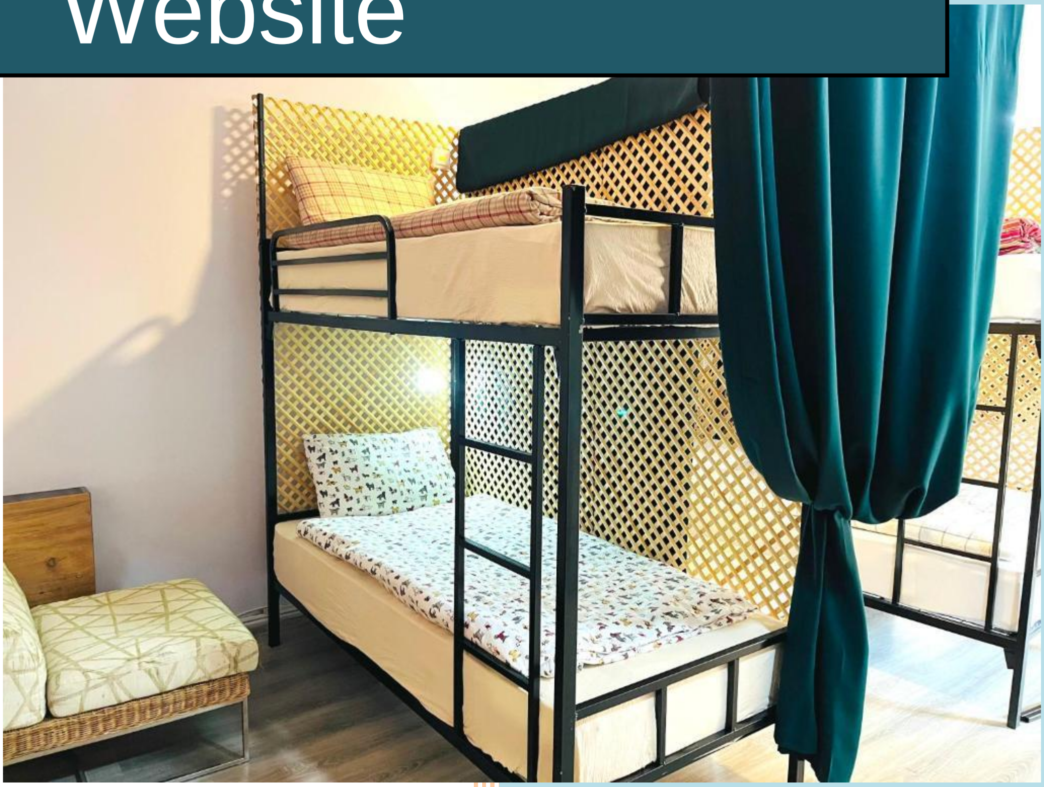
Accommodation Management Website



Group EE

University of Plymouth

8/4/2024

IN PARTNERSHIP WITH PLYMOUTH UNIVERSITY

Name: W M T Madusanka

Student Reference Number: 10899603

Module Code: PUSL2020	Module Name: Software Development Tools and Practices
Coursework Title: Group Assignment Final Report	
Deadline Date: 08/03/2024	Member of staff responsible for coursework: Ms. Pavithra Subhashini/ Dr.Rasika Ranaweera
Programme: BSc Honors Software Engineering	

Please note that University Academic Regulations are available under Rules and Regulations on the University website www.plymouth.ac.uk/studenthandbook.

Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.

10899603 – Wedamulla Madinage Thisara Madusanka
10899621- Chathupraba Devindi Munasinghe
10899521 – Navindu Nimsara Gamage
10899556- Yaddehi Kishal Sankalpa Jayalath
10899685- Kihaduwage Diduli Wijini Sahasra
10899600- Senanayake Dasili Liyanage Sameepa Pramuditha

We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.

Signed on behalf of the group:

Individual assignment: ***I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.***

Signed :

Use of translation software: failure to declare that translation software or a similar writing aid has been used will be treated as an assessment offence.

I *have used/not used translation software.

If used, please state name of software…………………………………………………………………

Overall mark _____% **Assessors Initials ______** **Date_________**

Acknowledgement

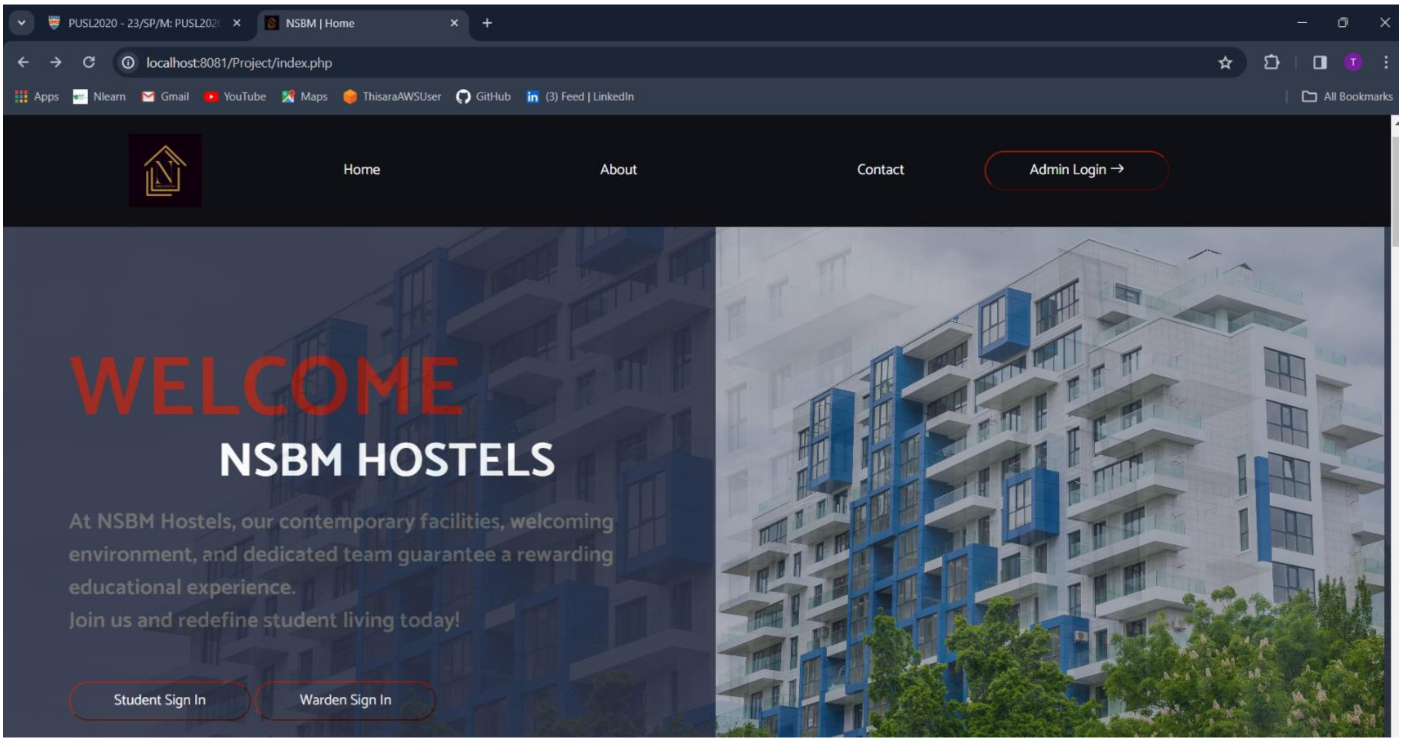
The team expresses gratitude to Dr. Rasika Ranaweera and Ms. Pavithra Subhashini, Module in Charge Lecturers, for their invaluable support and guidance throughout the project. They acknowledge NSBM Green University's commitment to fostering a culture of innovation and intellectual inquiry, providing an enriching learning environment. The team's unique skills, talents, and contributions have been crucial in shaping the outcome. They also acknowledge the sacrifices made by team members in balancing academic commitments, personal obligations, and project responsibilities. The team's dedication and professionalism have been a testament to their dedication and professionalism. The team's collective efforts have led to the successful completion of the project.

