed financial reports and analytics provide a clear overview of a property's financial health, allowing for better decision-making and strategic planning.

Communication: RMS often includes communication tools to facilitate effective inter- actions between property managers, landlords, and tenants, fostering better relationships

and resolving issues promptly. Document Storage: Centralized storage for important documents such as lease agreements, inspection reports, and tenant communication ensures easy access and organization. Compliance and Legal Management: Rental regulations and laws vary widely. An RMS helps property managers stay compliant by automating compliance checks and ensuring adherence to legal requirements. Transforming Property Management The adoption of a Rental Management System brings forth a myriad of benefits that extend beyond mere operational convenience. Here are some key ways in which RMS is transforming property management: Time and Resource Efficiency: By automating routine tasks and centralizing data, property managers can save valuable time and allocate resources more efficiently. This enables them to focus on strategic activities that contribute to the growth and success of their property portfolios. Enhanced Tenant Experience: RMS facilitates seamless communication, quick issue resolution, and efficient maintenance scheduling, leading to higher tenant satisfaction and prolonged tenant retention. Accurate Decision-Making: With access to real-time financial data and analytics,

property managers can make informed decisions regarding pricing, maintenance invest- ments, and expansion opportunities.

Risk Mitigation: Automated compliance checks and adherence to legal regulations reduce the risk of legal disputes and financial penalties. Scalability: Whether managing a single property or a diverse portfolio, RMS can adapt to different scales of operation, ensuring consistency and standardization across properties. Conclusion The advent of Rental Management Systems has ushered in a new era of property management, characterized by efficiency, transparency, and tenant-centricity. These systems empower property managers and landlords with the tools needed to optimize operations, enhance tenant satisfaction, and drive sustainable growth. As the real estate

industry continues to evolve, embracing technological solutions like RMS is no longer a luxury, but a necessity for those looking to stay ahead in a competitive market. In the subsequent sections of this guide, we will delve deeper into the intricacies of Rental Management Systems, exploring their functionalities, implementation strategies, and the transformative impact they can have on the realm of property management.

1.1 PROBLEM STATEMENT

The current process of managing rental properties is often cumbersome, time-consuming, and inefficient. Property owners and managers face challenges in effectively handling rental agreements, tenant information, rent collection, and maintenance requests. Additionally, tenants encounter difficulties infinding suitable rental properties that meet their specific requirements. These challenges lead to a lack of transparency, delays in communication, and a poor overall rental experience for both property owners/managers and tenants. The lack of a centralized and user-friendly system exacerbates these problems. Property owners struggle to efficiently list and manage their properties, resulting in missed rental income opportunities and potential tenant dissatisfaction. Tenants find it arduous to navigate through various property listings, arrange appointments, and communicate with property owners or agents. The absence of an accessible and streamlined platform adds unnecessary complexity to the rental management process, making it a time-consuming and frustrating experience for all parties involved. Therefore, there is a pressing need for an online building rental system that addresses these challenges and provides a comprehensive solution for property owners, tenants, and property managers. The system should simplify the rental management process, facilitate efficient communication and collaboration, improve transparency, and enhance the overall rental experience. By developing such a system, we aim to revolutionize the way rental properties are managed, ultimately benefiting property owners, tenants, and property managers alike.

1.2 Literature Review

1.2.1 PAPER 1

House (Individual House/Apartment) Rental Management System RB Shriram, P Nand- hakumar, N Revathy, V Kavitha International Journal for Computer Science and Mobile

Computing 19, 143, 2019 This Web Application helps user to register individual home or apartment to assist you in finding the perfect rental home or property. Also we can find your next rental from search view in your targeted area. This website is designed to attend to all our needs from buying property, selling property or renting/leasing of property in India. Here we found the better opportunity to invest our value of entire life. Property helps us to maintain the database of various property and agents information. It not only helps us to maintain the agent information but here we also allow agents to access the portal updated information across the global environment. We know it is a tiring to call individual property agents, arrange appointment, finding better time for appointment and they will assist you. For such complex process we provide a one simple online form which requires your basic information and we will assist in sort time period.

1.2.2 PAPER 2

OYO Rooms is one of the top online hotels booking service organization, getting popularity amongvarious countries for their technology and also the ideology. In this era most of the people becomingtech savvy and they are booking hotels online via internet. And it is important to know who arebooking online and what factors affecting their decision or their changing behavior.The purpose is to find the factors affecting the consumers decision to stay with OYO Rooms.Additionally, develops an insight to understand consumers behavior in online hotel booking services. Ms. H. Jagtap, Dr. V. Patil and Dr. G. Gopalakrishnan (2019),had find that majority of users of onlineapplication of OYO Rooms are between 21- 30 years of age and some are below 20 too, also when itcomes to book a hotel room online OYO is the first preference to the customers followed by ‘Goibibo’and their preference is ‘fully furnished hotel

rooms' followed by 'OYO total Holidays'.

1.2.3 PAPER 3

One of the most popular rental system websites in India is Rentomojo, which is a furniture and appliance rental platform. Here is a literature review of Rentomojo's advantages and disadvantages: Advantages: Flexibility: Rentomojo offers a lot of flexibility to its customers, allowing them to choose from a wide range of furniture and appliances for rent. The rental periods are also flexible, ranging from a few months to a few years. Affordable: Rentomojo's rental prices are comparatively cheaper than buying furniture and appliances outright. This makes it an affordable option for people who are on a tight budget. Convenience: Rentomojo takes care of delivery, installation, and maintenance of the rented items, making it a convenient option for customers who don't want to deal with these hassles themselves. Upgrade options: Rentomojo offers upgrade options for customers who want to switch to newer or better items. This is a great advantage as it allows customers to keep up with the latest trends in furniture and appliances withouthaving to spend a lot of money. Easy cancellation: Rentomojo's cancellation policy is simple and hassle-free, allowing customers to cancel their rental agreement at any time without incurring any penalties. Disadvantages: Limited options: While Rentomojo offers a wide range of furniture and appliances, the selection is still limited compared to what is available in the market. This can be a disadvantage for customers who are looking for specific items. Quality concerns: Some customers have reported quality concerns with Rentomojo's products, especially with appliances. There have been complaints about appliances breaking down or not working properly after a few months of use. Hidden charges: Some customers have reported being surprised by hidden charges that were not disclosed upfront. These charges include delivery charges, installation charges, and maintenance charges. Availability: Rentomojo is currently available only in select cities in India, which can be a disadvantage for customers who live in areas where the service is not available. Security deposit: Rentomojo requires customers to pay a security deposit, which can be a significant amount depending on the items rented. This can be a disadvantage for customers who are on a tight budget

