

To-Let: A Website that Locates Available Homes Based on Your Needs

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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ABSTRACT

The house rental issue is one of the elemental parts of society. Currently, finding and getting a suitable home in Bangladesh has become a very challenging task for anyone if people search for it physically. Because we waste a large part of our precious time in searching for vacant houses as per our requirement. That is why this Web Application helps user to register individual home or apartment to assist you in finding the perfect rental home or property. Also you can find your next rental from search view in your targeted area. This website is designed to attend to all our needs to renting homes at Dhaka. This website is a common online-based smart house rental web application that has been developed both for tenants and for house owners. This web application is very user-friendly, efficient and it has got many unique and smart features that are not offered by other currently available house rental websites here in Bangladesh. Tenants can register using their phone number, store information about their identity, search for available houses, send messages to house owners and choose a suitable house using developed web applications. House owners can also register for the system, which will manually verify and house owner can view a tenant's information history whenever a tenant makes contact through text and supply house related information accordingly. The proposed online smart house system has been tested and validated. It works very efficiently with many smart features. The application provided faster and improved opportunities to get houses, as well as ensuring the availability of houses for rent in the greatest number of areas and help to spread trustworthy services in Dhaka and nearby areas.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Development of houses for rent has become an important factor in modern society. This chapter will provide a brief understanding of the background of the study, definition of the project problem statement, its objectives, scopes, project justification, project deliverables and project budget and schedule. Housing has central importance to quality of life with considerable economic, social, cultural and personal significance. Though a country's national prosperity is usually measured in economic terms, increasing wealth is of diminished value unless all can share its benefits and if the growing wealth is not used to redress growing social deficiencies, one of which is housing.

Housing plays a huge role in revitalizing economic growth in any country, with shelter being among the key indicators of development. Most families choose to rent houses based on their income and family situations. Unfortunately, there may not be enough good quality rental housing for these families. The demand for rental houses is extremely high and more rental houses need to be put in place. Developing rental houses has numerous advantages, particularly for landlords, who can increase their profits through the rent paid by tenants. The increased number of tenants and landlords complicates management, especially for landlords who lose

large sums of money to tenants who do not pay their rent. The above statement gives a clear declaration as to why rental house management system needs to develop.

1.2 Motivation

We have been watching in the western countries they have been developing and also using House Renting systems almost in every single cities so that the tenants can see the informations and updates regarding their awaiting homes.

This motivated us to build something for our customers who are facing problems for finding their desiring home for them or for their closed one's and providing them good quality rental housing based on their income and family situations.

1.3 Objectives

Our system is going to help people who are facing problems for finding their desired home by providing them very user-friendly and efficient rental website. This system is combined of three individual parts operated by admins, house owners and tenants. Admins will set the details for each and every users (house owners or tenants), House owners can register and give information about their available homes and tenants can register, store information about them, search for available houses, send messages to house owners and choose a suitable house on their interface .

1.4 Expected Outcome

This project will allow people to find any house from anywhere in Dhaka through their smart phones or computers. Thus anyone will be able to reduce time waste. Besides financially not stable peoples will find a great comfort here. Also, people with a decent background and interested in business of house rent are the part of this system.

So that, the final outcome of the project is to reduce people hassle to find and get suitable home based on their needs.

1.5 Report Layout

This project contains two chapters so far. In the first chapter named Introduction, we will talk about Introduction, Motivation, Objectives, Expected Outcome, and Report Layout. Also, the final chapter named Conclusion and Future scope of our project. In this chapter, we will talk about Discussion and Conclusion and Scope for Further Development. In this report, we talk about our application and its various problem, solution, and use of the project.

CHAPTER 2

BACKGROUND

2.1 Introduction

People who live in Bangladesh specially in Dhaka city face huge problems on renting a house. People come to the city from all over the country to live the life they want. Also, people want money and big cities are the platforms for making money. Everyone tries to do business or get a job with a good salary.

Now the point is, they come to cities where they have their own place to live. So, everyone tries to get a house for rent. Also, students from all districts come to Dhaka to pursue higher education. 97% of students are bachelors and they need a house to live in. But the main problem is that getting a house for rent is lengthy and it takes a long time to be processed. So we implemented various types of solution to make people up to date and planned to design a solution related to our country and try to give our user a hassle-free life by providing our system which is more user-friendly and easy for users to use.

2.2 Related Works

Around the some related services are available. We believe that, the available services are serving users properly and so that this type of solutions can be effective in Dhaka city also. Some of those services are given below.

bdHousing.com: For almost 17 years, “bdHousing.com” has held the dominating position of offering a traditional and well-accepted stage for property owners to promote their assets for rent or sale, as well as allowing property seekers to discover their dream house. As a result, it is now known as Bangladesh’s largest online property selling website.

Renthome: It is an internet marketplace that assists individuals in finding land, a cheap home, or business space. Their goal is to provide our valued clients with the most up-to-date marketing information and make it as easy as possible for

them to contact brokers, developers, and landlords.