Table of Contents

Introduction

NSBM Green University has launched the NSBM Green University Accommodation Portal, a custom online application designed to streamline the process for new students. The portal links students with vetted landlords and rental businesses, ensuring a smooth transition for students. The platform offers a comprehensive database of accommodations, allowing students to make informed choices based on their needs and budget. The warden, responsible for ensuring lodging standards, has the power to accept or reject ads. The portal also provides a lively community for students to find their ideal home away from home. This initiative aims to create a supportive living environment for academic achievement.

Evidence of Project



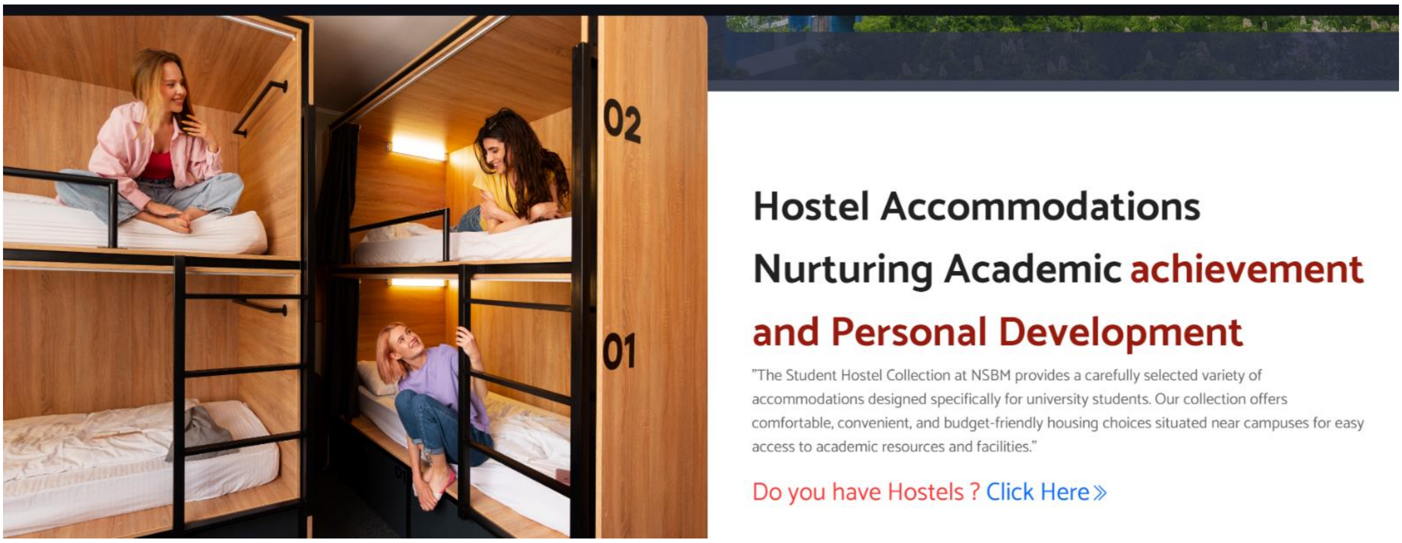
WELCOME

NSBM HOSTELS

At NSBM Hostels, our contemporary facilities, welcoming environment, and dedicated team guarantee a rewarding educational experience.
Join us and redefine student living today!

Developed by: Wedamulla Madusanka

This is how the Homepage of our website appeared when a user opened the website. The above section basically includes a nav bar and buttons which are linked with **Admin Login**, **Student Sign in** and **Warden Sign in.**



Hostel Accommodations

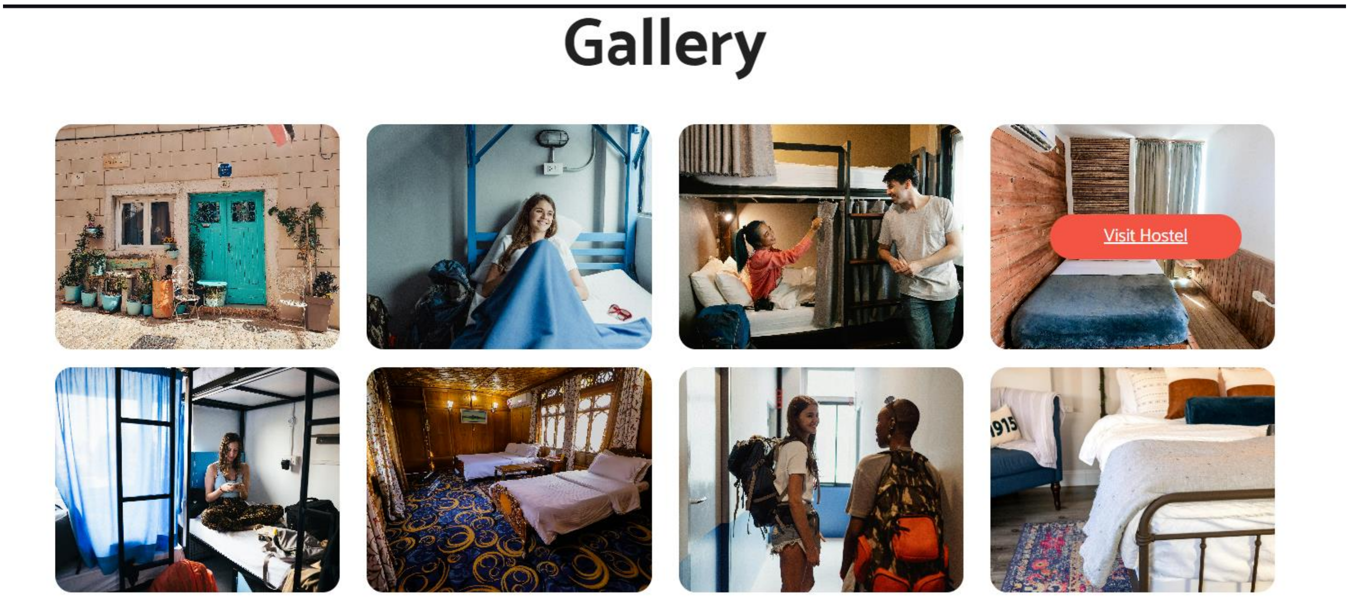
Nurturing Academic achievement and Personal Development

"The Student Hostel Collection at NSBM provides a carefully selected variety of accommodations designed specifically for university students. Our collection offers comfortable, convenient, and budget-friendly housing choices situated near campuses for easy access to academic resources and facilities."

Do you have Hostels ? Click Here»