1.3 PROJECT OVERVIEW

The Building Rental Management System is a software solution designed to streamline the management of rental properties. The system provides a user-friendly online platform that handles various aspects of property management, including rental agreements, tenant information, rent collection, and maintenance requests. Its primary objective is to simplify the rental management process for property owners and managers while improving the overall tenant experience. The project aims to develop and implement an online building rental system that is easily accessible to the public. The system offers a centralized platform where property owners can list their properties and manage all aspects of property rental. It provides tools for creating and managing rental agreements, setting reminders for agreement expiration and rent due dates, and tracking tenant information. The system also facilitates rent collection, allowing property owners and tenants to handle payment transactions securely and efficiently. For tenants, the system offers a convenient way to search for rental properties based on their specific requirements. They can browse through a comprehensive list of properties, view detailed information, and submit rental applications. Tenants can also communicate maintenance requests to property owners or managers through the system, ensuring timely resolution of any issues. The project focuses on creating a user-friendly interface that simplifies the rental management process for all stakeholders involved. The system aims to enhance transparency, improve communication between property owners/managers and tenants, and optimize efficiency in property management tasks. By developing this online building rental system, property owners can maximize their rental income while ensuring a high level of satisfaction for the renters. The project report will detail the development and implementation of the Building Rental Management System. It will cover the system's features, functionality, and benefits for property owners, tenants, and property managers. The report will also highlight the challenges addressed by the system, the technologies used for development, and the overall impact of the system on the rental management process. Overall, the project aims to provide a comprehensive and efficient solution for managing rental properties, simplifying the rental process, and improving the overall rental experience for property owners and tenants.

1.4 BENEFITS

Real-time monitoring in a rental management system offers numerous benefits, including improved efficiency, enhanced tenant experience, optimal resource allocation, timely rent collection, streamlined maintenance management, data-driven decision making, cost savings, and compliance support. These advantages contribute to effective and seamless rental property management and ultimately result in higher tenant satisfaction and increased profitability CHALLENGES Implementing a rental management system presents several challenges. These include establishing a reliable infrastructure, managing and analyzing large volumes of data, ensuring data security and privacy, integrating with existing systems, encouraging user adoption through training and support, accommodating scalability and flexibility, conducting regular maintenance and upgrades, and complying with legal and regulatory requirements. Overcoming these challenges is crucial for a successful rental management system implementation, improving efficiency, and enhancing the overall rental experience.

1.5 CHALLENGES

Rental management systems play a crucial role in efficiently overseeing and organizing the rental properties for property owners, landlords, and property management companies. However, these systems are not without their challenges, which can impact the seamless operation of property management processes. One of the primary challenges of rental management systems is effectively handling maintenance requests. Timely and efficient maintenance is essential to ensure ten

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One of the primary challenges of rental management systems is effectively handling maintenance requests. Timely and efficient maintenance is essential to ensure tenant satisfaction and property value. A rental management system must have a streamlined process for tenants to report issues, and property managers must ensure

that these requests are addressed promptly.

Accurate rent collection is another critical challenge. Rental management systems must integrate secure payment gateways and automated reminders to ensure that rent payments are collected on time. The system should also handle discrepancies and late payments while maintaining a transparent record of financial transactions.

Managing tenant disputes can be complex. Rental management systems need to provide a platform for effective communication between tenants and property managers. Resolving conflicts over issues like repairs, noise complaints, or lease terms requires a system that facilitates open dialogue and ensures a fair resolution process.

Maintaining accurate property records is essential for legal compliance and financial tracking. A rental management system should organize and store important documents such as leases, inspection reports, and tenant communication. Ensuring data integrity and security is crucial to prevent unauthorized access or loss of sensitive information.

Staying updated with local regulations and laws poses an ongoing challenge. Rental laws vary by region and can impact lease agreements, tenant rights, eviction processes, and property maintenance standards. A rental management system must have the flexibility to adapt to changing legal requirements and provide property managers with the necessary tools to remain compliant.

Furthermore, technological limitations and user adoption can hinder the effectiveness of rental management systems. Not all tenants and property owners may be tech-savvy, leading to resistance or difficulties in adopting the system. User-friendly interfaces, comprehensive training, and responsive customer support are essential to overcome these hurdles.

In conclusion, while rental management systems offer numerous benefits, they also come with challenges that require careful consideration and strategic solutions. Overcoming these challenges is essential to ensure the smooth operation of rental property management, tenant satisfaction, and overall business success.

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that these requests are addressed promptly.

1.6 DEVELOPEMENT METHODOLOGY

The methodology used in this project is the scrum methodology. Scrum is an agile development methodology used in the development of software based on iterative and incremental processes. Scrum is adaptable, fast, flexible and effective agile framework that designed to deliver value to the customer throughout the development of the project. The primary objective of scrum is to satisfy the customer's need through an environment of transparency in communication, collective responsibility and continuous progress. The development starts from a general idea of what needs to be built, elaborating a list of characteristics ordered by priority (product backlog) that the owner of the product wants to obtain. The five phases of scrum are: - 1. Initiation 2. Planning and estimation 3. Implementation 4. Reviewing 5. Releasing

Chapter 2

BACKGROUND

2.1 REQUIREMENT ANALYSIS

2.2 FUNCTIONAL REQUIREMENTS

The following are the functional requirements for Building Rental System User Registration User can register for an account through the website. Users can create a password for their account. Owner can register for an account through the website. Owner must provide their name, email address, phone number, and address. Owner can post hid building property details with images mentioning building address, location, rent amount etc. Payment Users can pay for their order through the website. Users can choose from multiple payment options, including credit/debit card, net banking, and mobile wallets. Feedback and Rating Users can provide feedback and rate the service through the website. The feedback will be used to improve the service and address any issues.

2.3 NON-FUNCTIONAL REQUIREMENTS

Security:

The system should ensure the security of user data, provide user authentication, and encrypt sensitive data.

Availability:

system should be available 24/7, with a minimum uptime of 99.9.

Performance:

- The system should be able to handle a high volume of users and transactions without significant delays or downtime.

Scalability:

- The system should be scalable to accommodate increasing user and property volume.

Usability:

- The system should be easy to use and navigate, with an intuitive user interface and clear instructions.

Compatibility:

- The system should be compatible with popular web browsers and mobile devices.

Data Backup and Recovery:

- The system should provide regular data backups and a disaster recovery plan to ensure data availability and reliability

Compliance:

- The system should comply with relevant data protection and privacy laws and regulations

2.4 TECHNOLOGY SPECIFICATIONS

The Technology Stack used for our application are:

Front end tool: HTML, CSS, JavaScript

Back-end tool: PHP

Database tool: MySQL

Frontend tools:

HTML

The Hyper Text Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as ¡img/¿ and ¡input/¿ directly introduce content into the page. Other tags such as ¡p¿ surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags but use them to interpret the content of the page.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.] This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting. Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device. The name cascading comes from the specified priority scheme to determine which style

rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable. The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/CSS is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents. In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

JavaScript

JavaScript often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of today, almost all of the websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on users' devices. JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It has dynamic typing, prototype-based object-orientation, and first-class functions. It is multi-paradigm, supporting event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM). The ECMAScript standard does not include any input/output (I/O), such as networking, storage, or graphics facilities. In practice, the web browser or other runtime system provides JavaScript APIs for I/O. JavaScript engines were originally used only in web browsers, but are now core components of some servers and a variety of applications. The most popular runtime system for this usage is Node.js. Although Java and JavaScript are similar in name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.

