

DESIGN AND DEVELOPMENT OF WEB BASED HOME RENTAL SERVICES

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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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APPROVAL

This Project titled “**Design and Development of Web Based Home Rental Services**”, submitted by Kazi Masudur Rahman, Jannatul Marjan and Md. Tanvir Ahmed to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 00-12-2021.

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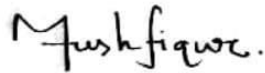
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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mushfiqur Rahman, Lecturer, Department of Computer Science and Engineering** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

NotunGhor is a web platform where people can easily arrange their living house. Many peoples shift from one district to another for various reasons, but they can't find the right place to live. Nowadays people have to visit a place physically to find a home for living, they have to walk in streets to find a to-let. But our platform will help people to find the best place to stay. Now tenants no longer have to waste their precious time walking in the streets to find a home, they can sit at home and find their desired home in a specific area within their budget through our website. Basically, our platform will make an interconnection between residential accommodation providers and tenants. Using this site, homeowners will be able to post details with pictures of their homes and tenants will be able to easily find homes in their specific locations. Also, nowadays it is very difficult for students to find a home. They cannot easily find a bachelor's flat. In that case, our site will help them a lot. In this case, students will also get the benefit from our website to find their bachelor flat by category filtering. Our goal is to help students/family to find a comfortable place in the desired location within their budget. And helping homeowners rent their homes easily. Now people can easily find their home without any hassle.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Nowadays we don't think a single day without the internet. And many people are now moving from one city to another for variety of jobs or education. When shifting from one place to another, the first thing that comes to people's minds is that they will rent a home. And they have to visit many locations physically to find the to-let for rent a house.^[1]

So, we are coming up with a new Web-based Home Rental Service called "NotunGhor" which will have all the details of the home and the people can rent their house as per their need. Now tenants no longer have to waste their precious time walking in the streets to find a home. Our website has all the rental posts in categories for this user so they can easily search their desired location within their budget.

Also, nowadays it is very difficult for students to find a home. They cannot easily find a bachelor's flat. In that case, our site will help them a lot. In this case, students will also get the benefit from our website to find their bachelor flat by category filtering. Our goal is to help students/family to find a comfortable place in the desired location within their budget. And helping homeowners rent their homes easily.

1.2 Motivation

When we first came to Dhaka, it was very difficult to find a home, so we thought we could build a platform where we could easily find a home. That's why we are coming up with a new web-based home rental service. So that people can find their desired home in a specific area within their budget. Now tenants no longer have to waste their precious time to find a home. and we'll be also benefited from using it for business purposes.^[2]

1.3 Objectives

With the help of this platform, we will be able to solve many kinds of problems such as:

- People will be able to find their desired home in a specific area.
- Homeowners will be able to post details of their homes.
- Homeowners will not need to keep homes empty for a long time.
- Homeowners will now find their tenants very fast and easily.
- Students will be able to find bachelor flats by category filtering.
- We'll be also benefited from using it for business purposes.

1.4 Expected Outcomes

Tenants no longer have to waste their precious time to find a home physically. And landlords will no longer have to face the problem of finding tenants, they will find their desired tenants from this platform. Students will also get the benefit from our website to find their bachelor's flat. and we'll be also benefited from using it for business purposes. The UI of our website will be very user-friendly. Anyone can easily find the service they want. Homeowners can easily post their ads and tenants can filter and find homes in their specific location. So, Homeowners will not have to worry about vacancies of their homes.

1.5 Project Management and Finance

Project management is a very important issue for every project and in that case, we are very careful. We are always active in solve any future problem. Our team effort has helped make the technology a success. We have worked into different parts at specific times. And for finance, there is an opportunity for us to benefit commercially from this project. Homeowners will be able to show their ads to more people by paying extra money and we will also be able to earn money from here.

CHAPTER 2

BACKGROUND

2.1 Terminologies

This web-based home rental platform will have all the details of the home in every megacity and people can rent their house as per their requirements. Now tenants no longer have to waste their time to find a home. Our website has all the rental posts in categories for this user so they can easily search their desired location within a location. And it is very difficult for students to find a home. They cannot easily find a bachelor's flat. In that case, our site will help them a lot. In this case, students will also get the benefit from our website to find their bachelor flat by category filtering. Now tenants no longer have to visit a place to find a home. And homeowners will be able to post details of their homes and tenants will be able to easily find homes in their specific address.^[3]

2.2 Related Works

In Bangladesh, there are few home rental websites. But unlikely there is no perfect platform that works for everyone. But globally has some web-based rental platform that deals with such kinds of services. One of them is "MyRentBD" which provide services related to home rent.^[2] But they not only provide service at home rent but also have many other categories. So, it's not clear that this is not the best platform for home rentals. Those websites are good with their design. Their User Interfaces (UI) design is also good. But our projects are slightly different from others cause in our project the people can be rent home in specific areas and house owners also can post ads.^[4] In our projects, we are trying to make a wonderful User Interface (UI) design that will be so much user-friendly and we think anyone can understand anything very easily.

2.3 Comparative Analysis

There are few websites those are provide home rental service. Those websites are good with their design. But our projects are slightly different from others. In our projects, we are trying to make a wonderful (UI) design that is very user-friendly.^[5]

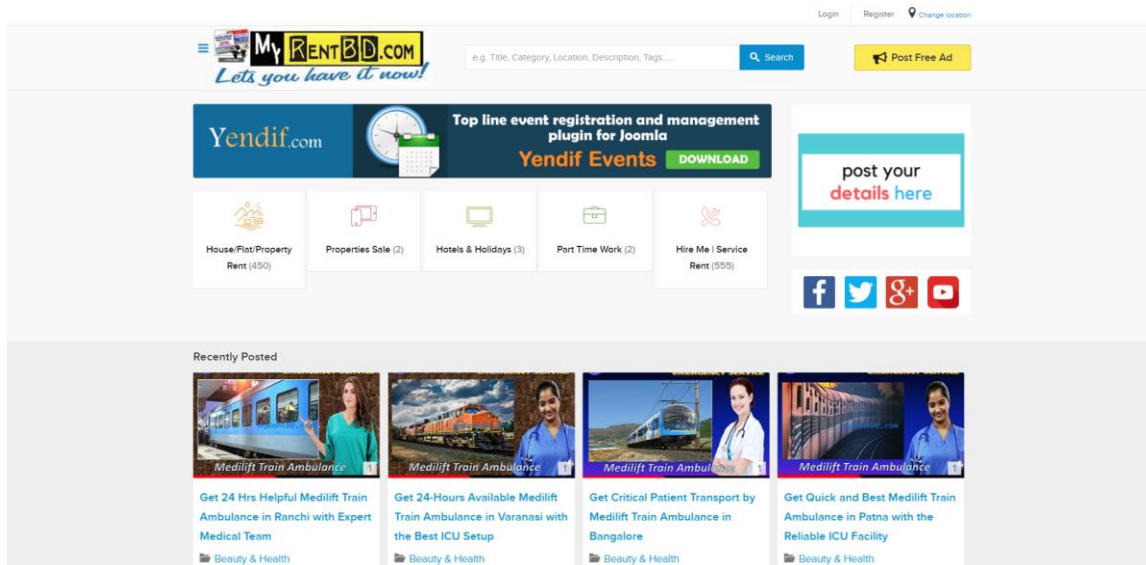


Fig 2.1: User Interface (UI) Related Website “MyRentBD”

2.4 Scope of the Problem

We encountered some problems while audit some related website.

- Finding category was difficult.
- Website design is not user-friendly.
- No option for promoting rent ads.

2.5 Challenges

Making our website user-friendly was a challenging thing. We have tried to create a user-friendly interface as much as possible. Ensuring the security of users' personal information was another challenge. Since it is a home dental service, there is a chance of come many visitors together. Making the website faster is also a challenge. And ensuring an uninterrupted connection to the website is also a challenge.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Using BPM, we can represent our business process in a diagram. We see that users have two options. If the user chooses 'Find home' then can send a message to the homeowner. The homeowner can reply to the user. Again, users can choose to submit ads. Then if he wants to promote his ads, he can select the promote option and the message will see the admin and the admin also can reply to his message to the user for confirmation.

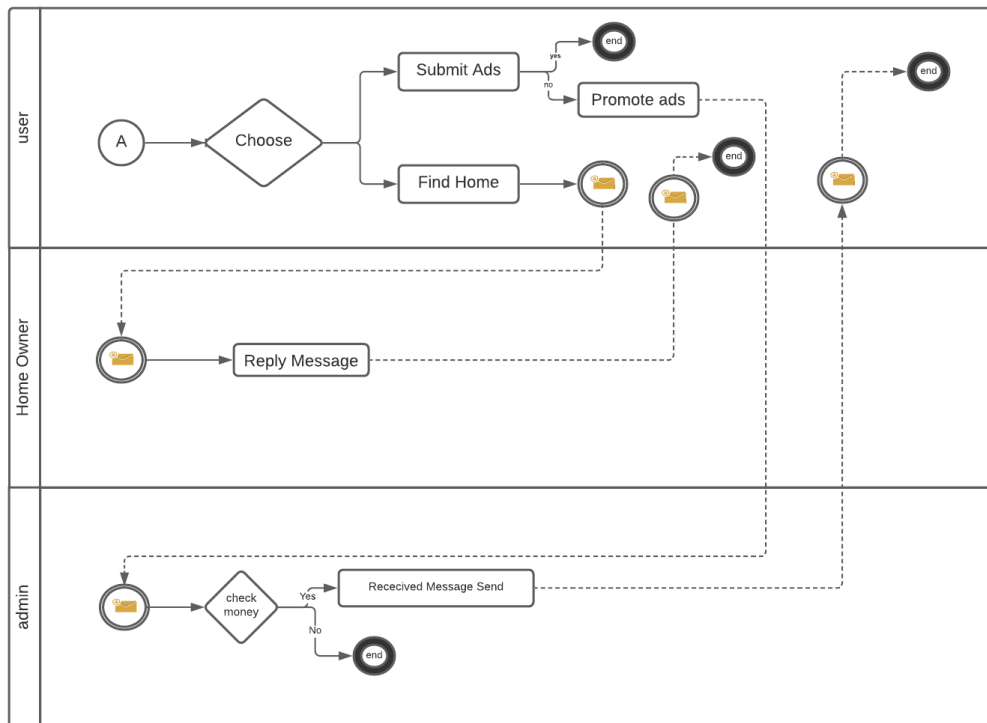


Fig 3.1: Business Process Modeling

3.2 Requirement Collection and Analysis

In our web application, we need some basic level requirements like admin login, user login, user registration, etc. Some of them are given below:

Table 3.2: Requirement Collection and Analysis

Serial No	Requirement Name	Requirement Analysis
01.	User Registration	Users can visit this web app without any registration process. But if the user wants to show the details of the homeowner info of a given post, then he must be registered on this site.
02.	User Login	If a user has already registered, then he/she is able to post ads and also can modify this post.
03.	User post Ads	Users can post their ads if they want and it's totally free on this site.
04.	User promote ads	If a user wants to promote his ads, he must select promoted option.
05.	Admin Login	To modify any change of the site, an admin must be logged in.