Developed by: Wedamulla Madusanka

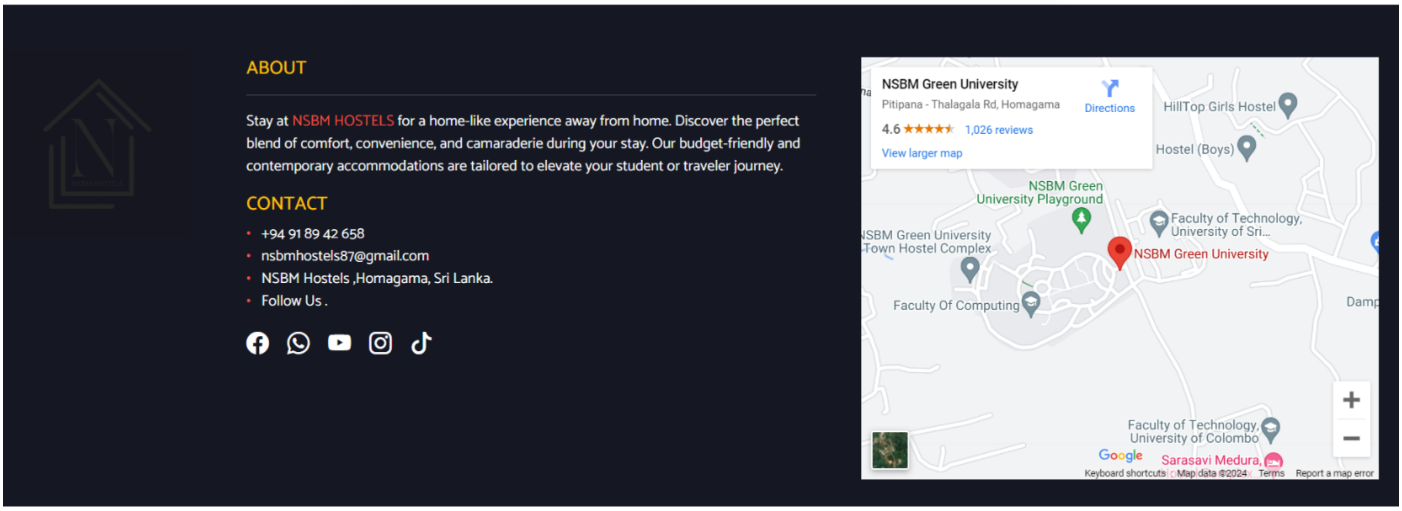
This section includes the landlord registration link with the **Click Here>>** hyperlink.



Gallery

Developed by: Wedamulla Madusanka

This Section includes a small galley within the homepage which has some images of hostel environment.



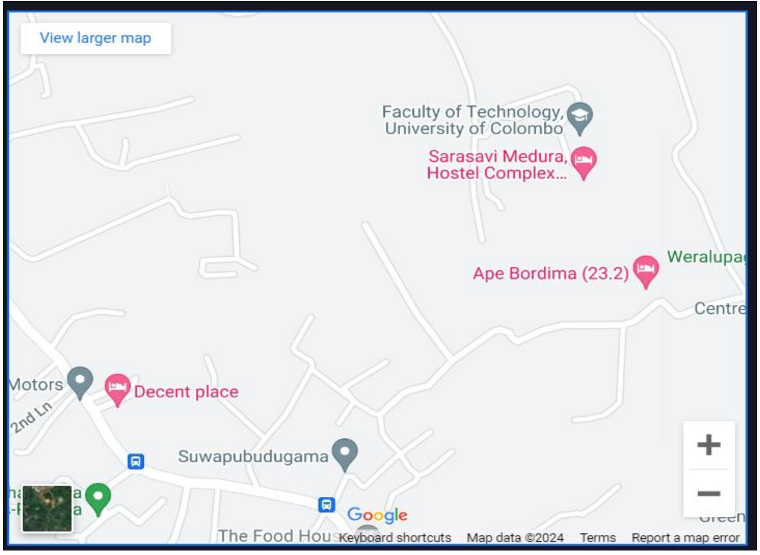
ABOUT

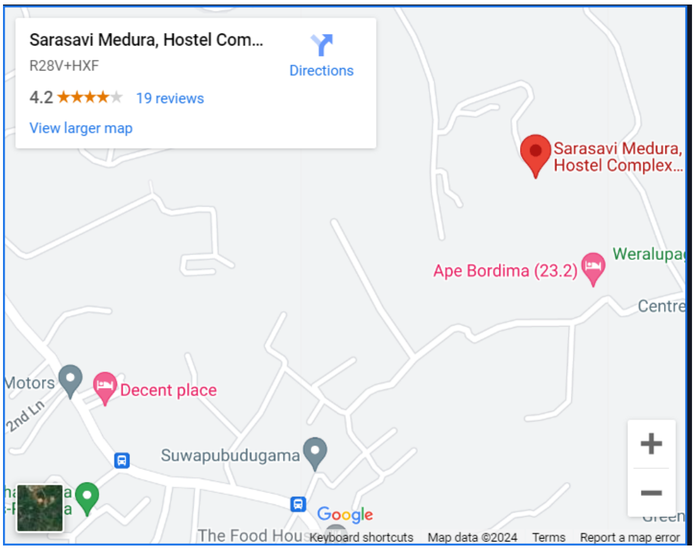
Stay at NSBM HOSTELS for a home-like experience away from home. Discover the perfect blend of comfort, convenience, and camaraderie during your stay. Our budget-friendly and contemporary accommodations are tailored to elevate your student or traveler journey.

CONTACT

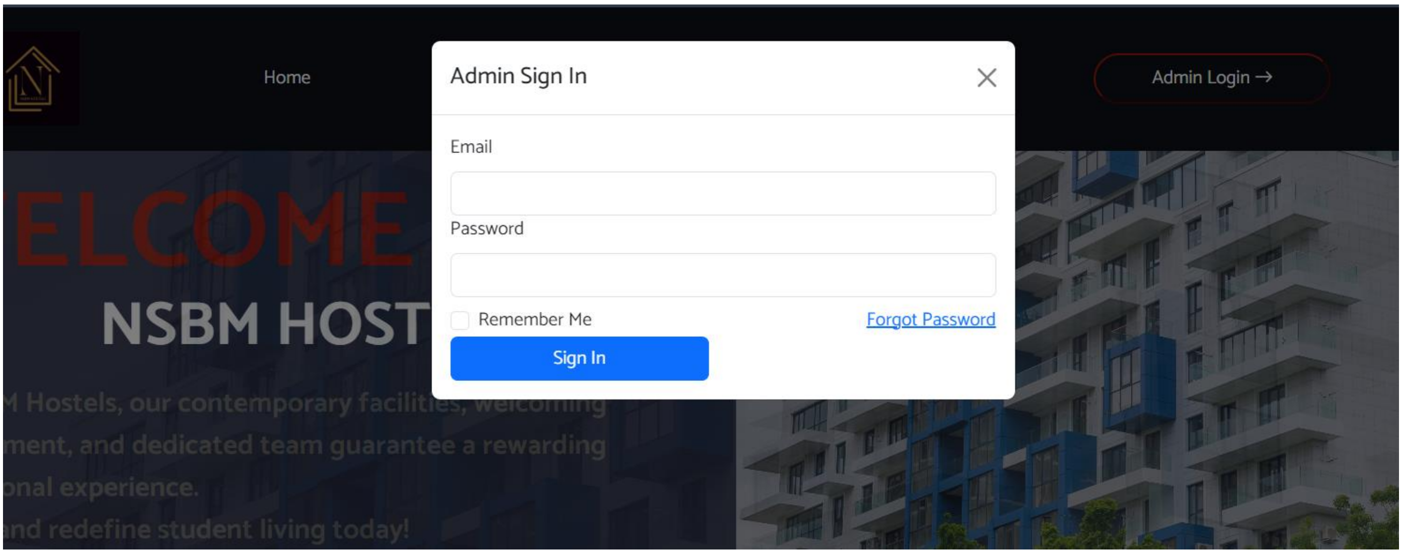
- +94 91 89 42 658
- nsbmhostels87@gmail.com
- NSBM Hostels ,Homagama, Sri Lanka.
- Follow Us .

Developed by: Senanayake Liyanage / Yaddehi Sankalpa This is the Footer part of our homepage it basically includes a small description about the website and the contact details of the website administration.By the way you can see a map aside with the footer.



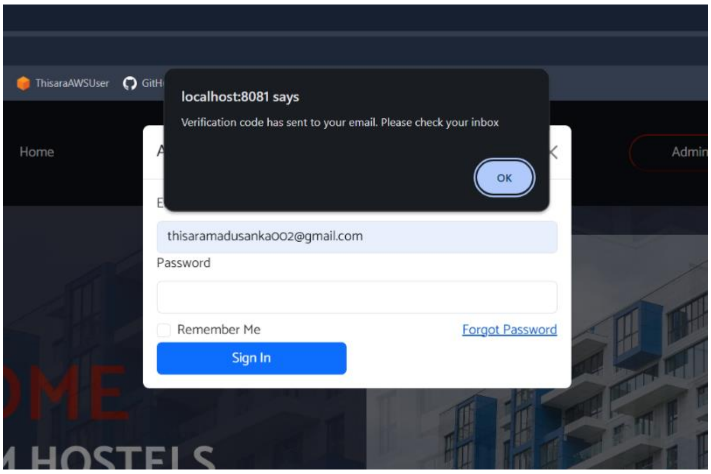


You can see hostel locations with the bed icon and when you click on bed icon you can see the directions to that relevant hostel, reviews about that hostel and also you will be able to view that map on large view also.