Backend tools:

PHP

PHP is an open-source server-side scripting language that many devs use for web development. It is also a general-purpose language that you can use to make lots of projects, including Graphical User Interfaces (GUIs). The abbreviation PHP initially stood for Personal Homepage. But now it is a recursive acronym for Hypertext Preprocessor. (It's recursive in the sense that the first word itself is an abbreviation, so the full meaning doesn't follow the abbreviation.) PHP runs on the Zend engine, which

is the most popular implementation. There are some other implementations as well, like parrot, HPVM (Hip Hop Virtual Machine), and Hip Hop, created by Facebook. PHP is mostly used for making web servers. It runs on the browser and is also capable of running in the command line. So, if you don't feel like showing your code output in the browser, you can show it in the terminal.

Database tool:

MySQL

MySQL, the most popular Open-Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. As with other relational databases, MySQL stores data in tables made up of rows and columns. Users can define, manipulate, control, and query data using Structured Query Language, more commonly known as SQL. MySQL's name is a combination of "My," the name of MySQL creator Michael Widenius's daughter, and "SQL". A flexible and powerful program, MySQL is the most popular open-source database system in the world. As part of the widely-used LAMP technology stack (which consists of a Linux-based operating system, the Apache web server, a MySQL database, and PHP for processing), it's used to store and retrieve data in a wide variety of popular applications, websites, and services

Chapter 3

DESIGN

A Data Flow Diagram (DFD) is a visual representation that depicts how data moves and is processed within a system. It is a powerful tool used in system analysis, design, and modeling to illustrate the flow of data, processes, and interactions among various components of a system. DFDs provide a clear and intuitive way to understand how data is input, transformed, stored, and output in a system.

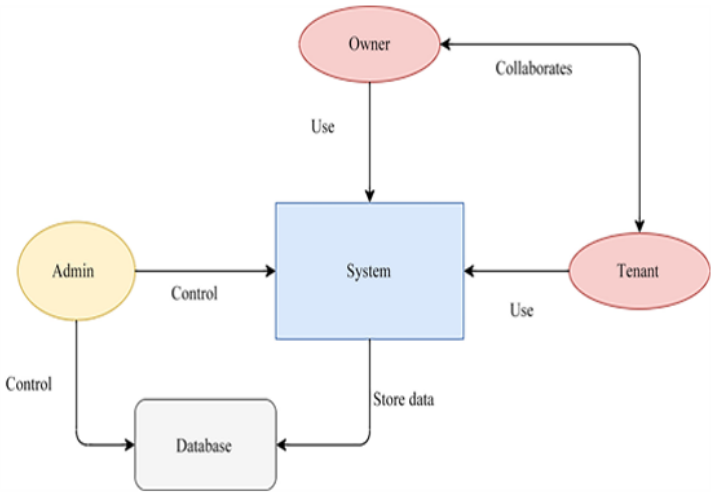


Figure 3.1: DFD

Chapter 4

PROJECT MANAGEMENT

4.1 SCRUM AND USER STORIES

Product Backlog

Organization	PG20IT01
Project	EVENTQUE
Scrum Master	ABDUL AHRAF M
Product Owner	KARTHIK SHANKER,IBRAHIM MUHAVVIS,ABDUL AHRAF M

Story ID	Category	Title	User story	Value	Sprint #
1	Design	Home page	Design the home page		1
2	Design	About page	Design the abot page		1
3	Design	Event page	Design the event page		1
4	Design	Contact page	Design the contact page		1
5	Design	Restration page	Design the registration page		2
6	Design	Login page	Design the login page		2
7	Admin	Dashboard	Admin can view overall details about the page		2
8	Admin	Admin login	Admin can access the page after logging in		3
9	Admin	Add event	Admin can add event		3
10	Admin	Add guests and venue	Admin can add guests and venue of the event to be held		3
11	Admin	Manage events	Admin can manage the added events		4
12	Admin	Event catogories	Event catogorised for the ease of scheduling		4
13	Admin	Edit events	Admin can edit event		4
14	Admin	Delete event	Admin can delete event		4
15	Admin	Forgot password	Admin and user seeks simple password recovery to reset the account		4
16	Admin	Add coordinator	Admin can add coordinators which can be visible to the user		4
17	User	View Event	User can view all the events added by the admin		4

Figure 4.1: Scrum and User Stories

4.2 SPRINTS

4.2.1 SPRINT 1

Sprint #1Tracking Sheet

Project	Building Rental Management System			
Sprint #	1		Start date	2/16/2023
Sprint focus	Design			

				Remaining units										
				week 1						week 2				
				1	2	3	4	5	6	7	8	9	10	
Task ID	Story ID	Description	Initial estimate	Thu 16/02	Fri 17/02	Sat 18/02	Sun 19/02	Mon 20/02	Tue 21/02	ww/xxxxx	Thu 23/02	Fri 24/02	Sat 25/02	
1	1	Design UI	5		3	1	0	1	2	0	1	2	2	
2	1	Implement UI	10	2	2	3	0	1	1	2	0	3	1	
3	2	ER Diagram	5	2	2	1	2	2	1	2	2	1	1	
4	2	Design database	15	0	0	2	2	0	1	1	2	2	3	
5	13	Testing and Debugging	2	0	0	0	0	1	0	0	0	0	2	
		Remaining units (actual)	37	4	7	7	4	5	5	5	5	8	9	
		Remaining units (ideal)												
		Velocity		33	-3	0	3	-1	0	0	0	-3	-1	

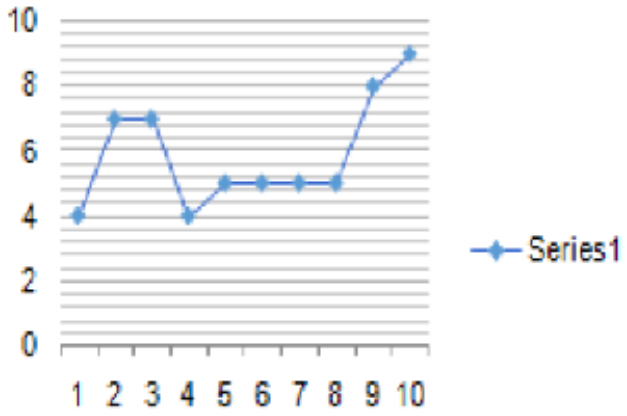


Figure 4.2: sprint1

4.2.2 SPRINT 2

Sprint #2Tracking Sheet

Project	Building Rental Management System		
Sprint #	2	Start date	
Sprint focus	Login page		