3.3 Use Case Modeling and Description

A diagram that shows a set of use cases and actors and their relationships. Noe our Use case diagram describe: Actors: - User, Admin

The use case in this factor: **User:** Login, Registration, Submits Ads, View Post, Edit Post, Delete Post, Promote Ads, Update Password. **Admin:** - Login, post, Update password.

Users can submit their ads but before that, they have to log in first. If the user is not registered, then he has to register first for login. After login users can post their ads. And then view or edit or delete their post. Users also can update their password. Admin can control user posts after login. A use case diagram will be shown below:

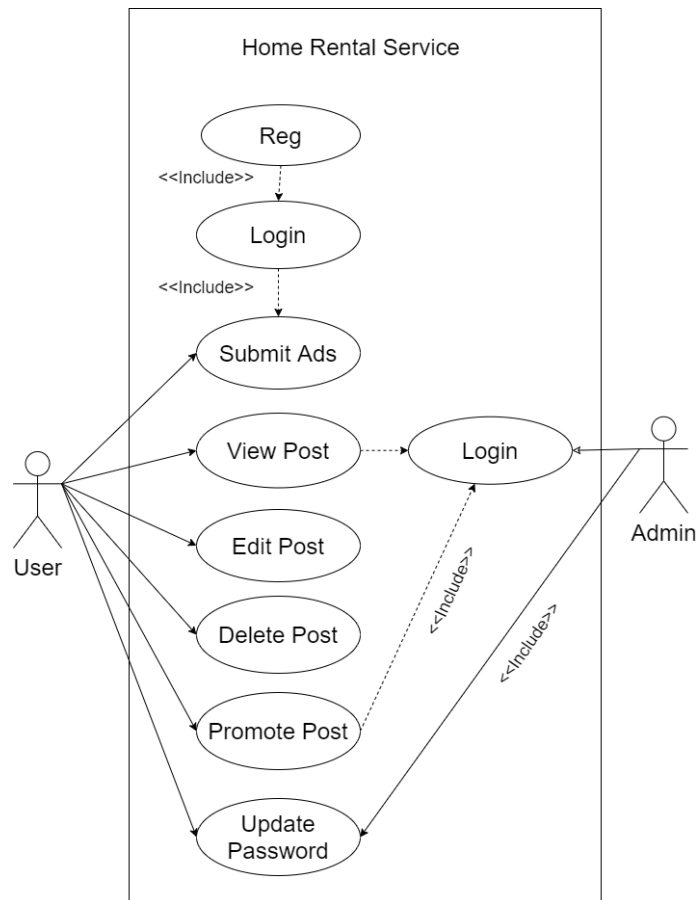


Fig 3.3: Use Case Modeling and Description

3.4 Logical Data Model

The logical data model is a presence of attributes for each entity. Their key attribute is Post, Review, Admin, User. Here Primary Key is user id, admin id, Post id.

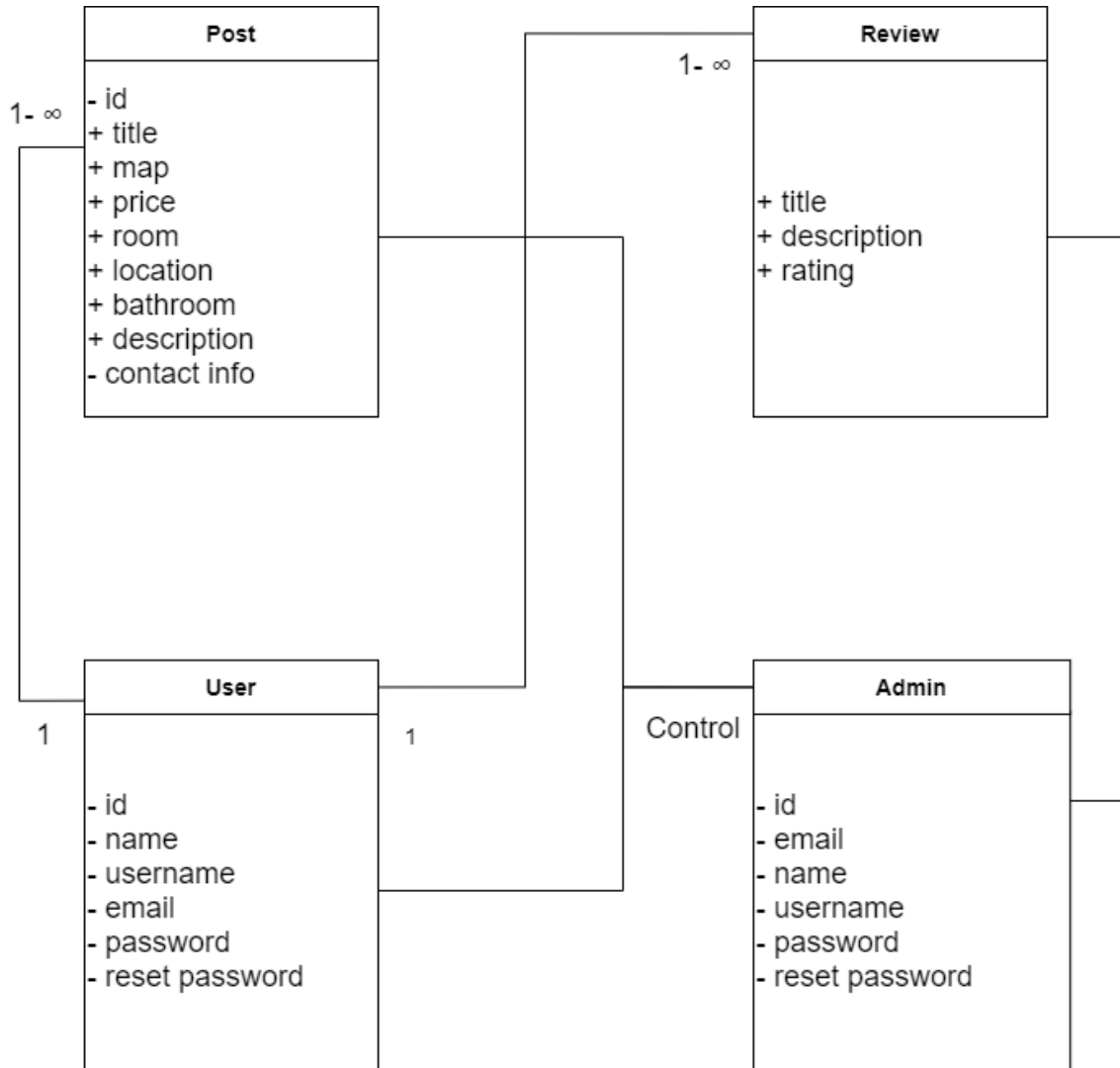


Fig 3.4: Logical Data Model

3.5 Design Requirement

We develop a dynamic website. For development, we divide it into two parts, front end, and backend. In frontend we use HTML, CSS, JavaScript. For better management of these tools, we used 'visual studio code'. We didn't use any framework.

HTML that full form Hyper-Text Markup Language. It is the structure of a website. It tells the browser to display the content. ^[6]

CSS full form Cascading Style Sheets. CSS is used to design a web page. After applying HTML, we use CSS to design a site. It is a defined style for the site. ^[7]

JavaScript is the programming language for the frontend design of web pages. It makes static web pages look attractive and interational. Many functions can be developed through JavaScript for the client side. It reduces the pressure on the database system and thus helps to increase webpage load speed. ^[8]

CHAPTER 4

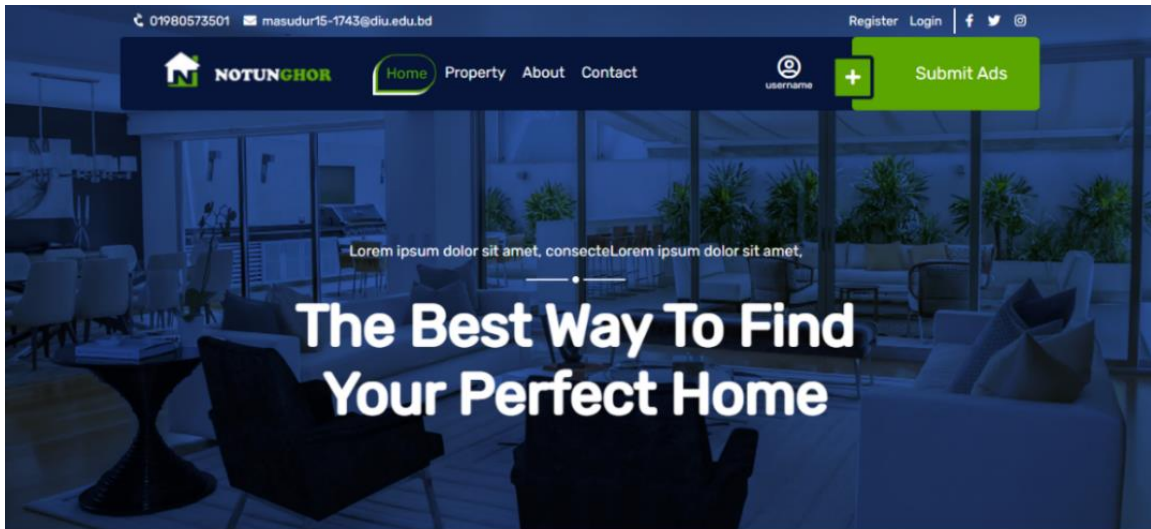
DESIGN SPECIFICATION

4.1 Front-end Design

We have 8 pages on our website and the pages are validated by PHP and our website can be controlled from the admin panel. Admin can change the logo, Title, Social Media Links, Copyright Text. Any visitor to our website will be able to see some recent posts on the homepage. Also, they will be able to see the client reviews. If you want you can subscribe to get a monthly newsletter from our website. For the first time, a visitor to our website will have to sign up for the first time. He will not be able to post on our website without signing in. A visitor can find his desired home through our website. Students can also find their bachelor flats in any part of any city if they want. If the visitor wants, he can find out by searching the post of a particular district. If the visitor wants, he can promote his post by contacting us directly. Visitors can see the information of the team members of our website if they want, they can contact them directly if they want or they can follow them on social media if they want. He can get more help by exploring our site.

4.1.1 User Interface

This is our home page. On the home page, we add navbar, recent ads, review and footer section. The Footer section will be the same on all pages. In the header section, we add a title. Admin can change the title from the admin panel. In the menu bar, we add our site logo. When users click another page, they will show the same design as the menu bar. Before login user will the registration and login option on the top left side. The icon is also linkable and clickable. When the user clicks the social icon it will go to the link and open it on another page. Before login user can't go submit the ads page. In the recent ads section, we add last 6 post from our post table which is in stored in MySQL database.