Home
Admin Login →
Admin Sign In
Email
Password
Remember Me
Forgot Password
Sign In
ELCOME
NSBM HOST
M Hostels, our contemporary facilities, welcoming
ment, and dedicated team guarantee a rewarding
onal experience.
and redefine student living today!

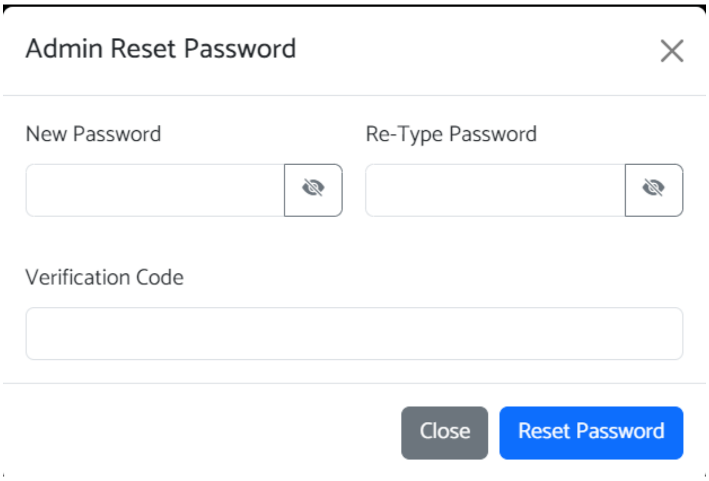
Developed by: Yaddehi Sankalpa / Kihaduwage Sahasra

This is the admin sign in page which admin can give access to admin panel. When user ticked on the **Remember me** checkbox login information will be saved to the browser as caches. And when Clicking on the **Forgot Password** link a verification code will be sent to the email and user will be directed to the forget password window. User can change his password after entering New Password and Verification Code Sent to the email address.


localhost:8081 says

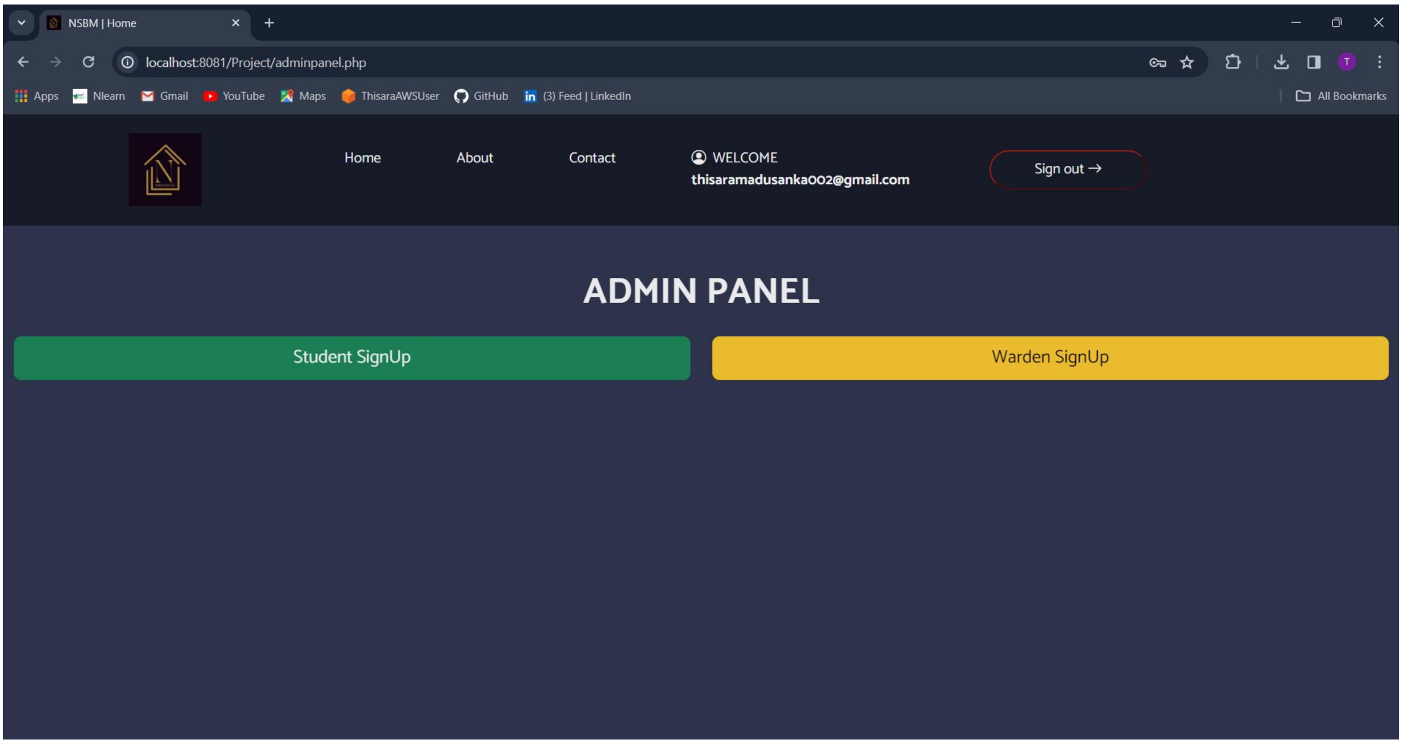
Verification code has sent to your email. Please check your inbox

thisaramadusanka002@gmail.com



Developed by : Yaddehi Sankalpa

After changing password admin can login to the admin panel by entering new password.



WELCOME
thisaramadusanka002@gmail.com

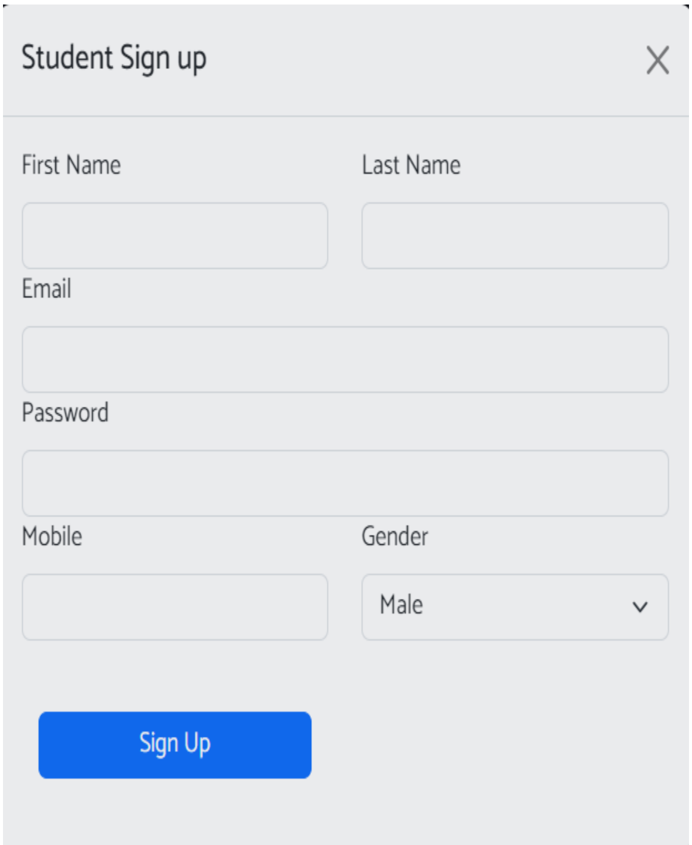
ADMIN PANEL

Developed by: Yaddehi Jayalath / Kihaduwage Sahasra

This is the Admin Panel which has two main functionalities.