				Remaining units									
				week 1					week 2				
				1	2	3	4	5	6	7	8	9	10
Task ID	Story ID	Description	Initial estimate	Sun 26/02	Mon 27/02	Tue 28/02	Wed 01/03	Thu 02/03	Fri 03/03	Sat 04/03	Sun 05/03	Mon 06/03	Tue 07/03
6	3	Create Login Page	9	1	3	1	2	2	5	4	3	2	1
7	4	Create signup page	9	1	1	2	3	1	1	2	3	4	2
8	5	Forgot password option	4	4	4	5	4	1	1	1	4	2	4
9	12	Enquiry page	4	2	2	3	5	1	1	2	4	2	2
10	13	Testing and debugging	4	2	3	1	3	4	2	4	1	2	3
		Remaining units (actual)	30	10	13	12	17	9	10	13	15	12	12
		Remaining units (ideal)											
		Velocity		20	-3	1	-5	8	-1	-3	-2	3	0

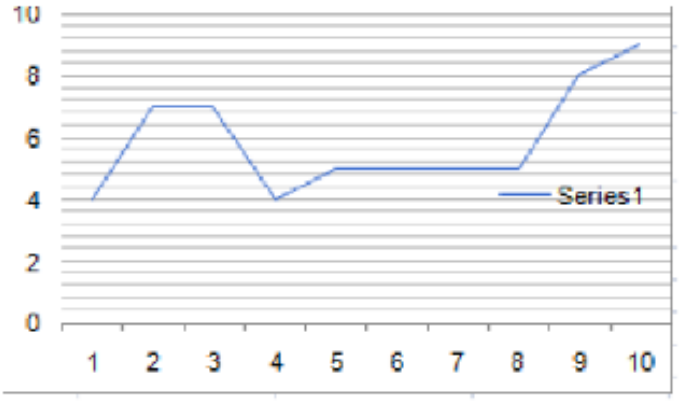


Figure 4.3: sprint2

4.2.3 SPRINT 3

Sprint #3Tracking Sheet

Project	Building Rental Management System	
Sprint #	3	Start date
sprint focus	Home page creation	

				Remaining units								
				week 1					week 2			
				1	2	3	4	5	6	7	8	9	10
Task ID	Story ID	Description	Initial estimate	Tue 07/03	Wed 08/03	Thu 09/03	Fri 10/03	Sat 11/03	Sun 12/03	Mon 13/03	Tue 14/03	Wed 15/03	Thu 16/03
11	3	Create Owner Page	8	8	7	6	5	4	4	3	2	1	0
12	5	Create Tenant Page	8	8	7	4	3	2	5	2	1	1	0
13	1	Design UI for Manager and Employee	5	5	4	3	2	1	1	2	3	3	1
14	10	Testing and debugging	4	4	4	2	3	2	1	1	1	2	2
		Remaining units (actual)	25	25	22	15	13	9	11	8	7	5	3
		Remaining units (ideal)		25	22	19	16	13	10	7	4	1	0
		Velocity		0	3	7	2	4	-2	3	1	2	2

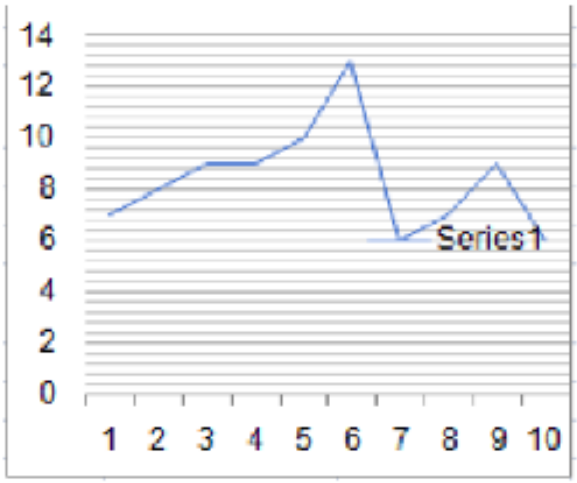


Figure 4.4: sprint3

4.2.4 SPRINT 4

Sprint #4Tracking Sheet

Project	Building Rental Management System		
Sprint #	4	Start date	3/17/2013
Sprint Focus	Property Booking		

				Remaining units									
				week 1					week 2				
				1	2	3	4	5	6	7	8	9	10
Task ID	Story ID	Description	Initial estimate	Fri 15/03	Sat 16/03	Sun 17/03	Mon18/03	Tue 19/03	Wed 20/03	Thu 21/03	Fri 22/03	Sat 23/03	Sun 24/03
15	7	Create Car listing	20	3	4	2	4	1	1	3	2	5	4
16	8	Create booking details page	15	1	2	4	1	5	4	2	1	3	2
17	9	Create Search option	20	2	1	3	5	3	1	4	1	5	5
18	2	Database linking	20	2	1	4	5	2	5	3	2	3	1
19	13	Testing and debugging	4	2	3	1	2	4	2	1	1	1	2
		Remaining units (actual)	79	16	11	14	17	15	15	13	7	17	14
		Remaining units (ideal)											
		Velocity		59	-1	-3	-2	2	2	9	6	-10	3