Recent Ads For You

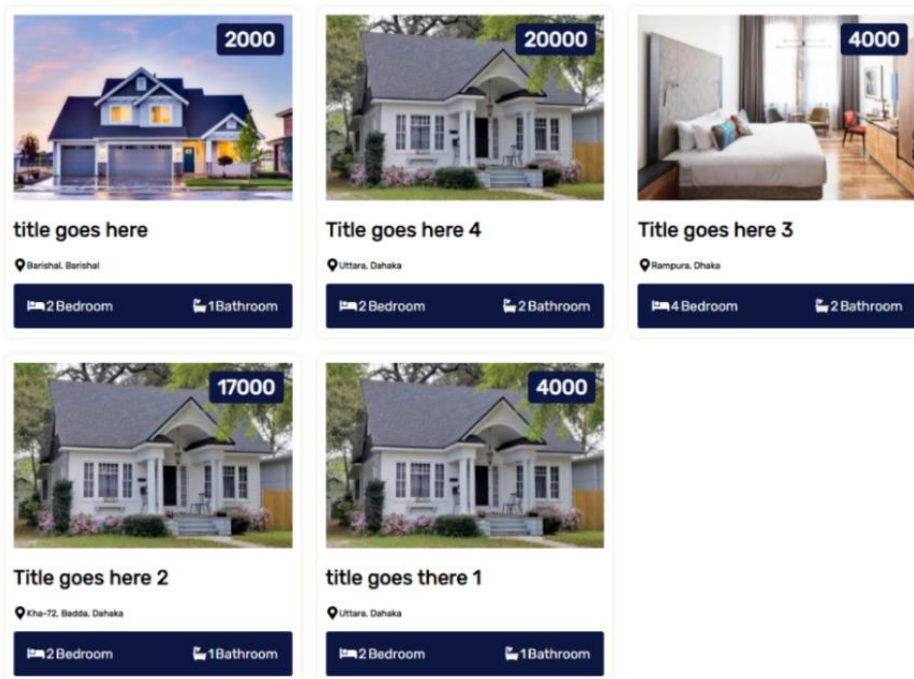


Fig 4.1.1: Home Page (Part-1)

In the review section, we show the all review. Users can review our site. And it will show on our main page one by one in descending order by Id. In the top footer section, we add the website site logo on the left side and on the right side, we add site social link as well. In the footer section, we add three columns such as Contact Us, Quick Link, and Newsletter. For a better user experience, we add quick links. In the quick links portion we include about us, contact us, sign up and sign in page. Before login Sign up and the Sign In page will show here. Users can subscribe to us by sending their email in the subscribe form. It will go to the admin panel. After that admin can see the email and they can send updated news of their site to these emails.

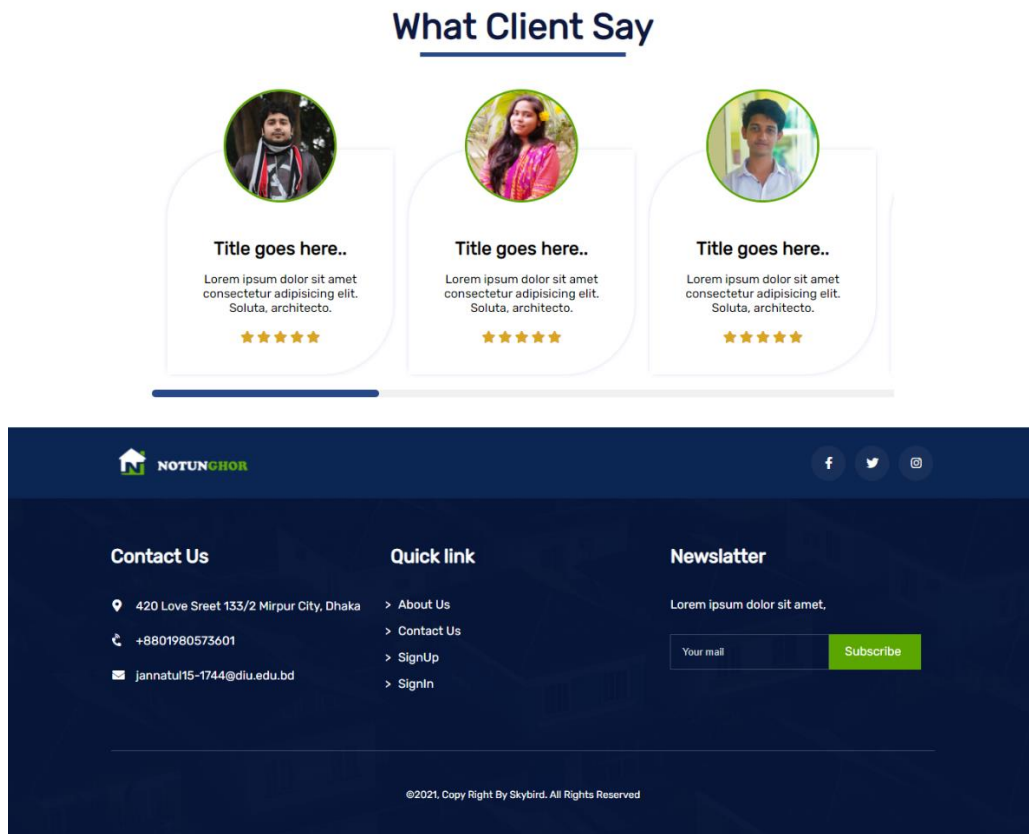


Fig 4.1.2: Home Page (Part-2)

The home page menu bar style is different from other pages and the second navbar is the same for all the pages. We can see all the posts on the property page. If the post's number is greater than 9, then at the bottom of the post pagination will appear. We also add search functionality to the property page. We add a banner section after the second navbar. After that, we add an important section for the property page. Where users can see the total numbers of the posts. We add a search functionality here. Using search form user can search district-wise or can write some letters of the district and then click the search icon or press the enter button from the keyboard to see the search result.

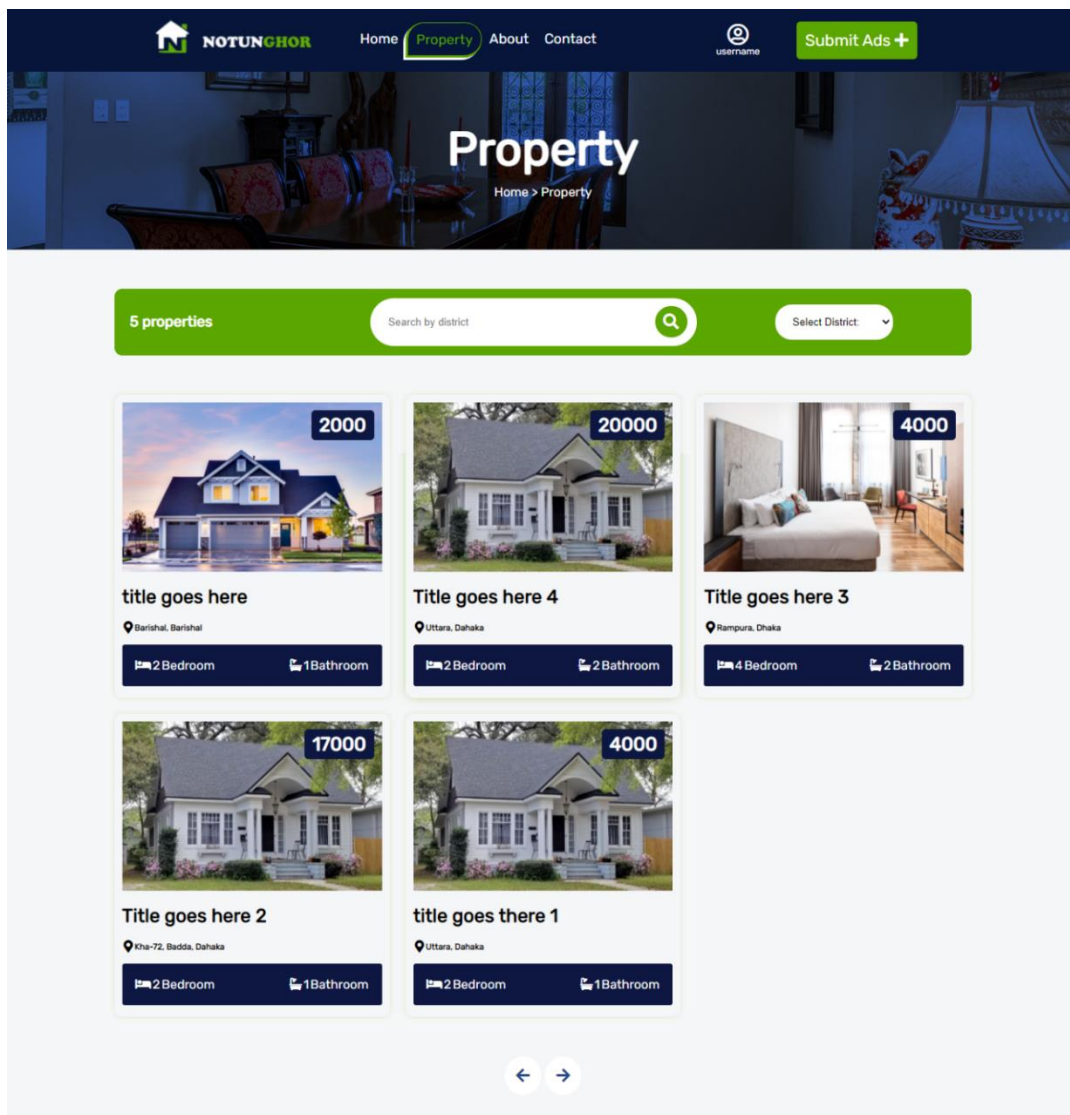


Fig 4.1.3: Property Page

This is our Contact Page portion without a header. On the left side of the page, we add a little animation from lottiefiles.com. And the right side we add a contact form. Where users can send messages to the admin through this contact form. Users must fill in the name email for sending messages. The email was validated using PHP default prebuild function `!filter_var($email, FILTER_VALIDATE_EMAIL)`.

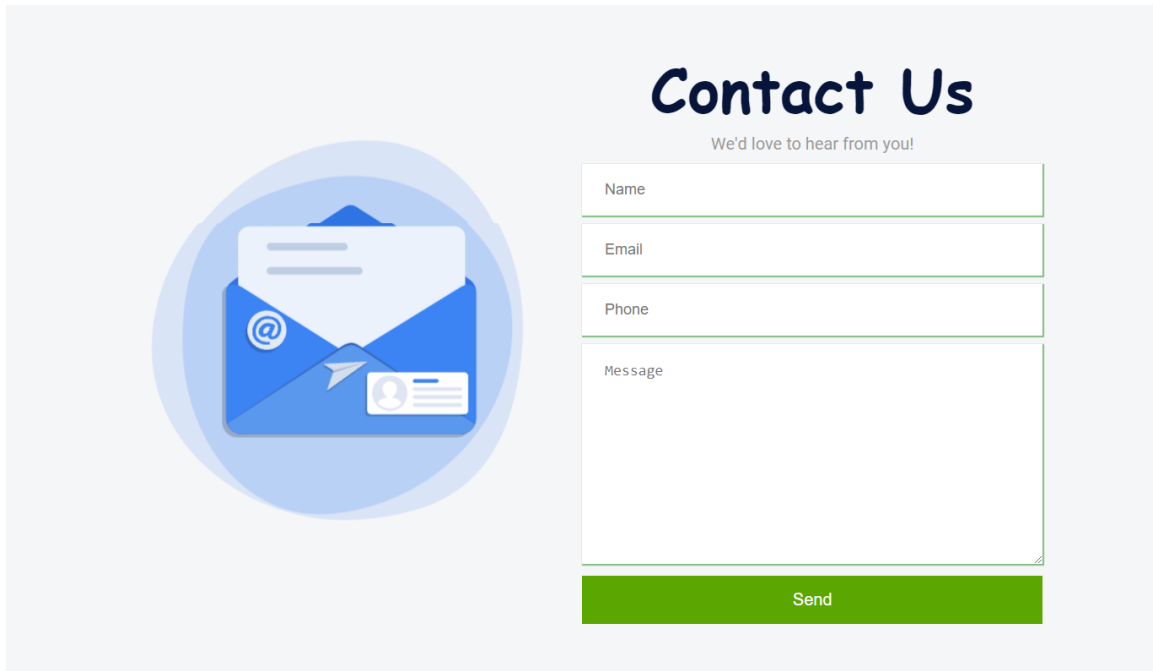


Fig 4.1.4: Contact Page

This page has information about our team members. visitors can see the contact info.