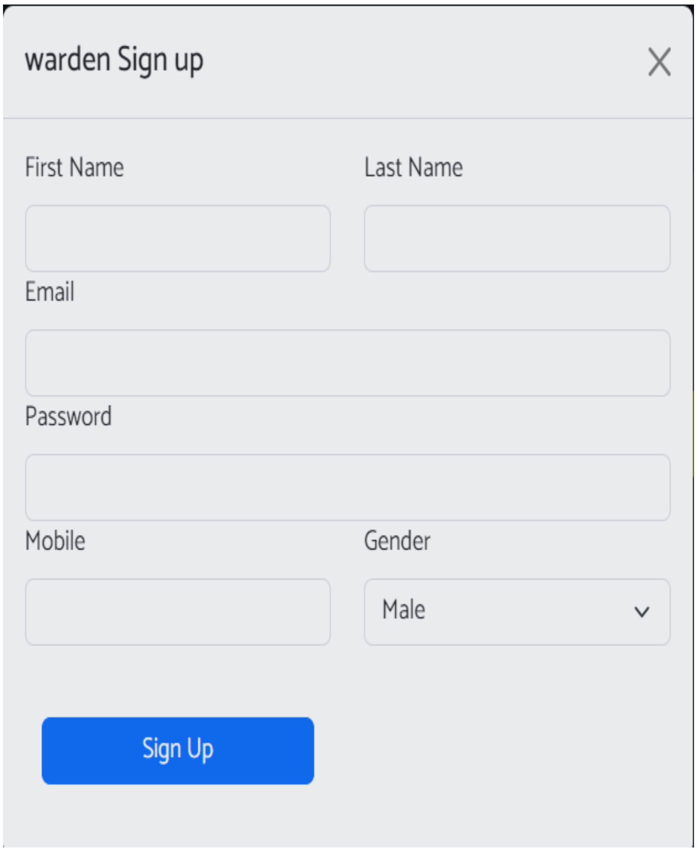
1. Student Sign up
2. Warden Sign up

In this system only admin can Sign up students and wardens. After admin registered a student or a warden, they can login to the relevant webpages and see hostel and ads.



Student Sign up

Gender: Male

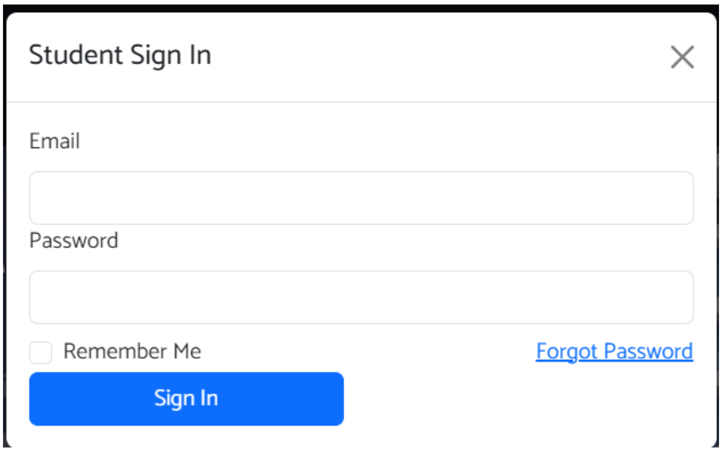


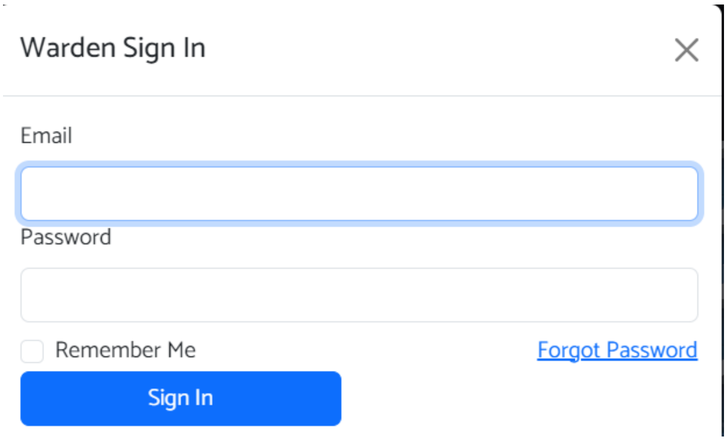
warden Sign up

Gender: Male

These are the Signup forms for students and wardens.

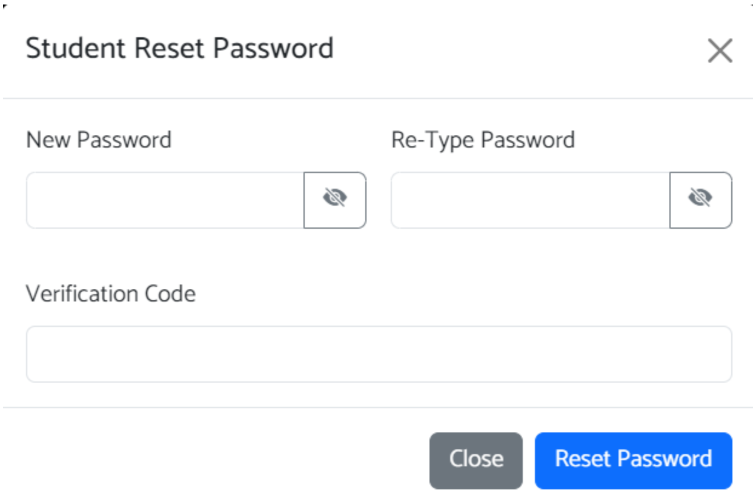
After admin registered students and wardens can login to the system. Following snaps are the login forms for students and wardens.