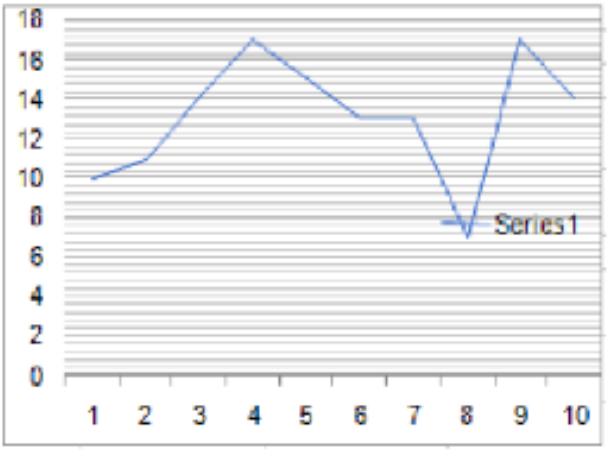


Figure 4.5: sprint4

4.2.5 SPRINT 5

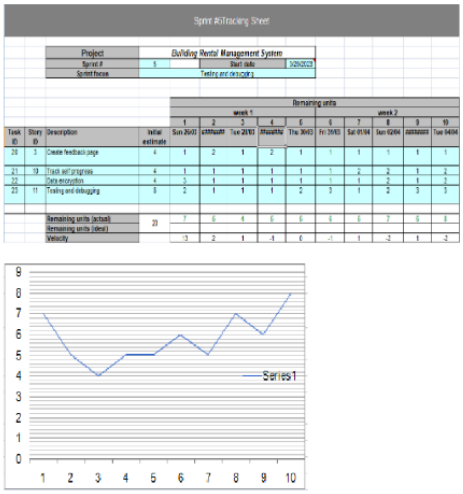


Figure 4.6: sprint5

4.3 RESULTS AND DEMO SCREENSHOTS

4.3.1 HOME PAGE

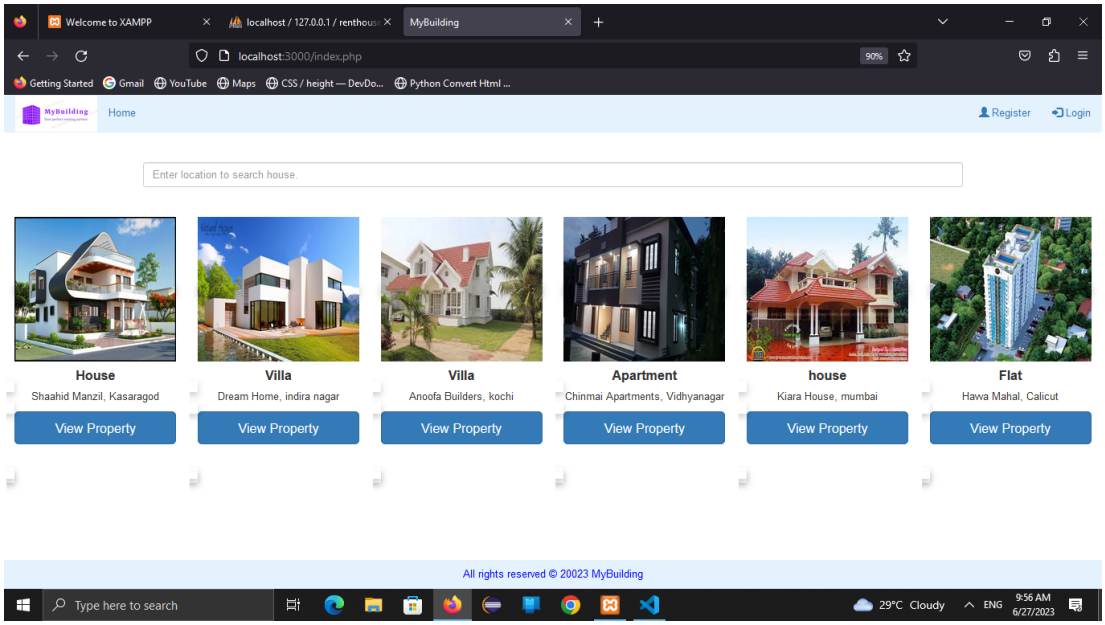


Figure 4.7: home page