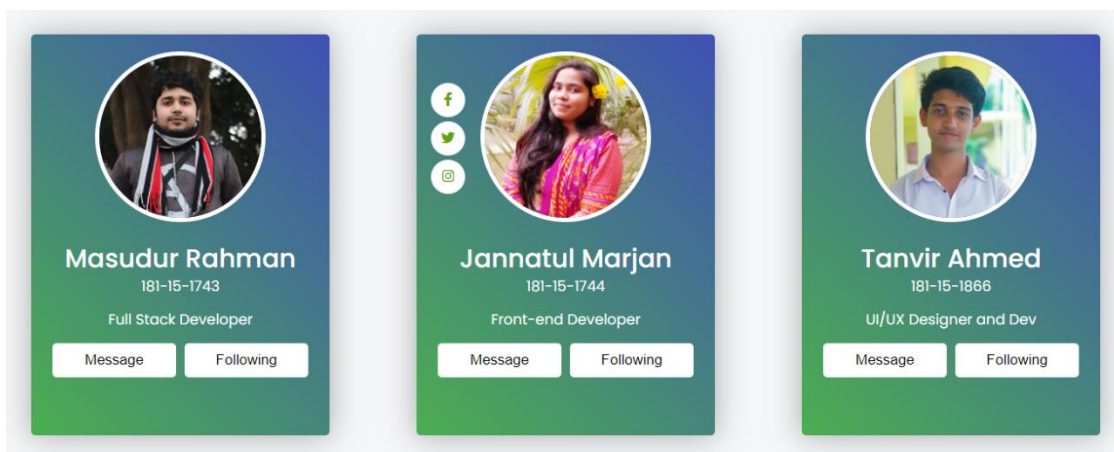


Fig 4.1.5: Team Information

This is our Sign Up page interface. At the beginning of this page, we put an animation that we brought from the animation. Here users will be able to sign up with their appropriate information such as photo, name, username, e-mail, mobile number, and password. The Sign Up form has been validated by PHP language. Username cannot be less than three characters and in the email field must use proper syntax.

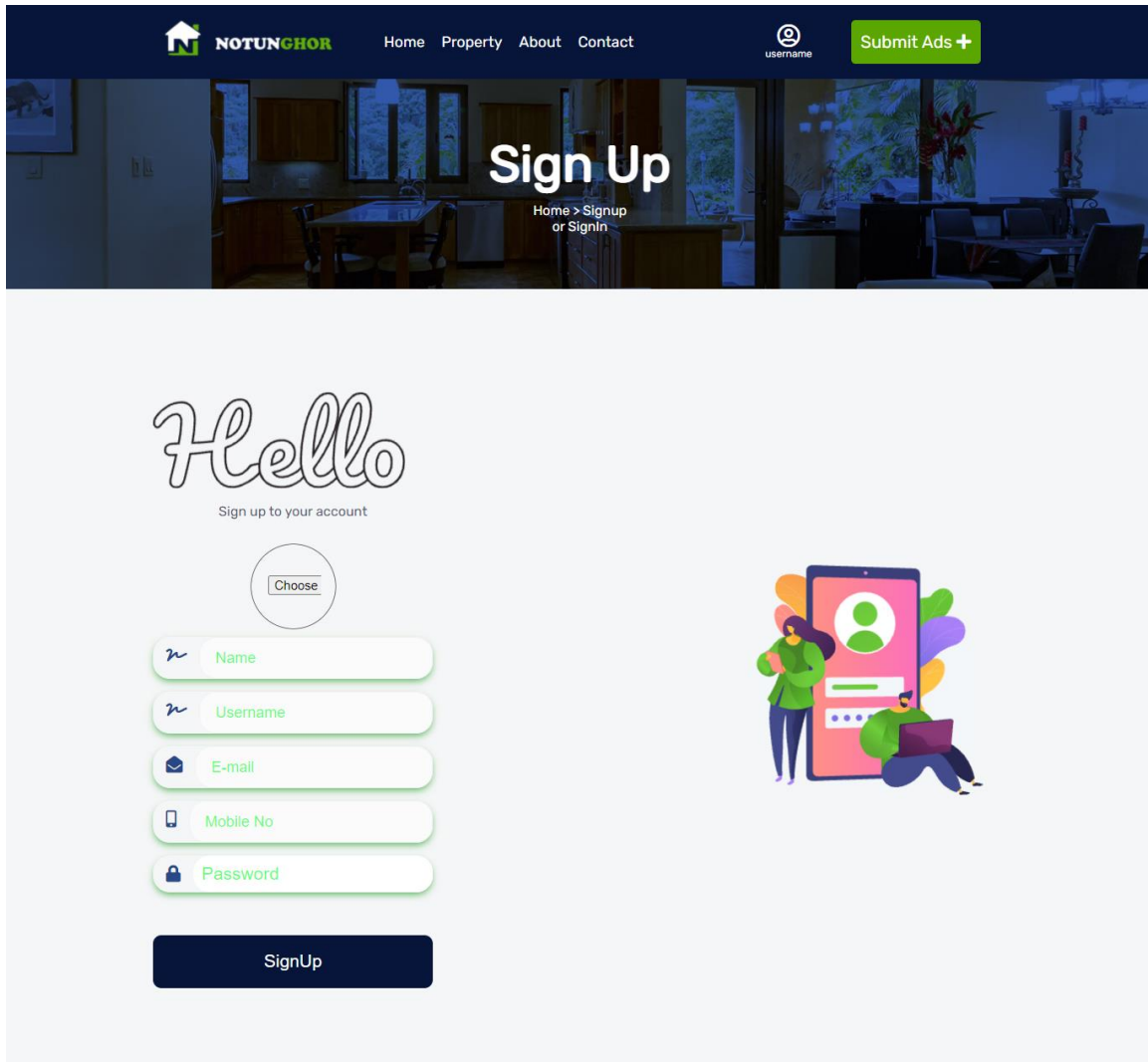


Fig 4.1.6: Sign Up Page

We add two input fields named Email and Password where registered users can log in to the site with their email and password. If the login information is wrong then they can't able to log in his account.

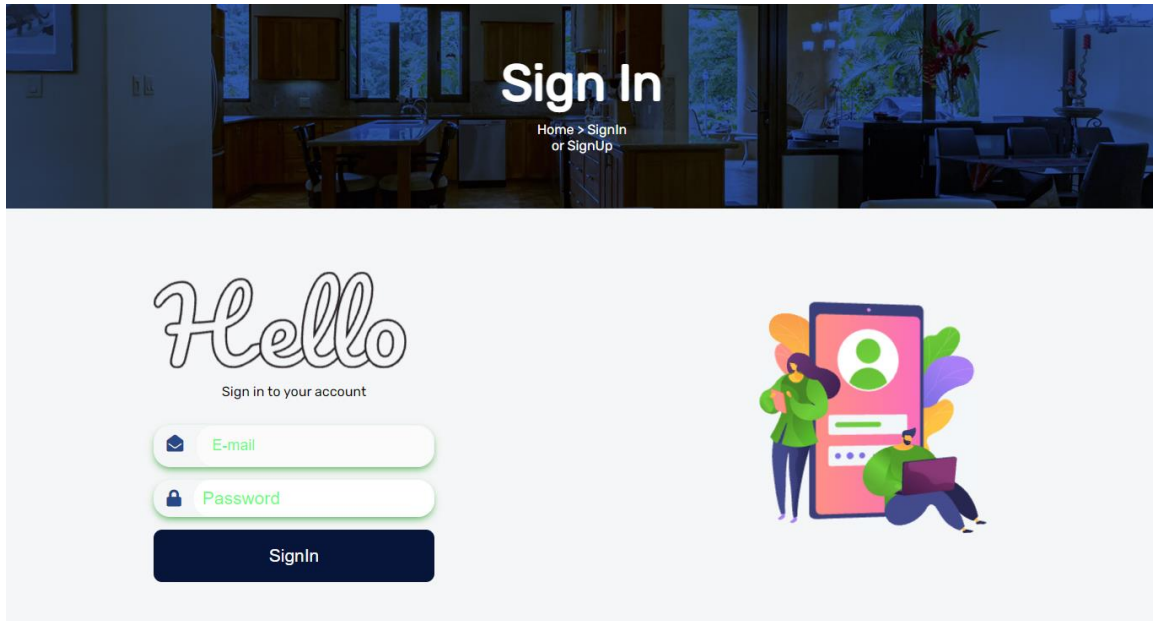


Fig 4.1.7: Sign in Page

After logging in, you can see the picture and username of the transgender person in the number option and after clicking on the profile option it will go to the profile page. On the profile page, the user will be able to see the information of his profile and he will be able to update his information and here is a symptom through which he can log out from his profile and below we have My ads info section where the user can see his information after submitting post here. We add two options edit and delete. user after submitting post user can edit his pots. If he wants to delete his post, by clicking the delete button.

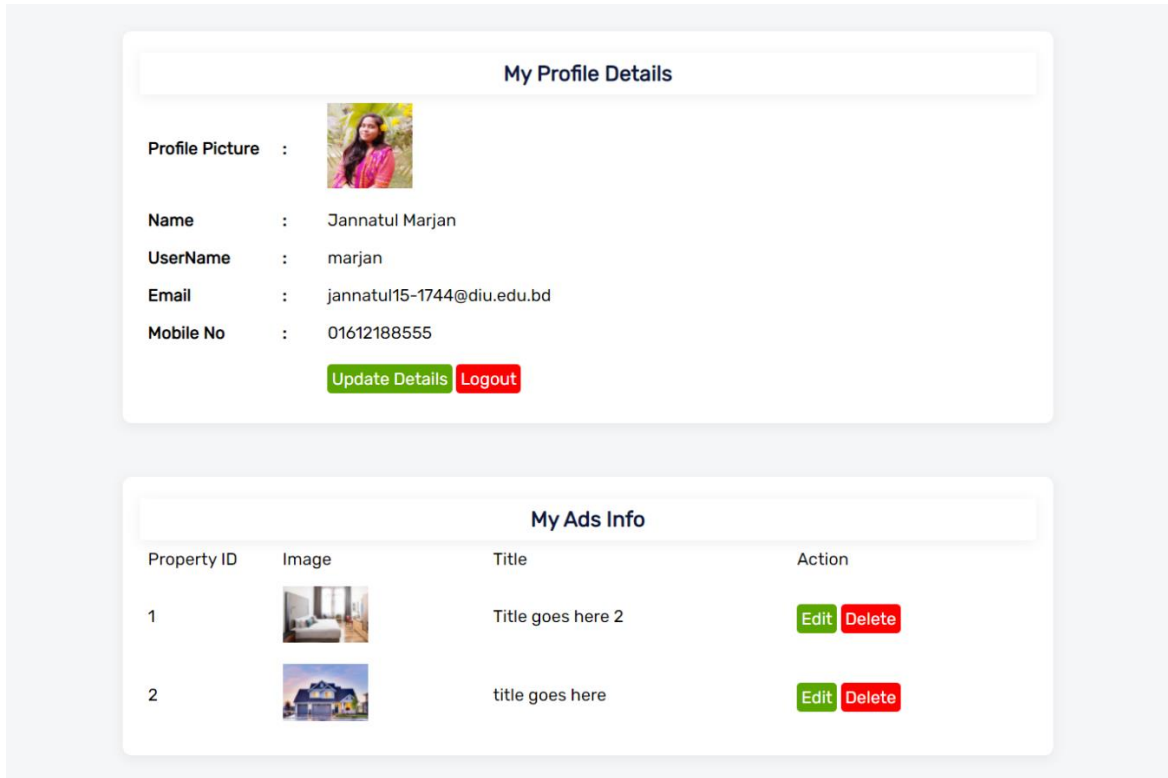


Fig 4.1.8: User Profile Page

Users can update the user's name, username, e-mail, mobile number on update profile details page. Also, they will be able to update their picture from profile update page.