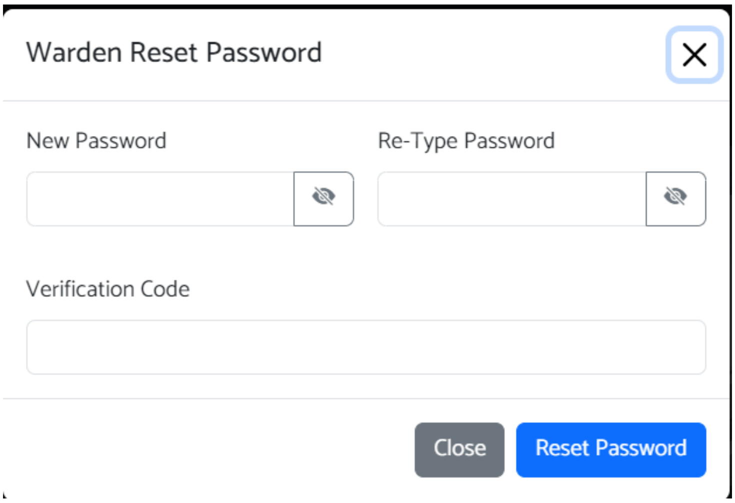




Developed by: Chathupraba Munasinghe/ Badal Gamage

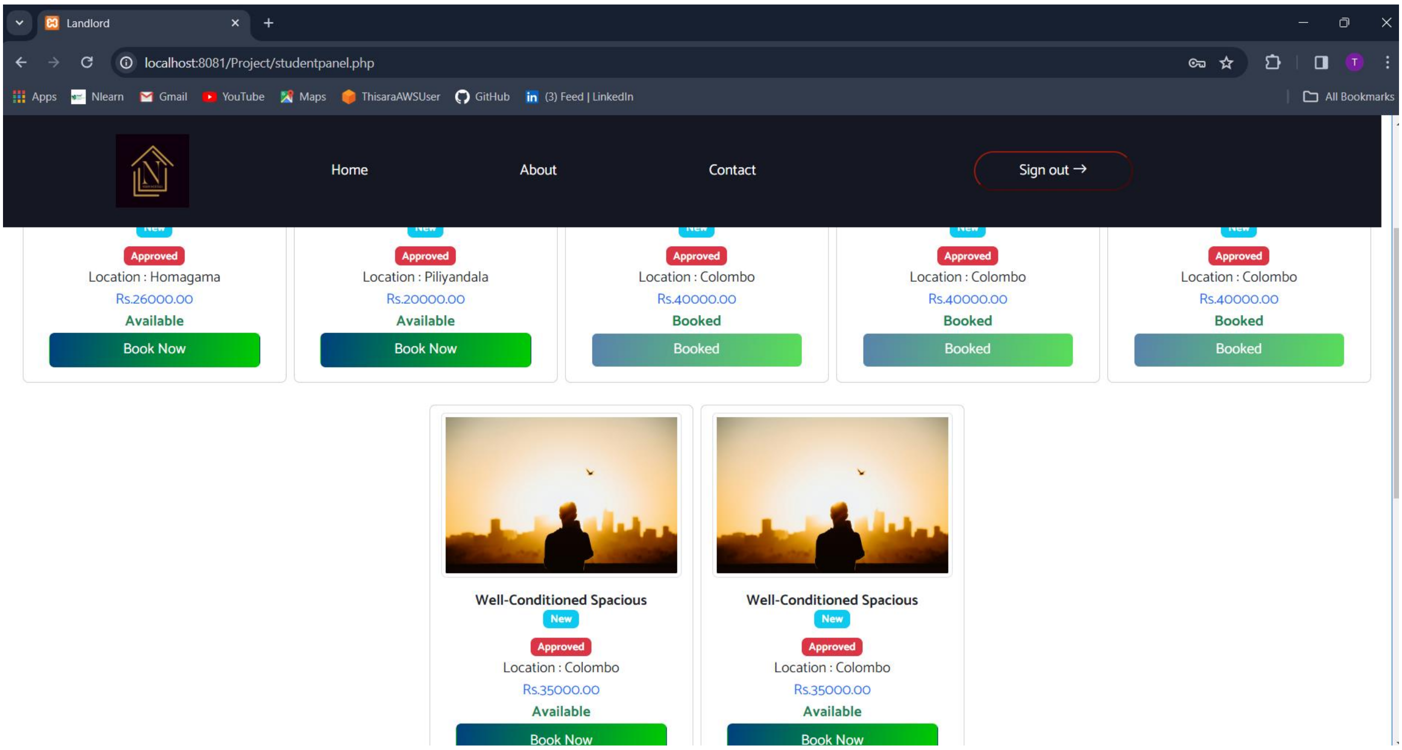
Users can login to the system when entering the registered emails and passwords. If they want, they can change their passwords by using **Forgot Password** Link. The Process of the Forget password will be same as admin forgot password. User will get a verification to the registered mail. Then only the user can change password by entering the New Password and Verification Code.





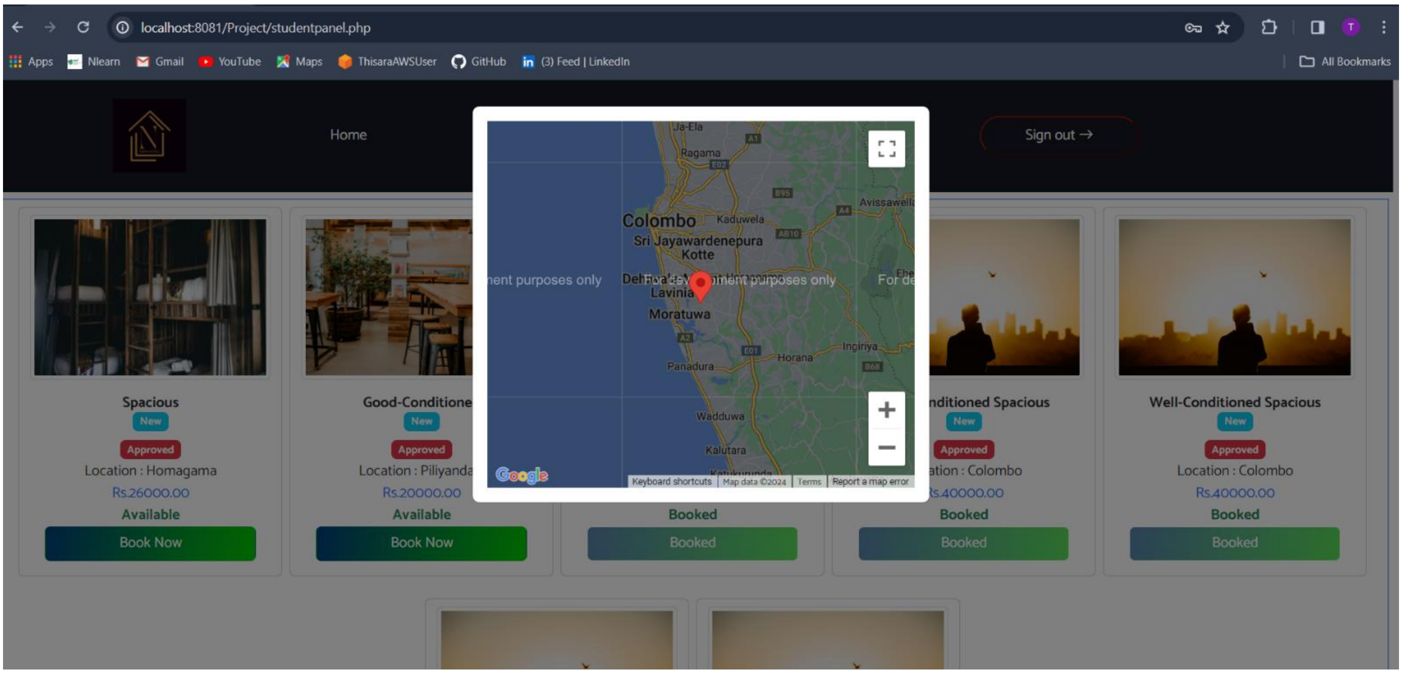
Developed by: Badal Gamage/ Chathupraba Munasinghe

The above snaps show the windows of Student Reset Password and Warden Reset Password.



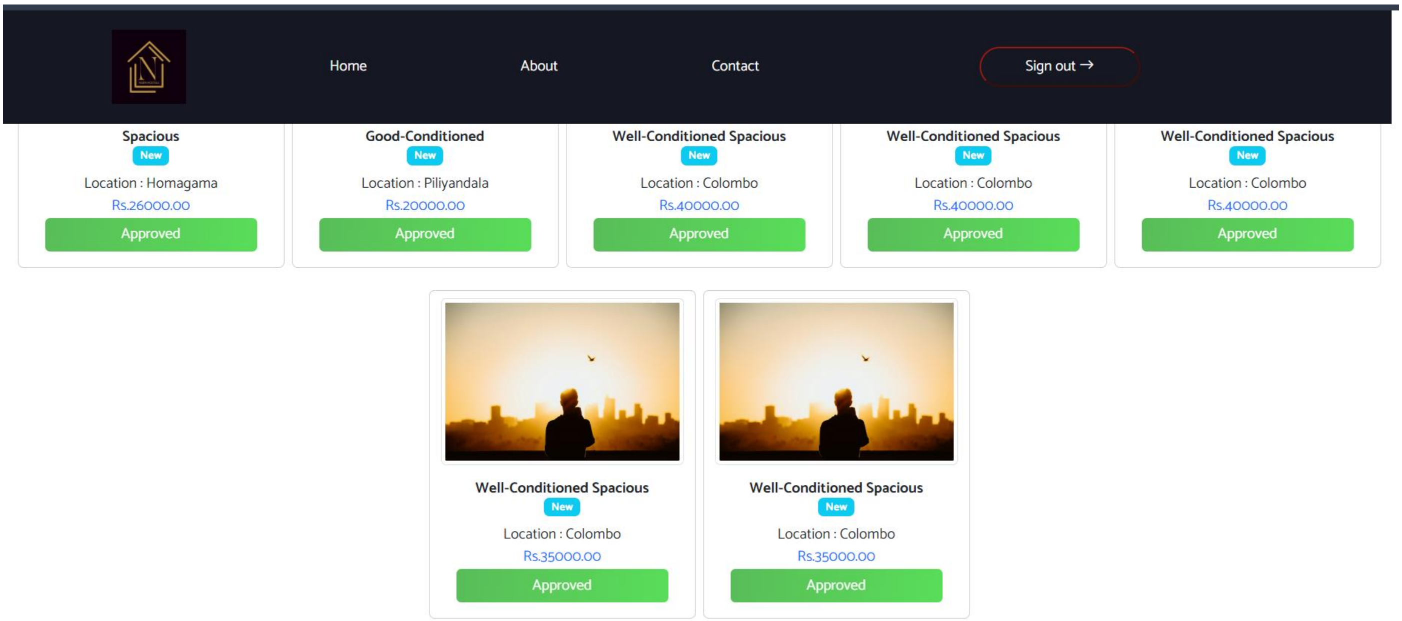
Developed by:Chathupraba Munasinghe /Kihaduwage Sahasra