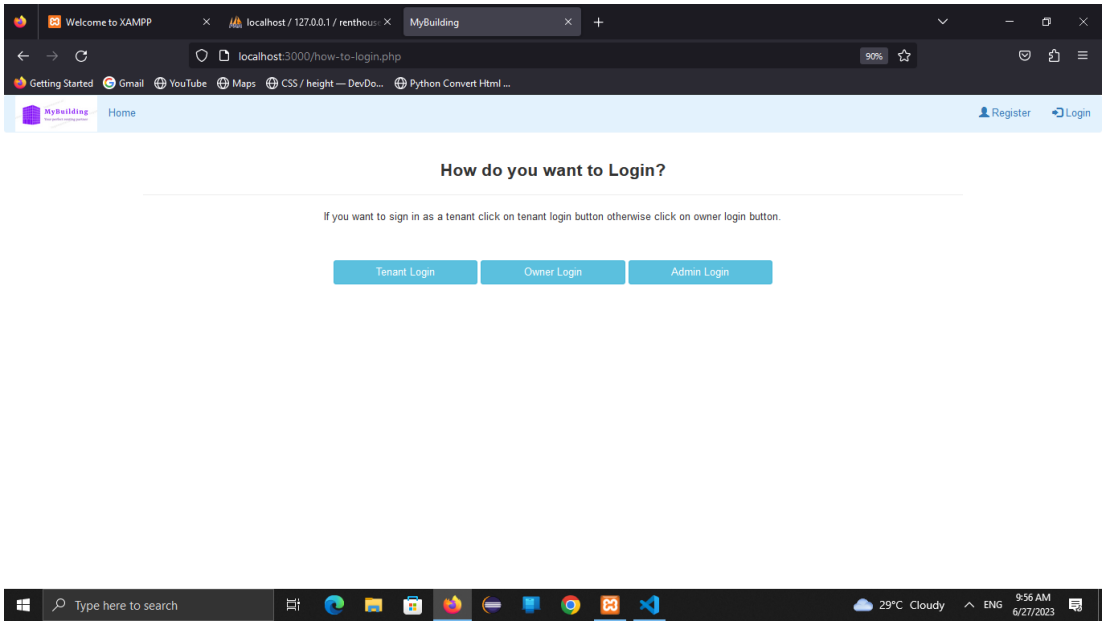


Figure 4.8: login page

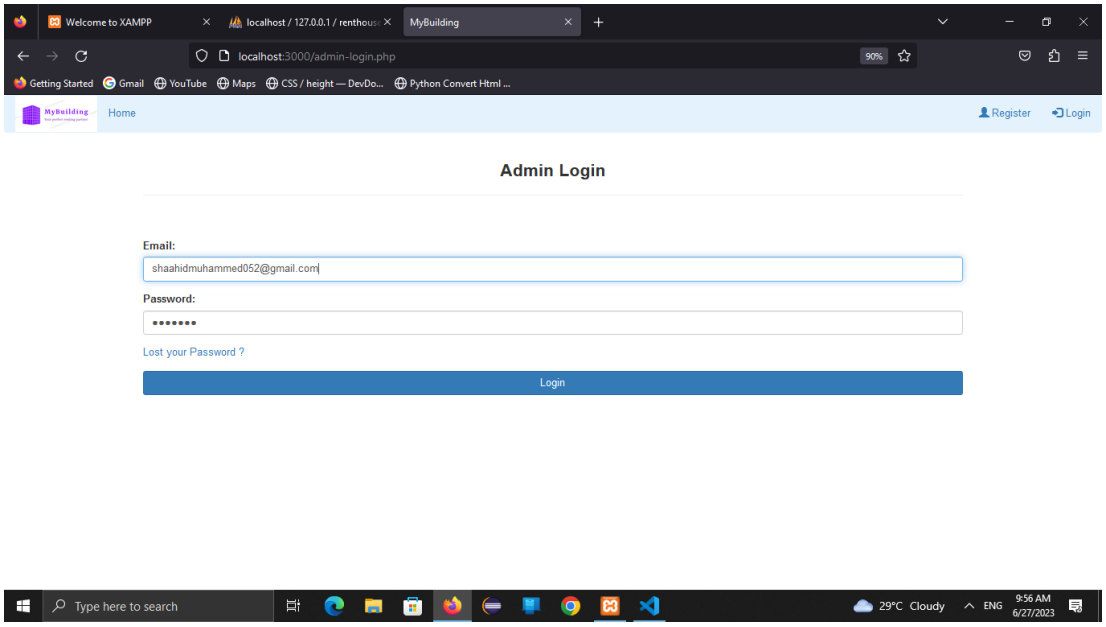


Figure 4.9: Admin login

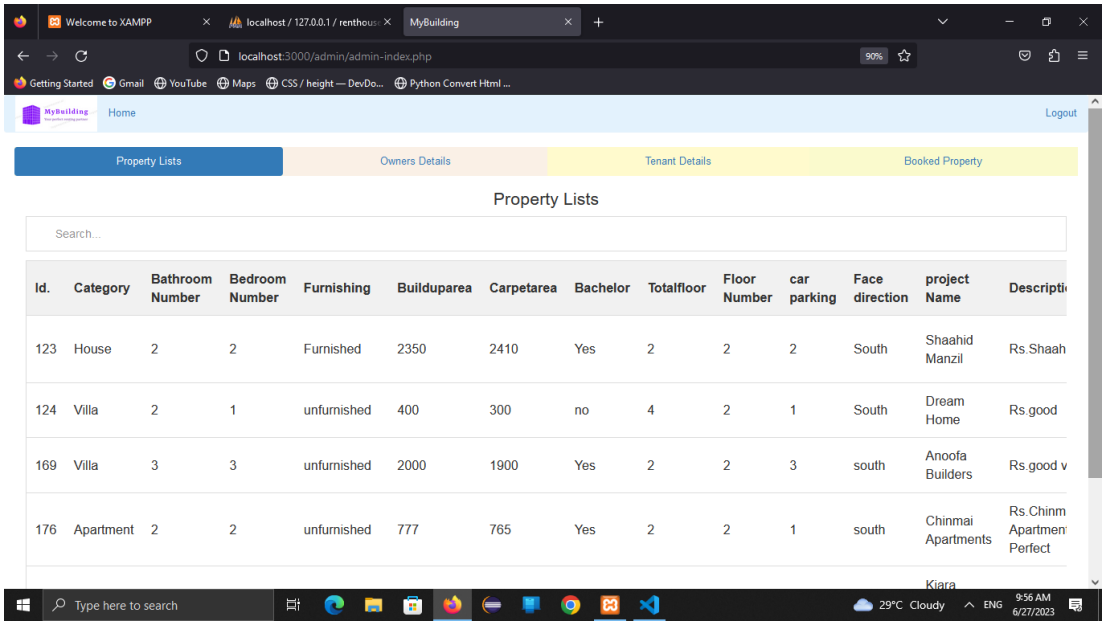


Figure 4.10: admin

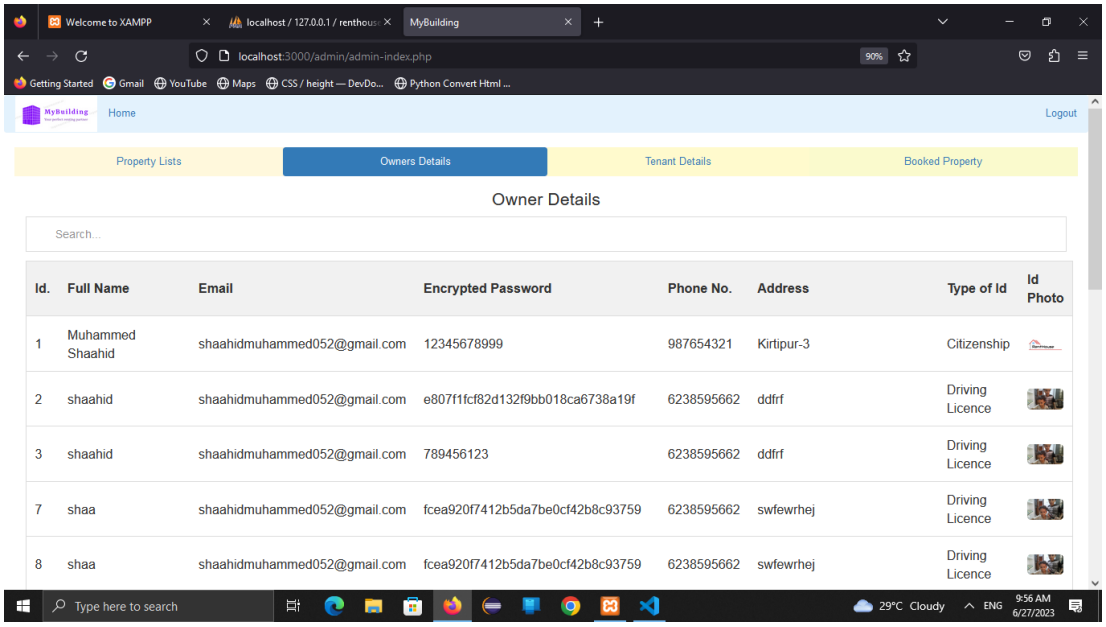
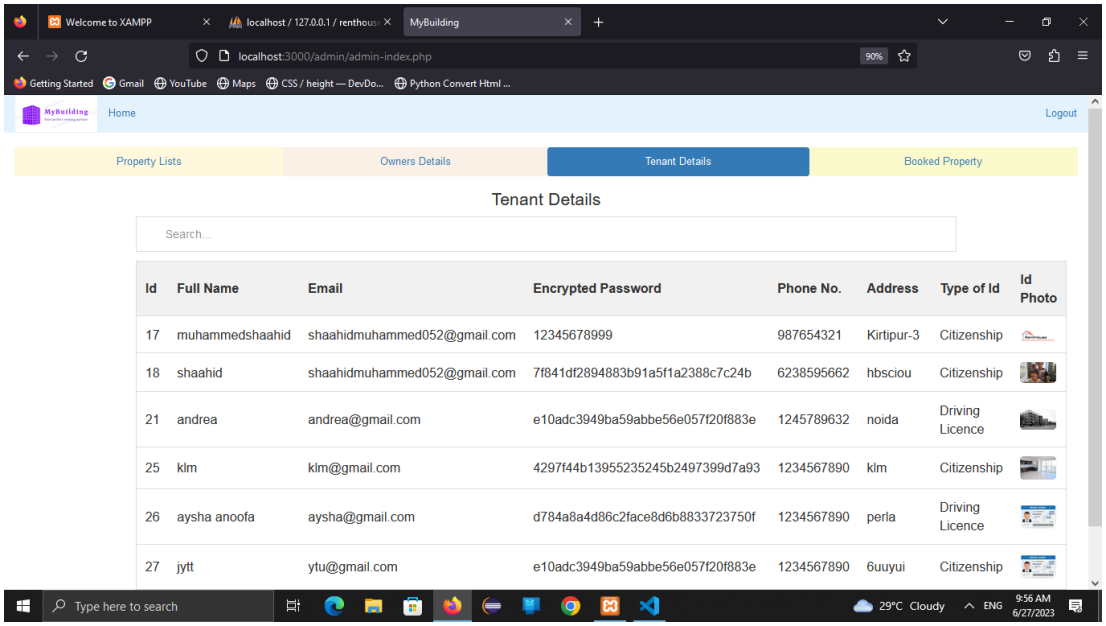