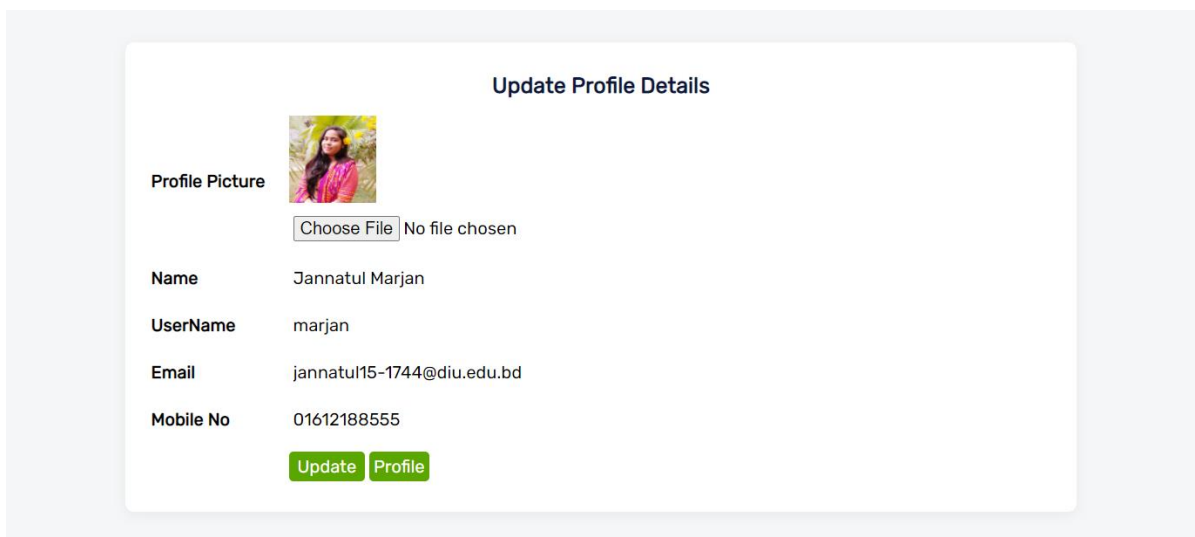


Fig 4.1.9: Update Profile Page

If the user wants to post after logging in, he has to come to the submit ads page and then post. The user must write the Red starfield. Users can Upload their home or room photos in the add image portion. they can add or upload their photo using two ways. one is drag and drop and another is manual uploading. For better UX we add a functionality on the Division, District and Thana select option. When the user chooses their Division after that district will automatically come from by the id of division and when the user clicks District, then thana will automatically appear by the id of the district. this process we created using JavaScript. Sector No, Road no and house no and the map is optional. For adding a map users have to choose the map from google map and paste the embedded code in the Google Maps link portion. After writing all the important fields user can able to submit his post using clicking submit button or pressing enter button.

The image shows a web form for submitting ads. It has a green header 'Basic Information'. The form contains the following fields and sections:

- Property Title * (text input)
- Bedroom * (text input)
- Bathroom * (text input)
- ADD IMAGE (green button)
- Drag or Upload your Photo (with an upload icon and a note: 'Its must be a clean photo')
- Division * (dropdown menu)
- District * (dropdown menu)
- Thana * (dropdown menu)
- Sector No (optional) (text input)
- Road No (optional) (text input)
- House No (optional) (text input)
- Address * (text input)
- Price * (text input)
- Google Map Link(optional) (text input)
- Description* (text area)
- Submit (green button)

Fig 4.1.10: Submit Ads Page

This is the property details page. Before login, a user can see property details but he is not able to see user information. After login user will be able to see user details.

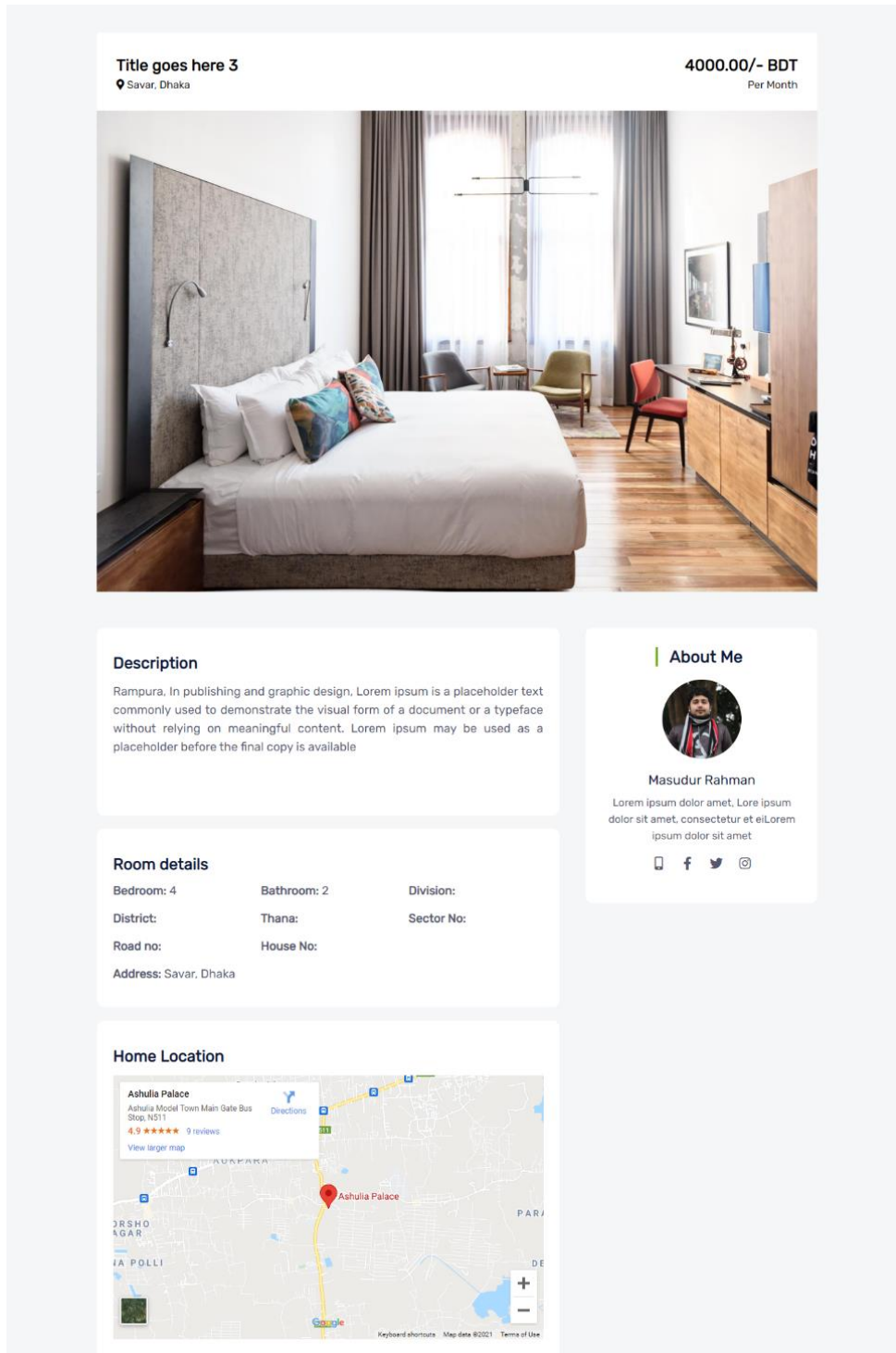


Fig 4.1.11: Property Details Page

On the edit property page user able to edit their post information.

NOTUNCHOR Home Property About Contact marjan [Submit Ads +](#)

Edit Property

Home > Add Property

Basic Information

Property Title *
Title goes here 2

Bedroom * Bathroom *

Previous Image

[ADD NEW IMAGE](#)

Drag or Upload new Photo
Its must be a clean photo

Division * District * Thana *

Sector No (optional) Road No (optional) House No (optional)

Address *
House 472, Bardia, Matlab South, Chandpur

Price *
17000

Google Map Link(optional)

Description*
In publishing and graphic design, Lorem ipsum is a placeholder text commonly used to demonstrate the visual form of a document or a typeface without relying on meaningful content. Lorem ipsum may be used as a placeholder before the final copy is available

[Update](#)

Fig 4.1.12: Property Update Page

4.1.2 Admin Interface

This is the interface of the Admin login page. Only our registered admin can access on this website admin page. After login admin can able access the admin dashboard page.

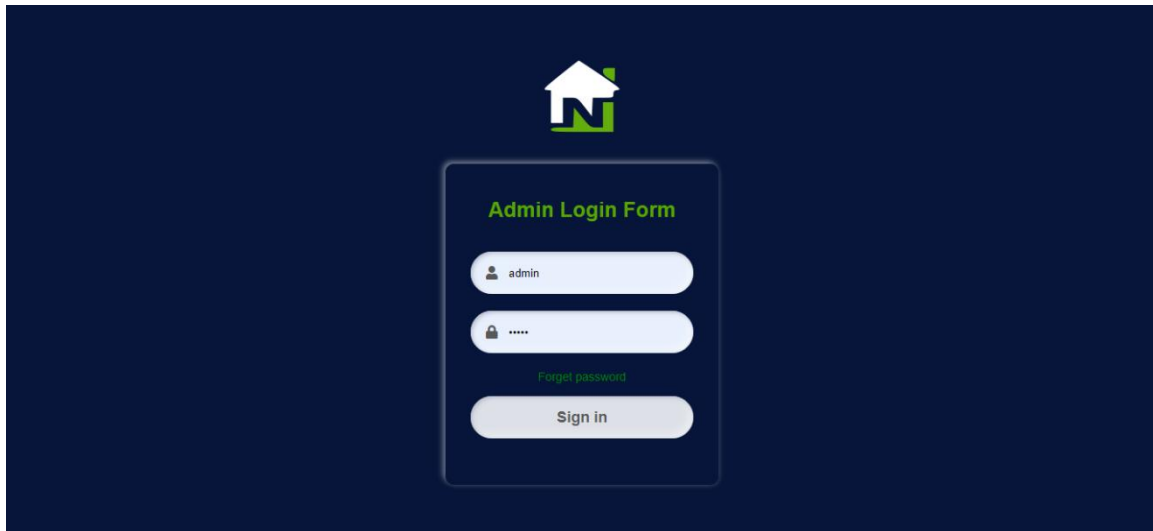


Fig 4.1.13: Admin Login Page

On the admin board, we can see the username in the header and add a total number of post numbers, registration number of subscribers, the total number of comments. this number will show dynamically from the database. We add a profile page, site option dropdown, change password page, inbox page and sign out option. we add a JavaScript in the dropdown. when users click site options they will see a dropdown option where we add logo, title, social media and copyright page. On the logo page we add two this one is a preview of the logo and another is updating the logo. Using the update input file user can update their logo using the update button option. In the title, the social media and copyright page are also the same as the logo page. where users can the site title logo, social media link, and copyright text.