This is the Student Dashboard of the system. Student can see the ads published by landlords and students can see the Bookings available hostels and already booked hostels also. Hostel Name ,Location, Price are the items included on the cards. Students can see the exact location of the hostel by clicking on the image of cards.



Developed by : Chathupraba Munasinghe / Senanayake Liyanage

The above snap Shows how a mini map popped-up and shows the exact location of the selected hostel.



Spacious
New
Location : Homagama
Rs.26000.00
Approved

Good-Conditioned
New
Location : Piliyandala
Rs.20000.00
Approved

Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Approved

Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Approved

Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Approved

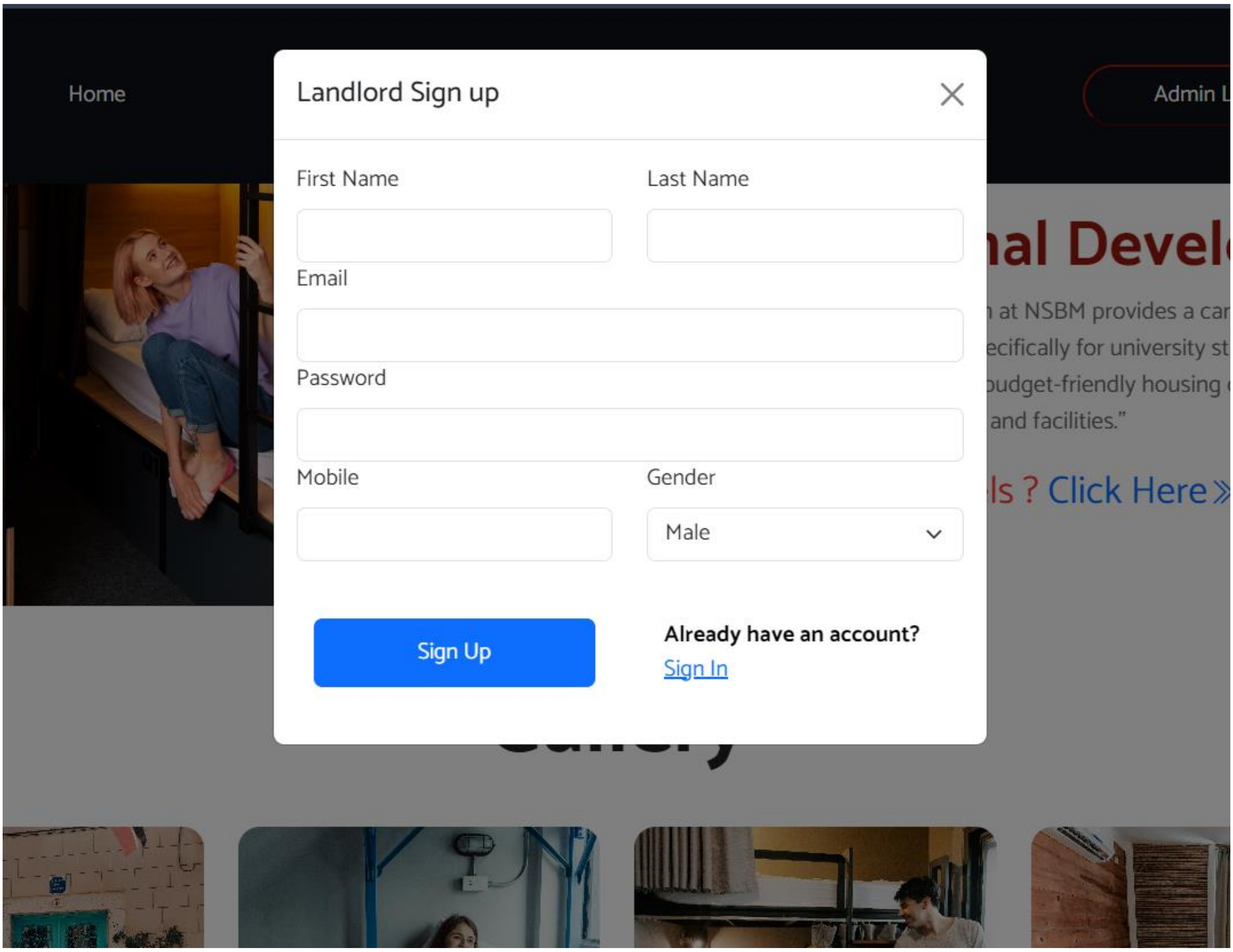
Well-Conditioned Spacious
New
Location : Colombo
Rs.35000.00
Approved

Well-Conditioned Spacious
New
Location : Colombo
Rs.35000.00
Approved

Developed by: Badal Gamage/ Kihaduwage Sahasra

The above snap shows the warden panel of the system. When a landlord publish an advertisement all the advertisements will be shown in the warden panel after warden approved the advertisement then only students can see the advertisement.

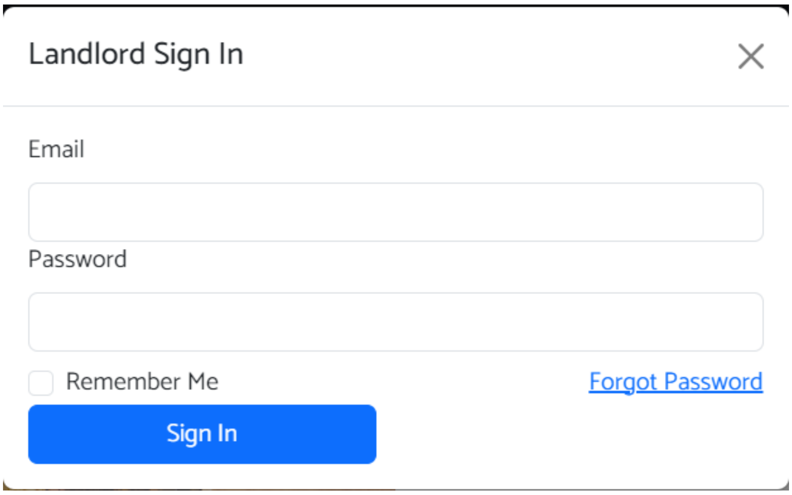
Warden also can see the exact location of the hostel by clicking on the image on the card.



Gender: Male

Developed by: Wedamulla Madusanka

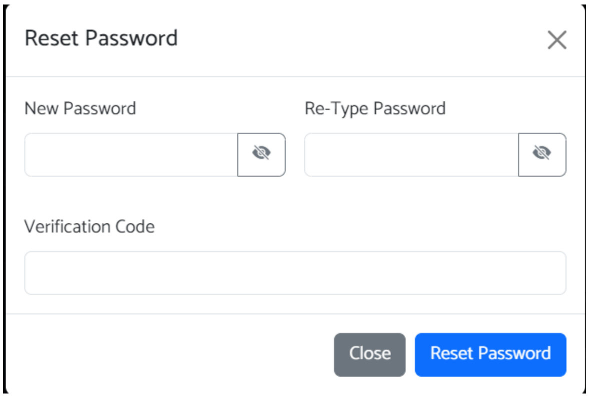
The last snap shows the signup window for a landlord. They can register themselves to the system by entering required details. If a landlord already has an account he can sign in to the system by clicking **on sign in** link.