Bikroy.com: The famous Bangladeshi largest market place “Bikroy.com” has a partial section for house rent or buy-sell. Since then, the system has worked as a place to buy and sell used items.

2.3 Comparative Studies

According to previous points there are some similar system available. But, basic working principal is totally different and structurally, the systems have deference.

Some of those are build for specific purpose like business development or self interest. On the other hand our system is designed to be used for mass people. We are planning to make the system available for any people who wants to rent home in Dhaka city. Even location tracking system is also different in cases. Some system uses self build location trackers where we are using worlds mostly used map Google map. Google Map is the most accurate and widely used map all around the world. That is why, we believed in Google map to track and share proper location of house.

2.4 Challenges

A big challenge to implement the project is getting cooperation from both house owners and renters side. Again, the incentives should be strong enough to let the supply side people always engaged enough with the platform. Except that, the admins also need some training to use it. Moreover, the people who don't know how to use android or how to use online platforms can't take the advantage of our system.

We wish, the project's main goal to reduce human hassle will fulfill by everyone's cooperation and we can implement it on action.

CHAPTER 3

METHODOLOGY

3.1 Business Process Modeling

ADMIN MODULE

This Admin module contains the complete details about the owners and renters and views the customer complaints. There are some modules like login, user view, add/view rooms, send message to owner, make complaint, view complaint from customer. Login is use to login in the website and sign in is to create an account. User view contains the user details(both owners and renters). The admin and owners can add and view the rooms. If the admin wants to contact any customer they can send a message. Any complaint by customer that can be view by the admins and owners. The sub modules are:

- LOGIN
- USER VIEW
- ADD/VIEW ROOMS
- VIEW COMPLAINT FROM CUSTOMER

USER MODULE

User Modules contains every user details who register as the user. The people who want to buy the home for rent they want to register as a user and login. The user can check the room details and availability of the room which is nearby them. They can also check the booking status.

- REGISTER
- LOGIN
- VIEW ROOM STATUS

ROOM MODULE

The Room module contains the availability of the room and the user can book the room. A system through which customers can book available Rooms online prior to their date of using the house

instead of walking around and asking for a vacant house. The details about the rooms can view in this module.

SEND MESSAGE TO CUSTOMER MODULE

If the owner or renter want to contact with each other they can send message. They can chat with it. Here They can discuss about the room or rent details etc.

VIEW COMPLAINTS FROM CUSTOMER MODULE

The system indicates that the employee's competence, friendliness and active listening skills are particularly important for customer complainants. Customers are more important factors in the system. Every customer feedback is important for the owner and admin.

3.2 Requirement Analysis and Collection

3.2.1 Software Requirements:

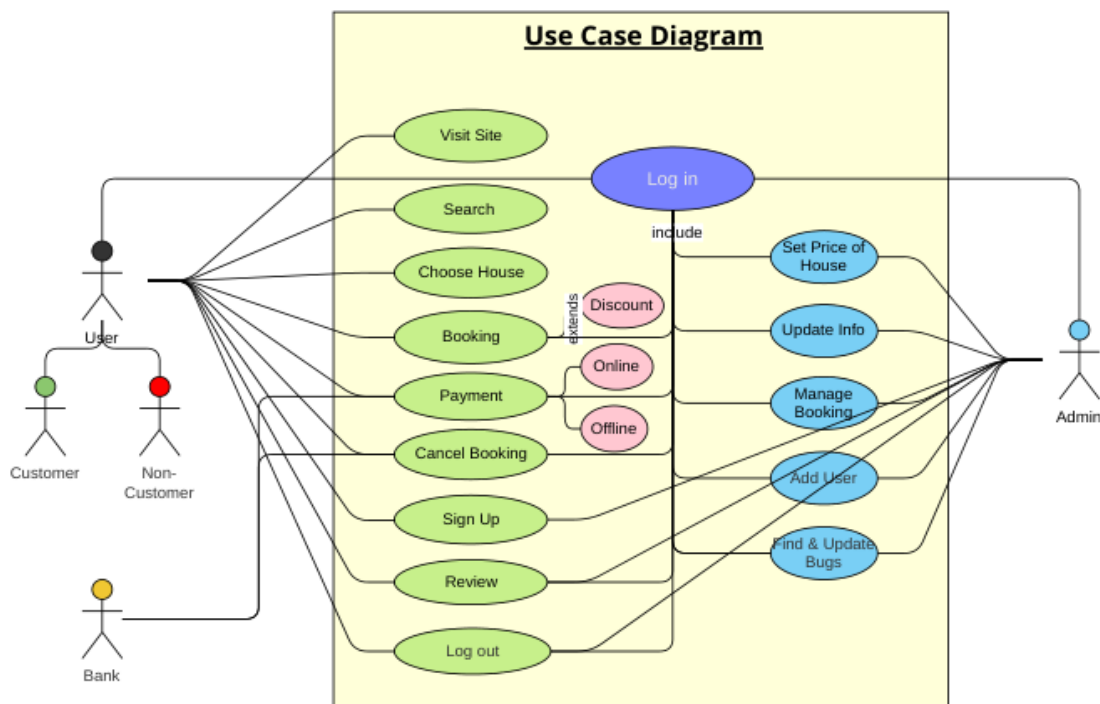
- **VS Code:** Visual Studio Code is a code editor where we can easily code for our necessary codes and see live output easily.
- **Browser:** To see the live output we need a browser like Chrome, Brave, Firefox, Edge etc.