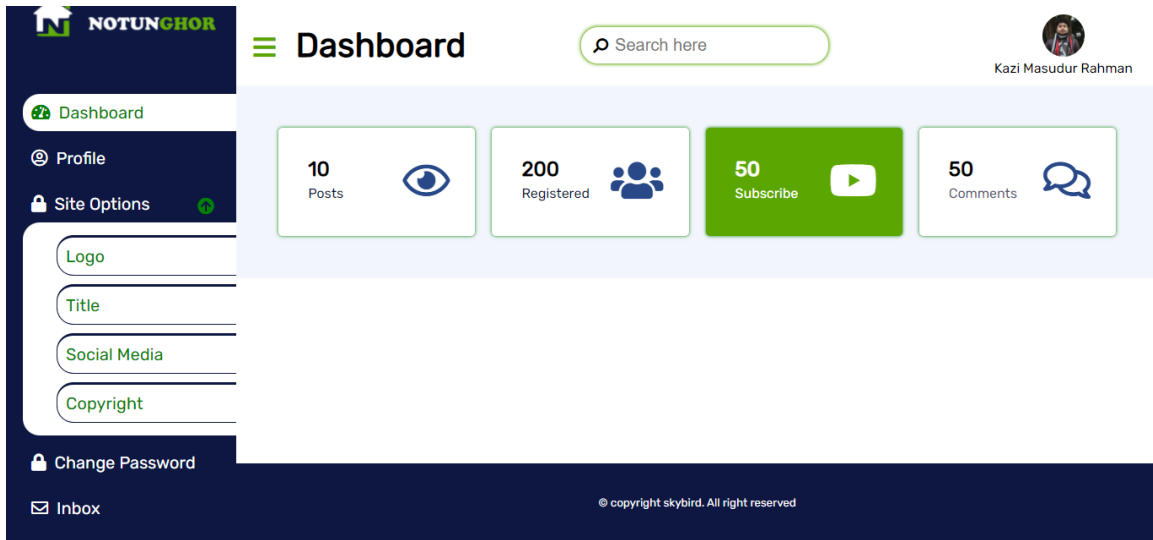


Fig 4.1.14: Admin Dashboard Page

On the profile page, the admin can see his name and email from the database admin table.

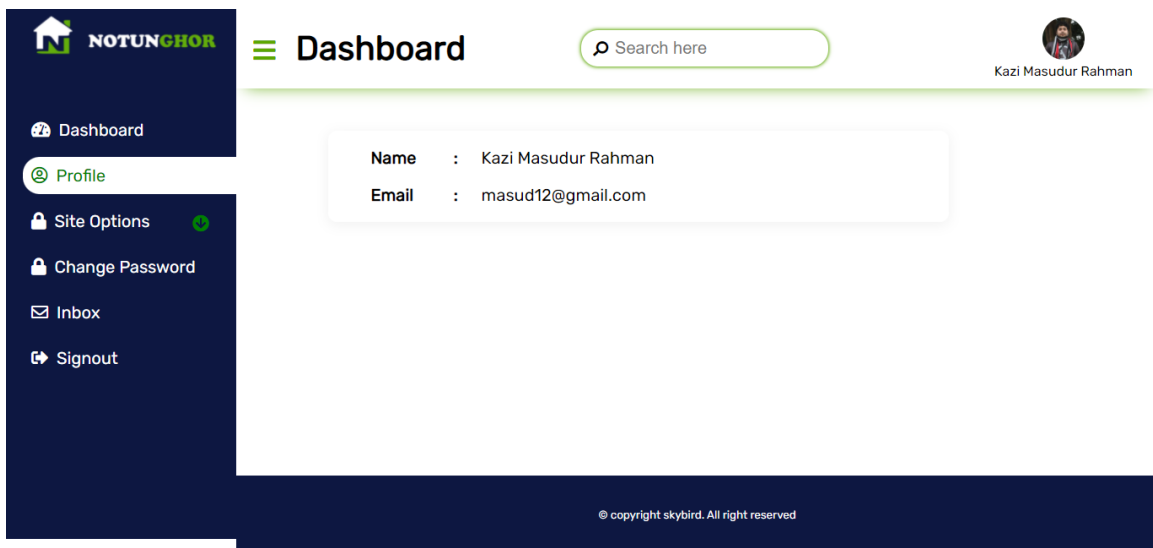


Fig 4.1.15: Admin Profile Page

On the Site option page, the admin can change the logo, title, social media and Copyright.

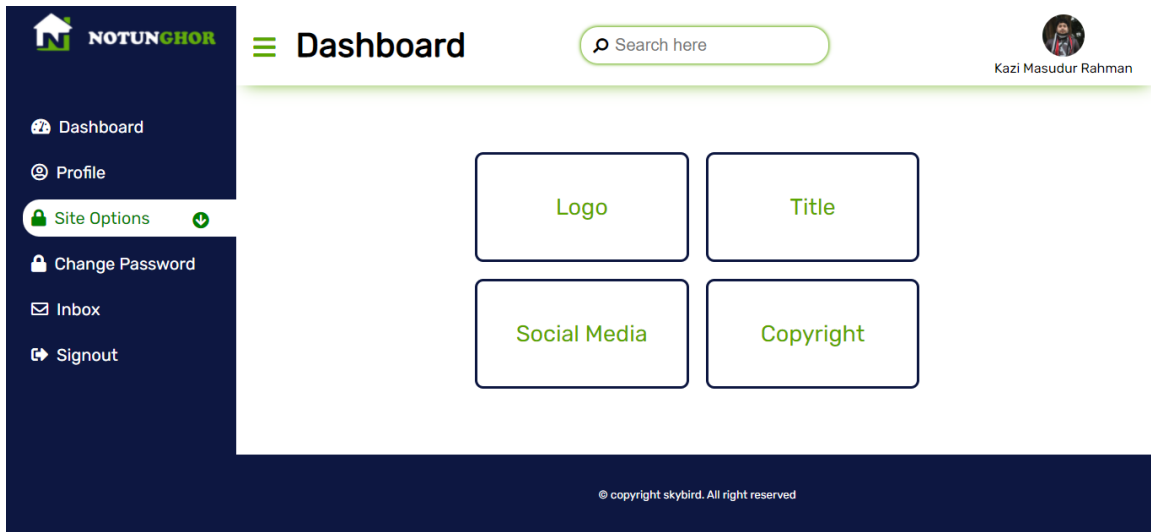


Fig 4.1.16: Admin Options Page

On the Change password page, the admin can change his password by giving their valid old password. If he forgot his password won't change his password. After entering the old password he has to enter his new password and then update.

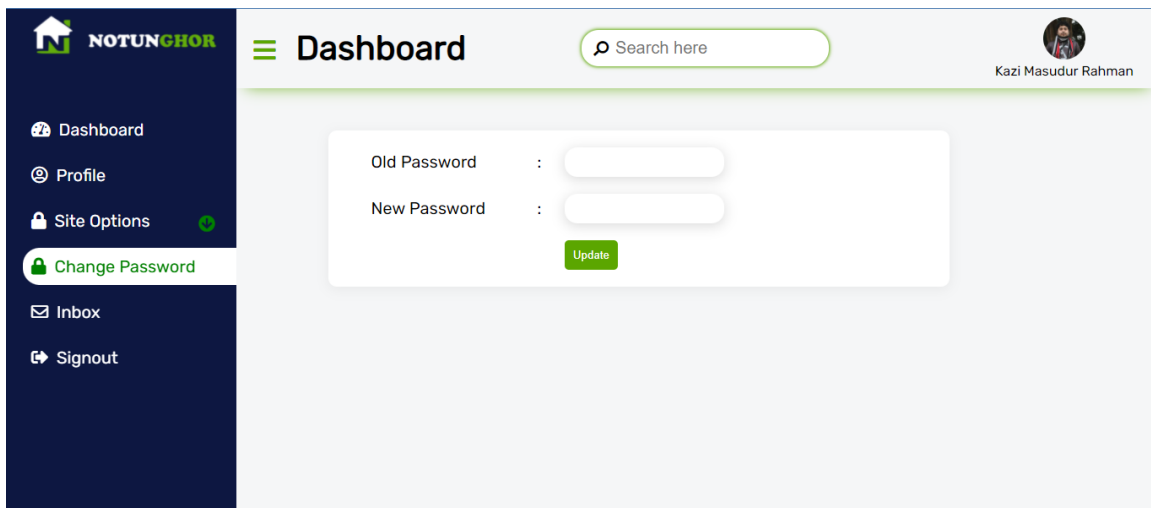


Fig 4.1.17: Change Password Page

On the Inbox Page, the admin can see the messages, name and email of the user. After clicking the view button user is able to see the full message and also can reply to this email by clicking the reply option and also can see clicking seen option.

The screenshot displays a web dashboard with a dark blue sidebar on the left. The sidebar contains navigation links: Dashboard, Profile, Site Options, Change Password, **Inbox** (highlighted), and Signout. The main content area is titled 'Dashboard' and features a search bar. Below the search bar is a table of messages. The table has six columns: Sl. No., Name, Email, Message, Date, and Action. There are five rows of messages, each with a 'View Reply seen' link in the Action column. The footer of the dashboard contains the text '© copyright skybird. All right reserved'.

Sl. No.	Name	Email	Message	Date	Action
1	Kazi masud	masud@gmail.com	Beautiful Website...	October 24,2021	View Reply seen
2	Jannatul marjan	marjan@gmail.com	Need to add review option...	October 24,2021	View Reply seen
3	Tanvir Ahmed	tanvir@gmail.com	Please add more filters like...	October 24,2021	View Reply seen
4	Karim Ahamed	karim@gmail.com	blah...	October 24,2021	View Reply seen
5	Kuddus Mia	kuddus@gmail.com	blah blah blah...	October 24,2021	View Reply seen

Fig 4.1.18: Inbox Page

4.2 Back-end Design

This is the MySQL database of our 'Notunghor' web app. We create a database named 'database_rent'. After that, we create the necessary tables.