Figure 4.11: admin



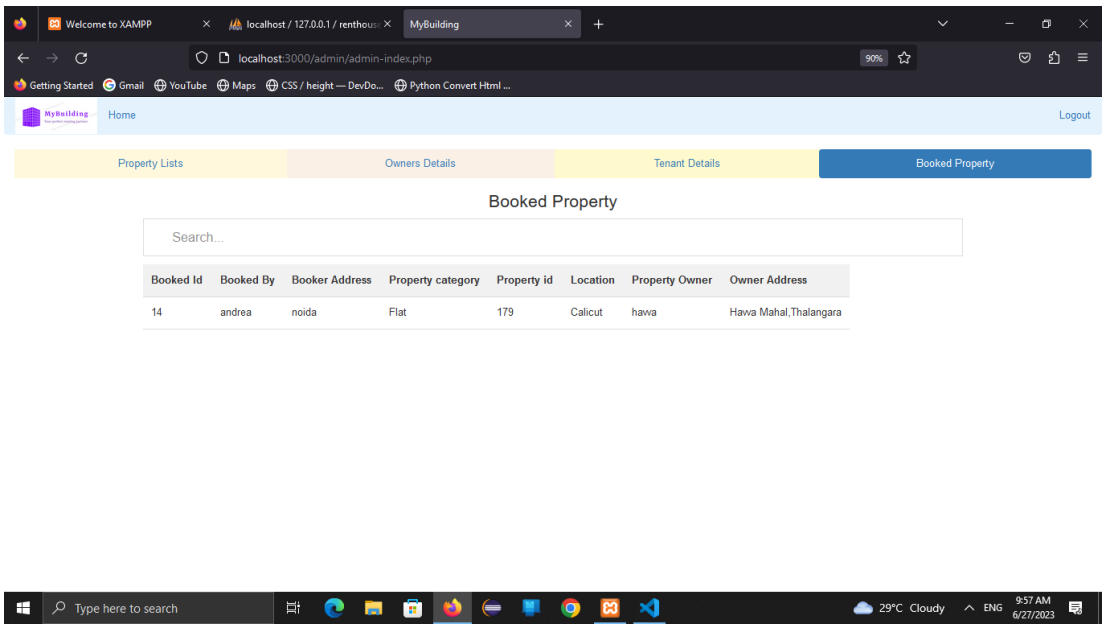


Figure 4.12: admin booked

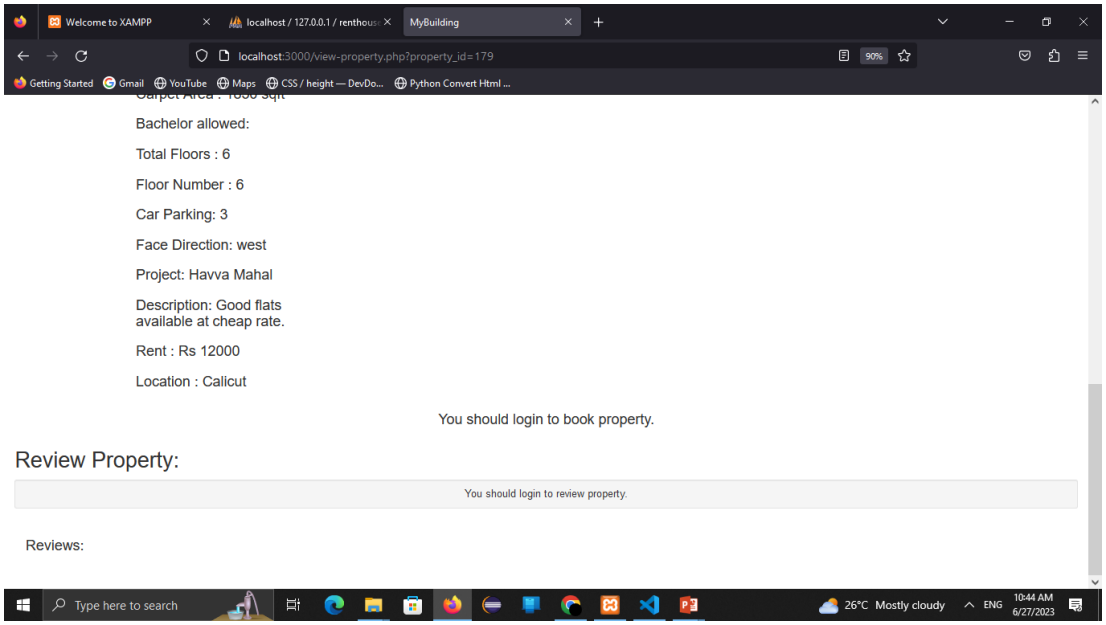


Figure 4.13: property booked

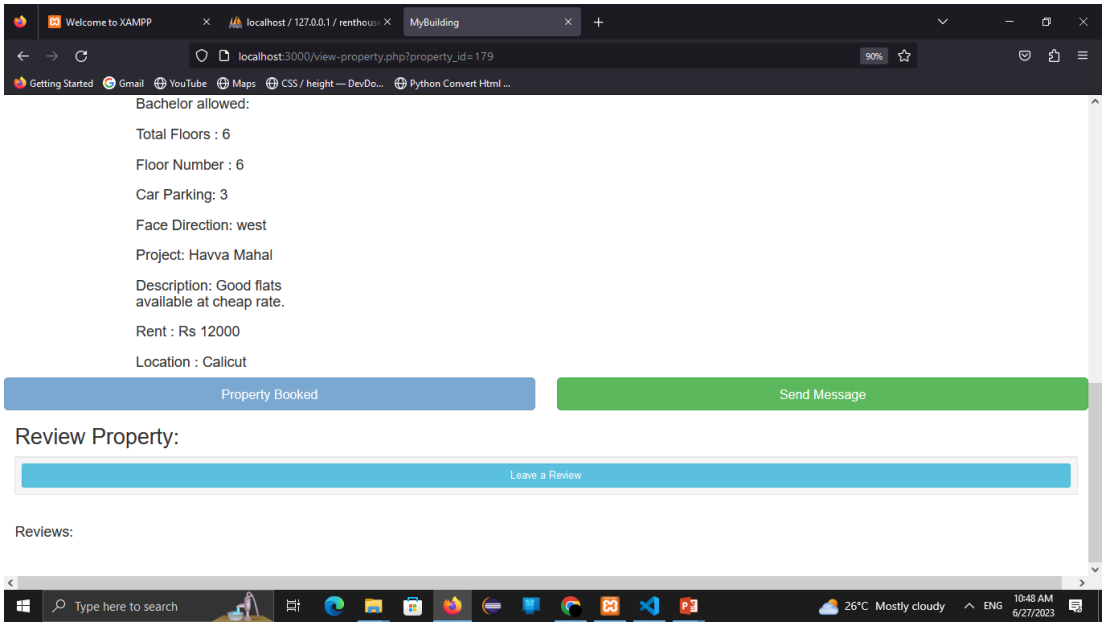


Figure 4.14: book propery or message

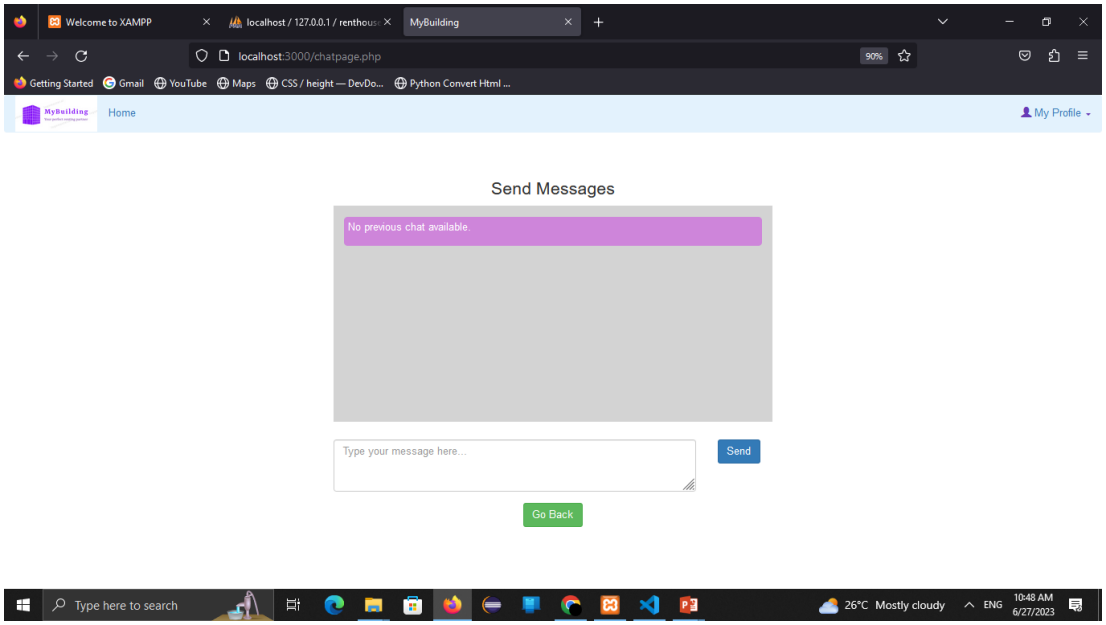


Figure 4.15: send message

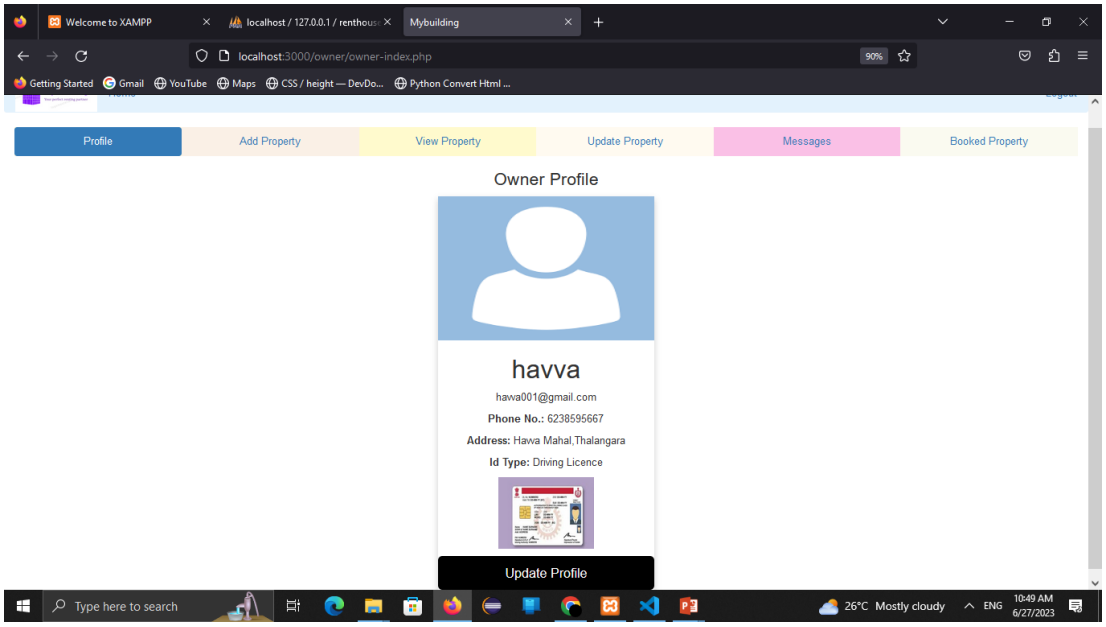


Figure 4.17: profile

Chapter 5

IMPLEMENTATION

Implementation is the stage of a project which theory is turned into practice. The major steps involved in this face are: **CODING**

The system design needed to be implemented to make it a workable system. This demands the coding of design into computer understandable language eg; programming language. Here HTML and CSS used for Front end programming PHP is used for Back end.

TESTING

Before actually implementing the new system into operation, a test run of the system has done for removing the bug If any.

PROGRAM TEST

When the program coded, compiled and brought to working conditions, it was individually tested with the prepared test data. Any undesirable happening has been noted and debugged (error corrections).

SYSTEM TEST

After carrying out the program test for each of the programs of the system and errors removed, test has done.

MAINTENANCE

It is necessary to eliminate errors in the system during its working life and to tune the system to any variations in working environments.

MODULE DESCRIPTION

User interface – Input form to perform user registration is provided. Users can login to the website using their username and created password. And they can view the water level. And also getting alert messages.

Chapter 6

CONCLUSION

This Software Requirements Specification document outlines the requirements for the development of Building Rental System. The aims to provide online portal for rent management. In this system owner can list his building property. Tenant can buy it for rent. The service will be accessible through our website.

Chapter 7

FUTURE WORKS

Future works for a rental management system include developing a mobile application for convenient access, integrating with smart home technology for automation and control, implementing advanced analytics and reporting tools for data-driven decision-making, incorporating machine learning and predictive analytics for intelligent insights, exploring IoT integration for property monitoring, enhancing virtual reality and augmented reality experiences for property viewing, improving communication and collaboration features, integrating with online rental platforms, exploring block chain technology for secure transactions, implementing sustainability initiatives, and leveraging emerging technologies for continuous system enhancement. These future developments aim to improve efficiency, user experience, and sustainability in the rental management process.

References

[1] https://www.tutorialspoint.com/

[2] https://www.w3schools.com/

[3] https://www.freecodecamp.org/