3.2.2 Hardware Requirements:

- Windows Operating System.
- Computer configuration:
 - 8 GB RAM
 - 512 GB SSD
 - 2.1 GHz Processor.

3.2.3 Use Case Modeling and Description

A Use Case model is a graphical representation of the relationships between the components of a system. Use cases are methods used in systems analysis to identify, describe, and manage system requirements. User interaction is an example of how different types of users interact with problem-solving systems. For example, select Users, Users, Applications, and Systems to achieve this goal



CHAPTER 4

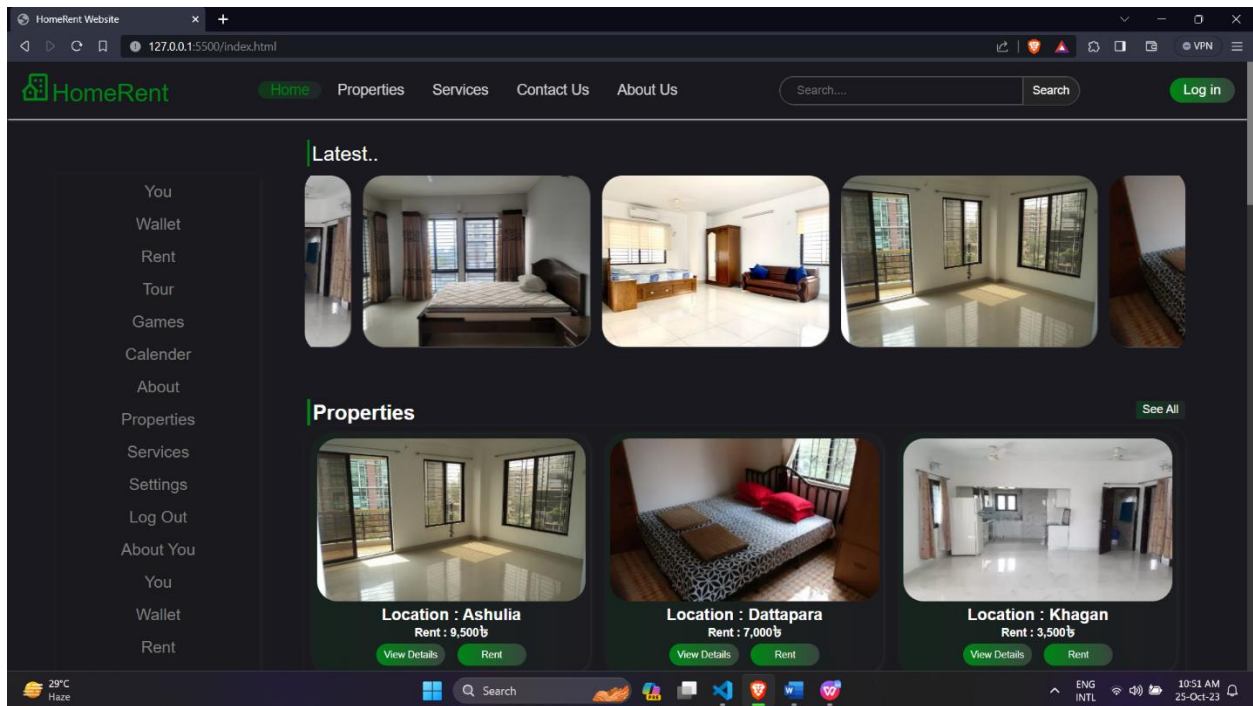
DESIGN SPECIFICATION

4.1 Front-end Design

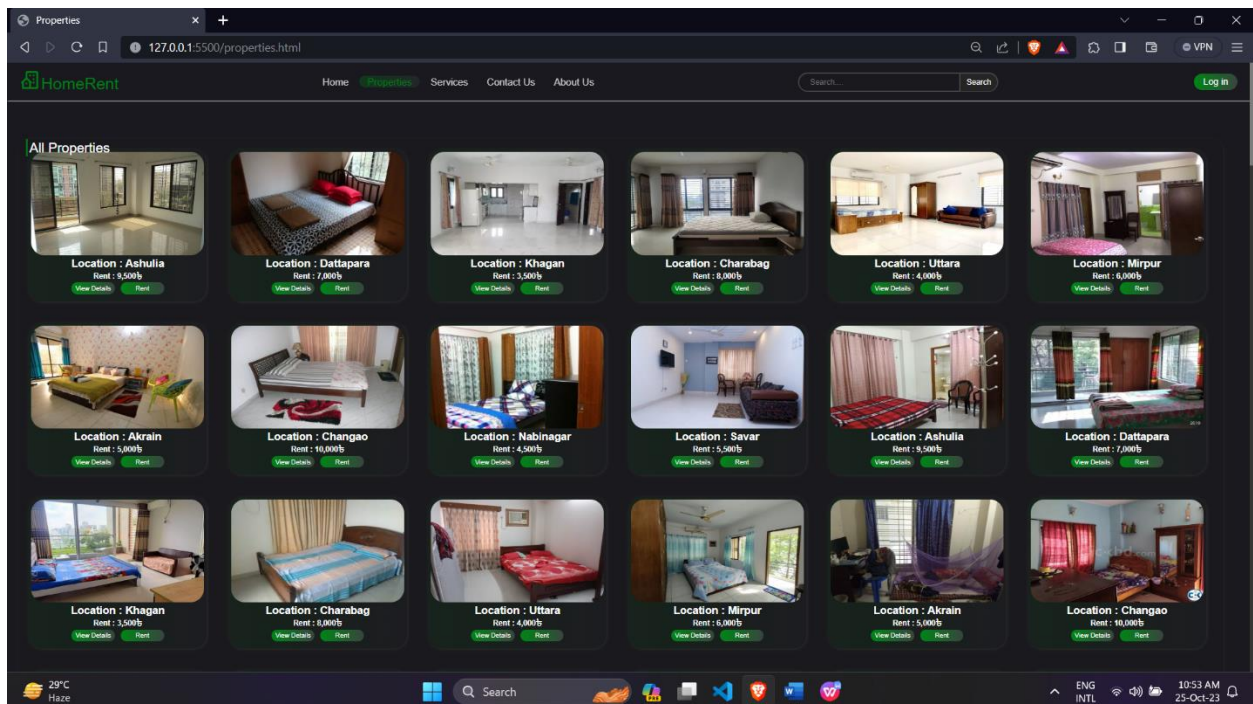
An Android app has two parts: The frontend part and the backend part. The frontend part is created using html, CSS and Javascript. The frontend is mainly the visible part of the developed mobile app that the user interacts with it. The system is divided into 2 different parts. Those are.

- Admin Part
- User or Renter Part

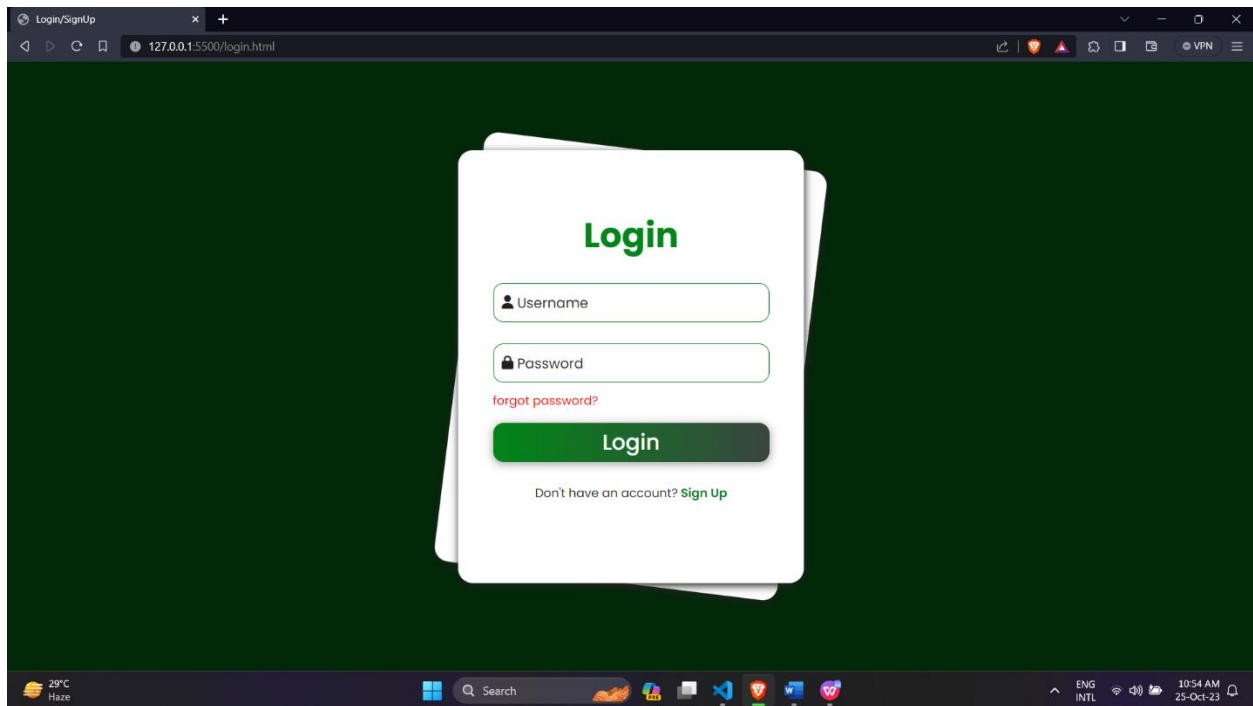
Home Page:



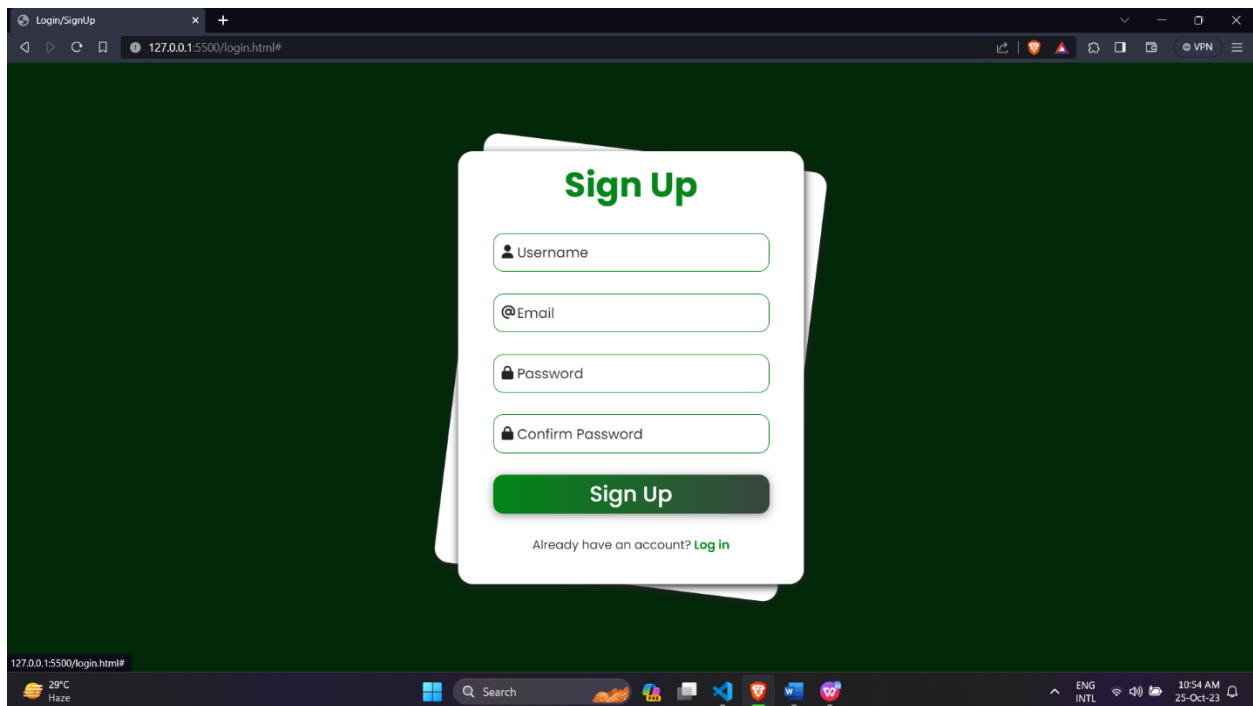
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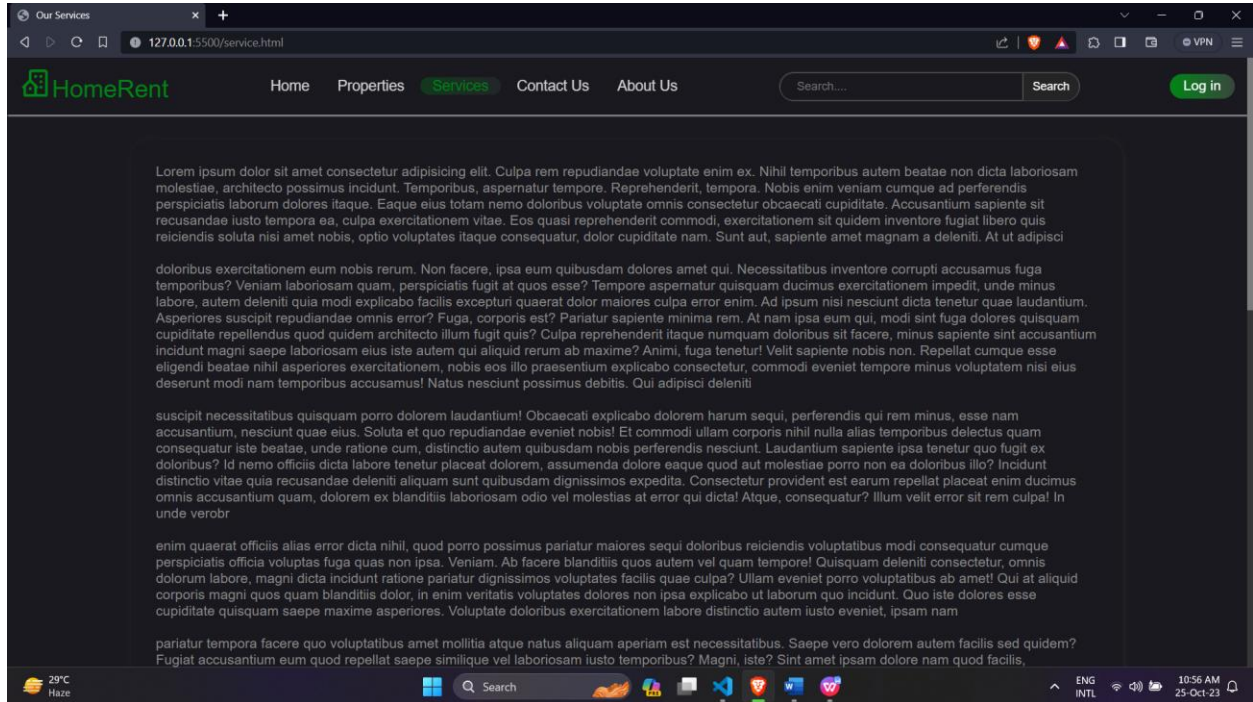
Login Page:



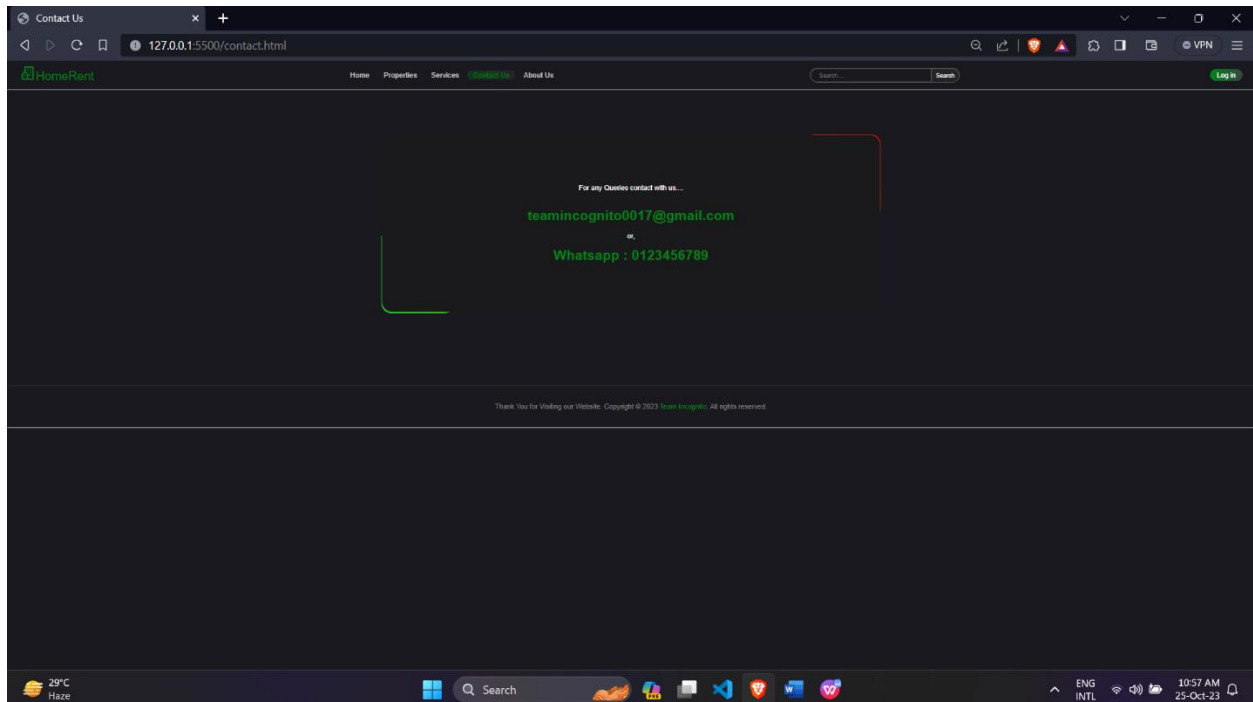
Sign Up Page:



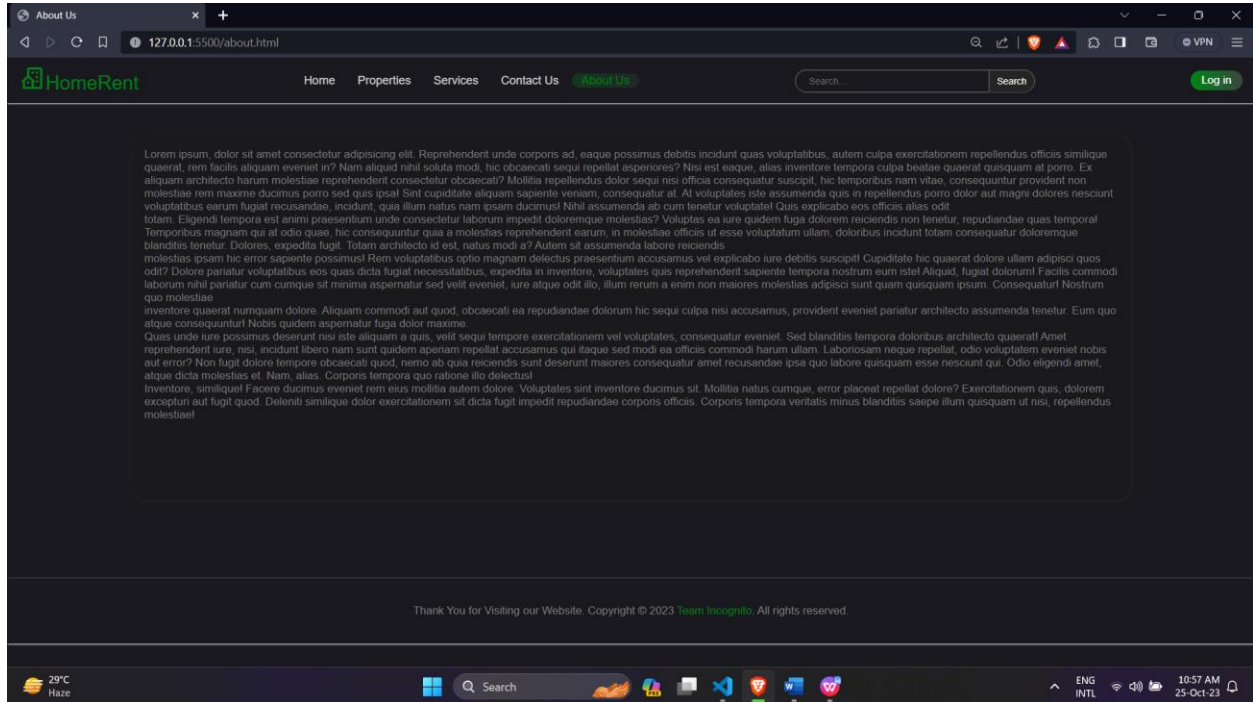
Service Details Page:



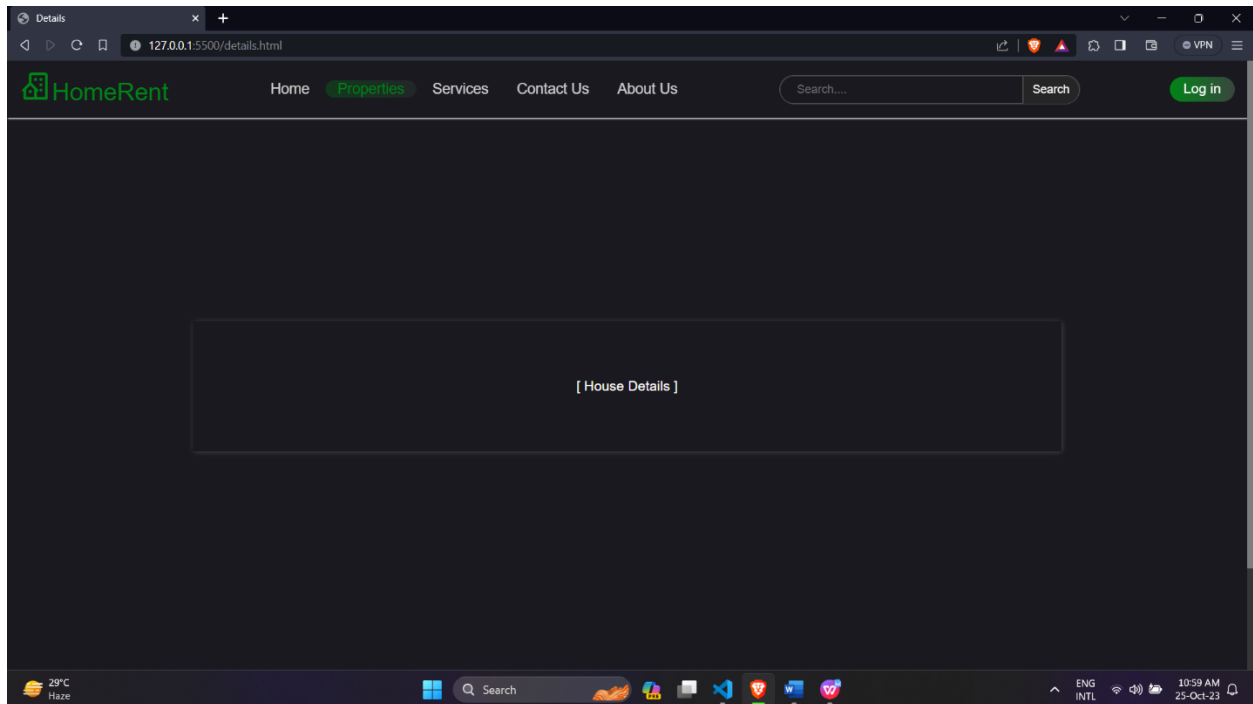
Contact page:



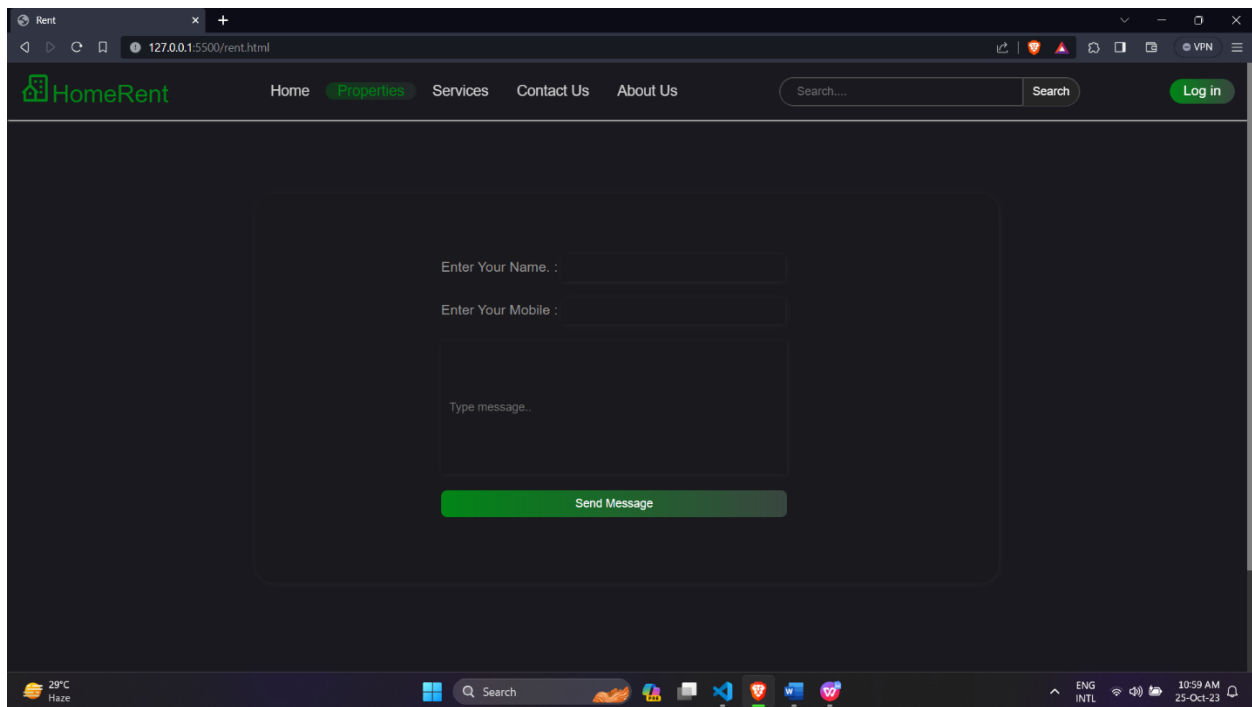
About Us Page:



View Details Page:



Rent Page:



4.2 Implementation Requirements

The process is done using some simple and widely used techniques. Website is the most used system for mobile applications. There are many ways to develop a Website, but we use the least complex basic framework to develop our website.

The technology used as follows:

- ❖ Framework: HTML
- ❖ Programming Languages: JavaScript
- ❖ Front-end Design: CSS

CHAPTER 5

CONCLUSION AND FUTURE SCOPE

5.1 Discussion and Conclusion

The project is finished with the help of html, CSS and JavaScript. People can use it from anywhere by using a Smartphone with the help of an internet connection. The system is designed with the aim of helping or satisfying the needs of rental house owners and renters. Several user-friendly interfaces have also been adopted.

The system works with registering as admin who are going to maintain or update the details of the houses and the users are going to have the facilities . Finally, the goal of the project is to create a better relationship between tenants and owners which can be achieved through this project.

5.2 Scope for Further Developments

It is already a user-friendly application, but in the future, we are thinking about adding some more features to make this application more user friendly. There are some limitations in our use which we can come up with some betterment like the owner's option can be minimized. If we install a system in the website that can update the available homes automatically .

Moreover, This project can also be extended to IOS Platform and we want to extend the project not only in our country but also worldwide.

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