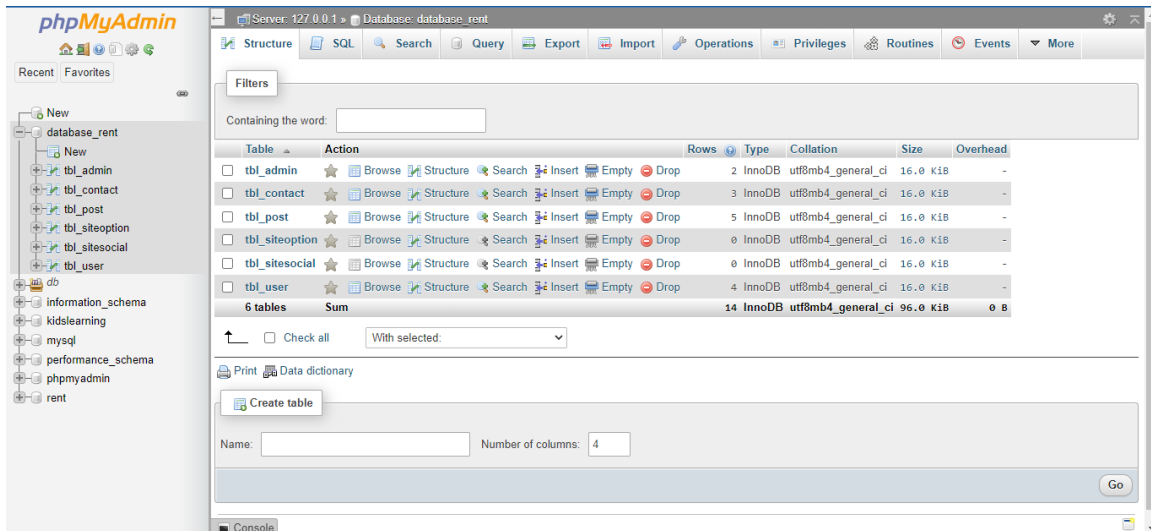


Fig 4.2.1: Database

This is the contact table. Where we store the contact info of the user. The contact table attributes are name, email, phone, body and status.

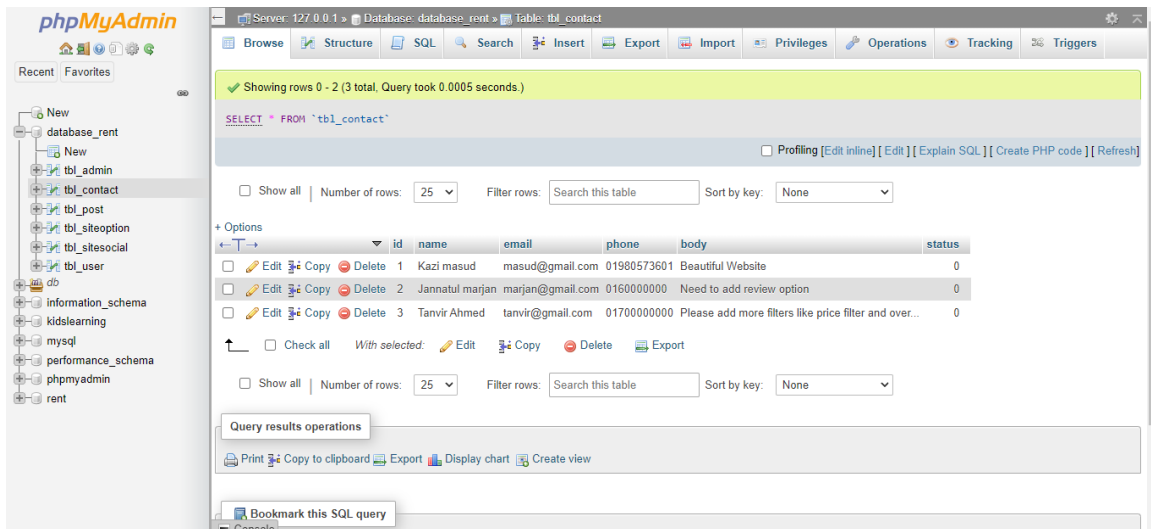


Fig 4.2.2: Contact Table

This is the admin table. Where we store the admin login information.

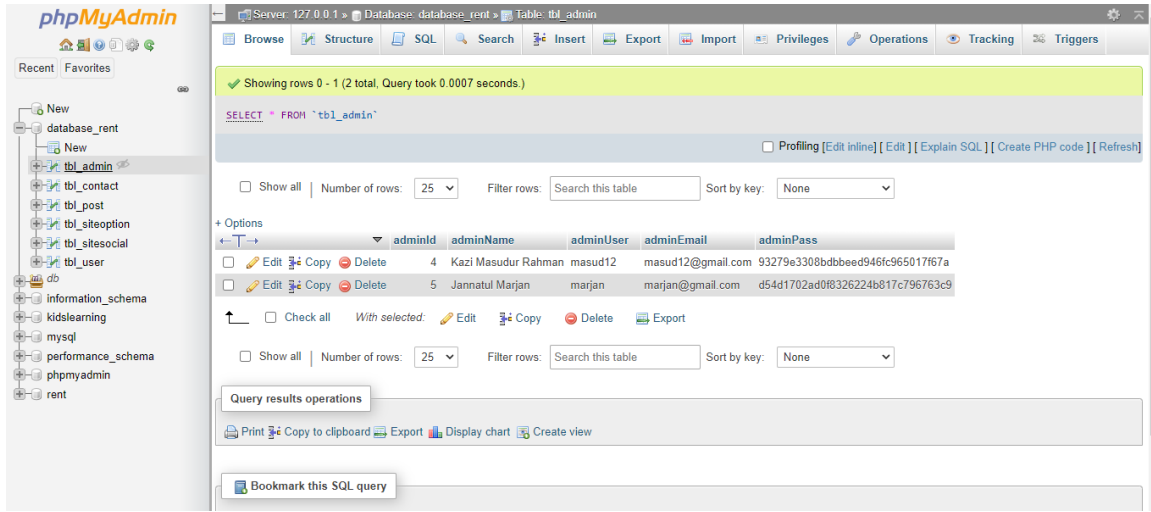


Fig 4.2.3: Admin Table

This is the post table. Where we store the post information from submit ads page.

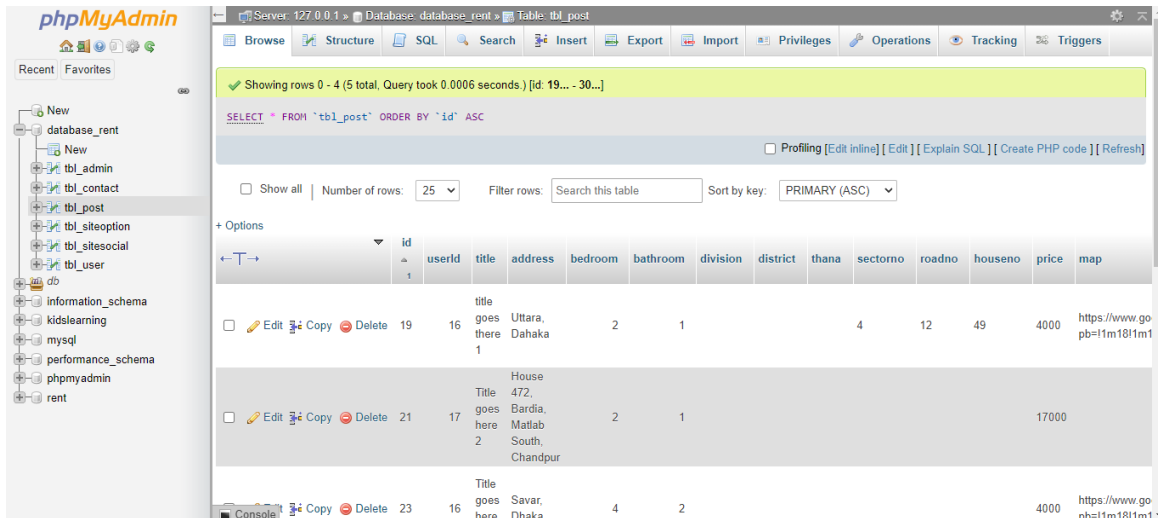


Fig 4.2.4: Post Table

This is the site option table. Where we store site logo , title and copyright text.

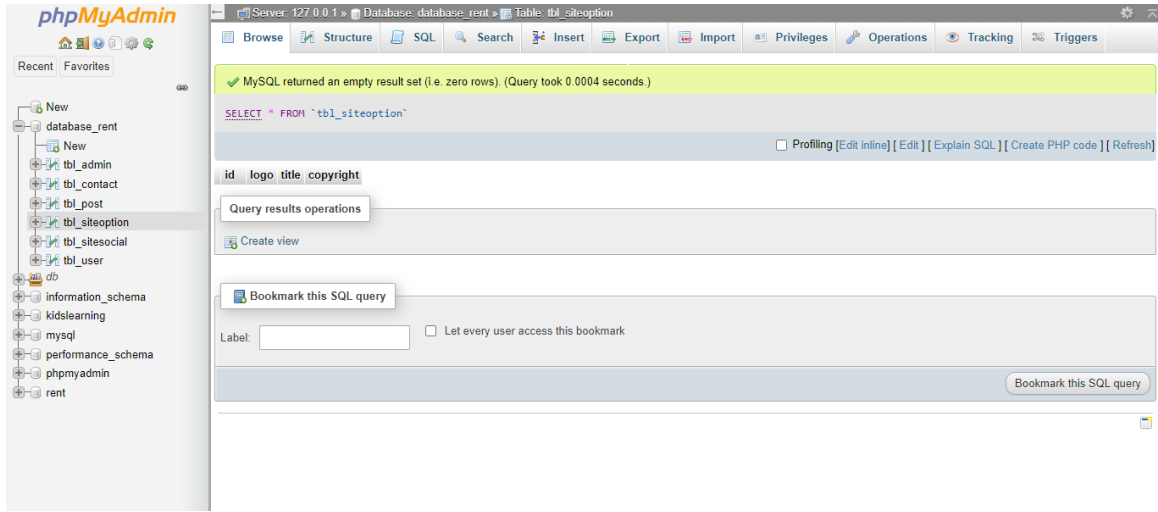


Fig 4.2.5: Site Option Table

This is the social table. Where we store site Facebook, Twitter and Instagram links.

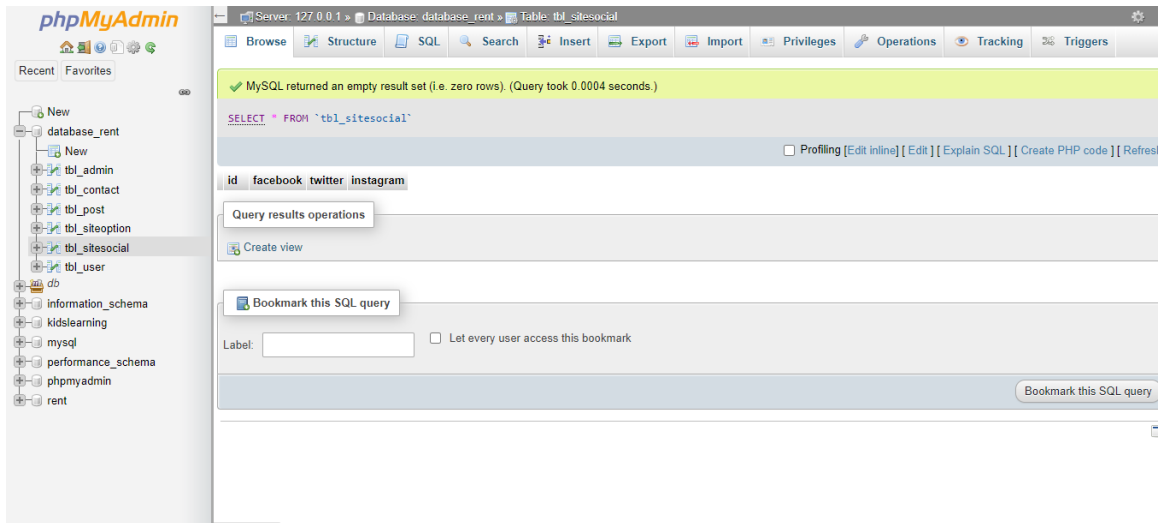
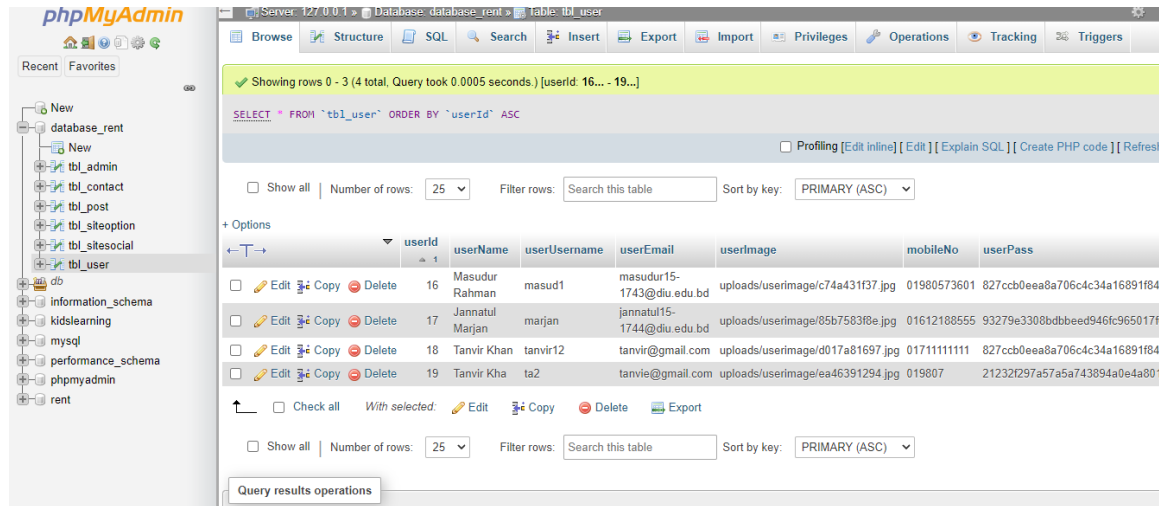


Fig 4.2.6: Social Table

This is the user table. Where we store user login and registration information.



The screenshot shows the phpMyAdmin interface for a database named 'database_rent'. The 'tbl_user' table is selected, and the following SQL query is executed: `SELECT * FROM `tbl_user` ORDER BY `userId` ASC`. The table contains 4 rows of data. The columns are: `userId`, `userName`, `userUsername`, `userEmail`, `userImage`, `mobileNo`, and `userPass`.

	userId	userName	userUsername	userEmail	userImage	mobileNo	userPass
<input type="checkbox"/>	16	Masudur Rahman	masud1	masudur15-1743@diu.edu.bd	uploads/userimage/c74a431f37.jpg	01980573601	827ccb0eea8a706c4c34a16891f84
<input type="checkbox"/>	17	Jannatul Marjan	marjan	jannatul15-1744@diu.edu.bd	uploads/userimage/85b75838e.jpg	01612188555	93279e3308bdbbed946fc9650178
<input type="checkbox"/>	18	Tanvir Khan	tanvir12	tanvir@gmail.com	uploads/userimage/d017a81697.jpg	01711111111	827ccb0eea8a706c4c34a16891f84
<input type="checkbox"/>	19	Tanvir Kha	ta2	tanvie@gmail.com	uploads/userimage/ea46391294.jpg	019807	212321297a57a5a743894a0e4a801

Fig 4.2.7: User Table

4.3 Interaction Design and User Experience (UX)

Interaction design is very important for a website. We have focused on the design that we have created so that they can easily find their rented house and homeowners can easily provide the data when they post the ads. We have created such a user-friendly system.

4.4 Implementation Requirements

- The Backend of the system should be developed using PHP
- MySQL is the preferred database for keeping and managing all the data.
- SQL injection is needed to protect with CSRF token.
- Validating all the forms on the client-side using PHP.
- Verify all the form-protected XSS (cross-site scripting) attacks.
- Unauthorized access is needed to prevent in a proper way
- The implementation of workable session management.
- Any invalid data input in the form should be warned by various error messages.
- All the database queries should work properly.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

We have created tables manually in our database without using any framework. We used Php Language for operating CRUD operations. Since MySQL is a model controller database, we didn't need a direct query to perform actions. We can access our database by starting the MySQL server from the XAMPP Control Panel and visiting <http://localhost/phpmyadmin/>.

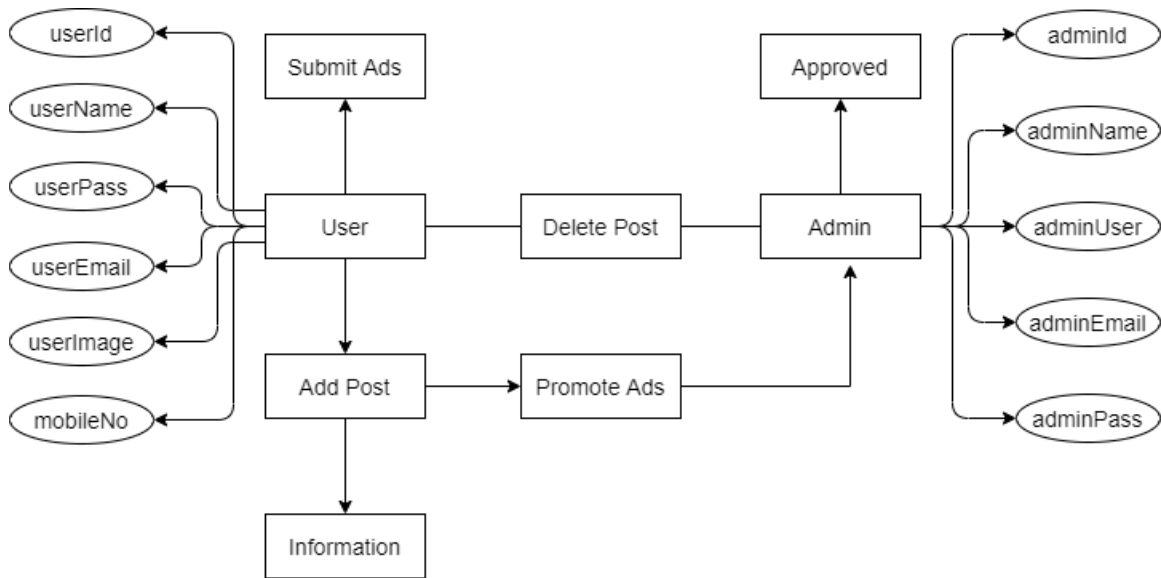


Fig 5.1: Implementation of Database

5.2 Implementation of Front-end Design

Our primary goal in designing a front end was to ensure a user-friendly UI for users. So, we have tried to keep our web pages as simple as possible. We also keep in mind that the design should be attractive and user-friendly during implementation of front-end design. Another important factor is that the website should be responsive to all kinds of device like smartphones, tablet, notebook etc. So, we have used responsive coding to make our site responsive. We have used JavaScript and also jQuery to ensure user friendly interaction. Our frontend design includes the following:

- A simple but attractive home page design.
- An easily understandable property details page.
- User friendly registration and login page.
- An attractive and easy-to-find filter option.
- Attractive and informative card design.

5.3 Testing Implementation

Testing is as much important as developing it. Because testing implementation ensure that application run smoothly as we expected. We have tried our best to make system secure. So, we have performed testing by implementing some test cases for our system.

5.4 Test Results and Reports

Table 5.4: Test Results and Reports

No.	Description	Text Data	Expected Result	Actual Result
01.	Check all input field empty or not	If empty	A message should be displayed as all field must not be empty.	Pass
02.	Check the input email is in valid format	Email: masud@.com	A message should be displayed as input validation	Pass
03.	During registration check the input mail is already registered	Email: tanvir@gmail.com	A message should be displayed as the input mail is already taken	Pass
04.	Check username is greater than 4	Username: Mar	A message should be displayed as the username must be greater than four	Pass
05.	Clicking the login button with invalid email or password or both.	Email: inavild@gmail.com Password:” invalid”	A message should be displayed as account is not valid	Pass
06.	Clicking the login button with valid email and password	Email: Jannatul5-1744@diu.edu.bd Pass: 121212	Redirect to Home page.	Pass

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

6.1 Impact on Society

Home rent service is one of the important issues in society. Nowadays people face difficulty when they find their desired home and the landowner also needed to rent their house. So, we created a web-based home rental service which is really a good impact on society. Because of this platform homeowners and tenants can easily reach each other. By this system, they both will be mutually benefited. [4]

6.2 Impact on Environment

These days we see innovation in everything around us. Most things have become online-based. In the same way, renting a house with the help of online and finding the house of our choice is now in our hands. We can now find a home of our choice without having to physically look for a home anywhere through an online-based website. So, we think it is really a good impact on our environment. This system will make our life easier.

6.3 Ethical Aspects

In the case of web-based rental services, neither the landlord nor the tenant will face any problems. Because when we use this platform, we both will register on the website with our correct information. This will allow both the tenant and the landlord to know all of their information in advance. So, the chances of any unethical problem are very low.

6.4 Sustainability Plan

Sustainability will increase when the general public uses the website. Some more features will be added to the website so that users can use it easily so it will be user-friendly. The advertisement system will be launched. For which homeowners have to post with advertising fee. The money received will be spent on the maintenance of the website and the honorarium of the developers.

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

Our project will provide people more comfortable searching rental homes category-wise and minimize their time. We have completed our Web-Based Home Rental project to achieve knowledge and experience in web design and development. We are very much interested in building our carrier in the web design and development sector. So, this project is very helpful for our future life. We have achieved various knowledge about web design and development and learned a lot about it. Now we have the potential to develop a complete web-based system that can satisfy users requirements. We have faced many problems during the development process and find out the solution. we learned how to deal with the problem that can arise while developing web-based software. It will not only help in our future carrier but also will help us to be professional web developers.

7.2 Scope for Further Developments

We have tried to integrate various trending web technology into our system. But due to time and resource issues, we were not able to cover all. To improve its efficiency, we will extend many features in near future. Some of them are pointed below:

- We will add a live chat for communicating with the tenant and owners.
- Also, we will add a one-click Google Sign-In registration system.
- We will integrate various payment methods that are available in BD.
- The system will be updated day by day for a better user experience.
- We will add a public review section for every homeowner's service.
- User account creation system will be easier in near future.
- The admin panel will be more dynamic and feature-rich.
- Converting the whole system into an android system or application.

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