This is the signup form for landlord. They can also reset password by clicking on the **Forgot Password** link.

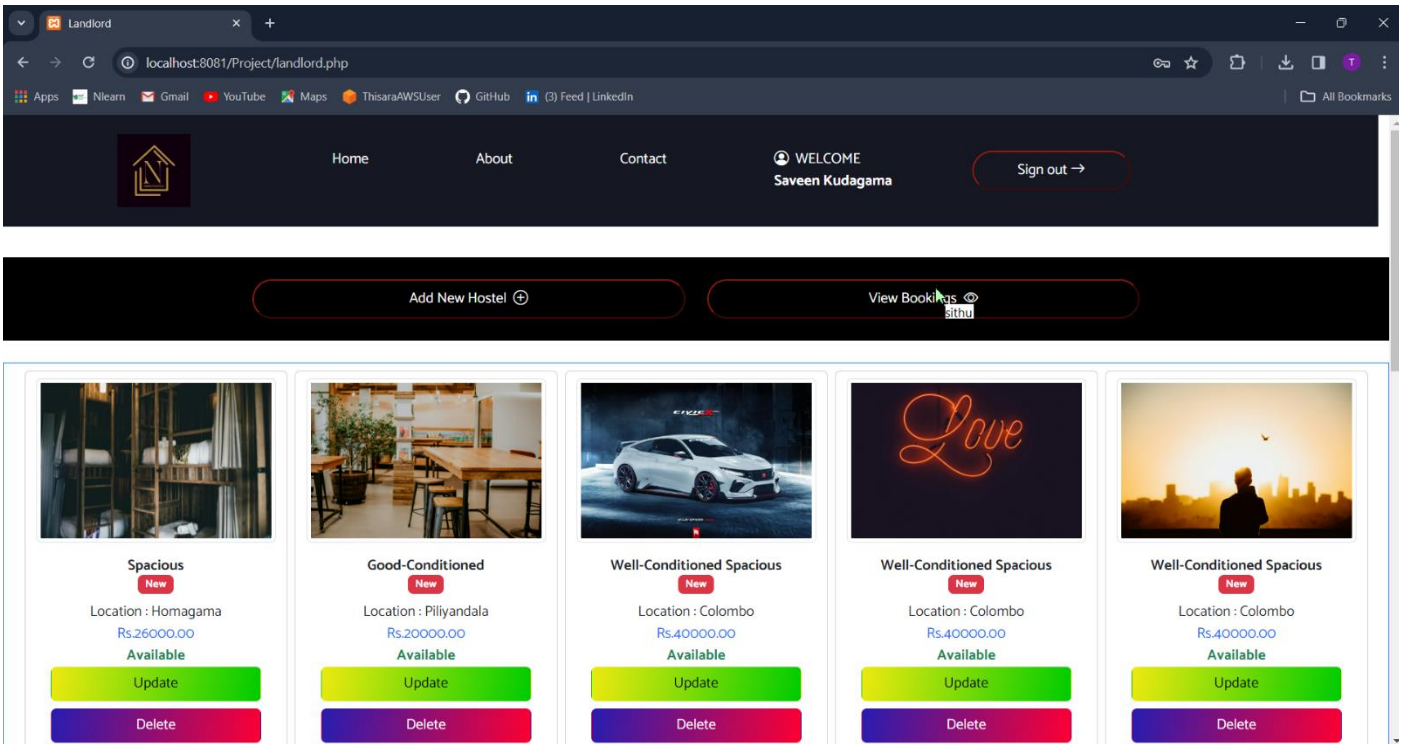
The Process of Forgot password is same as the other processes mentioned earlier. User will get a verification code to the registered email and by entering that code and new password user can reset the password easily.

Developed by: Wedamulla Madusanka



This is the Reset Password window for landlords.

Developed by: Wedamulla Madusanka



Spacious
New
Location : Homagama
Rs.26000.00
Available

Good-Conditioned
New
Location : Piliyandala
Rs.20000.00
Available

Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Available

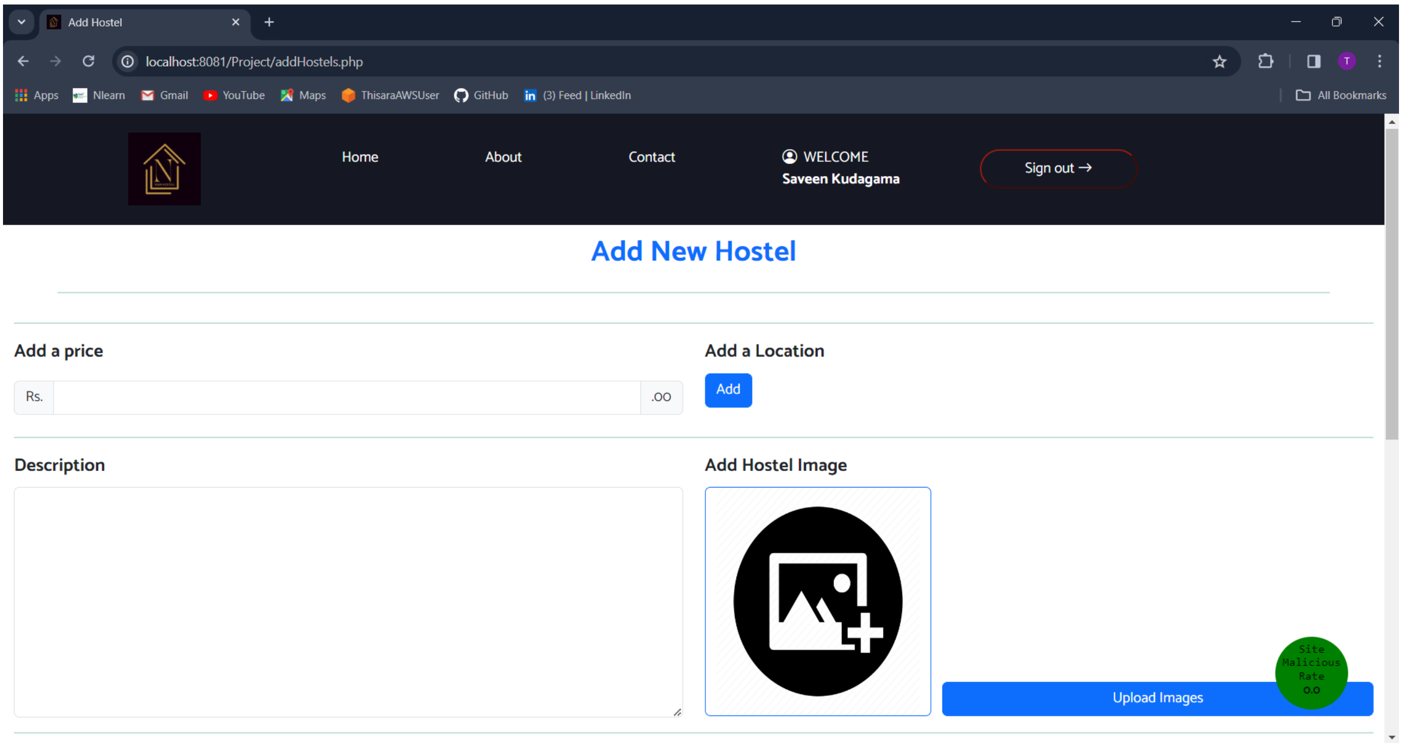
Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Available

Well-Conditioned Spacious
New
Location : Colombo
Rs.40000.00
Available

Developed by: Wedamulla Madusanka

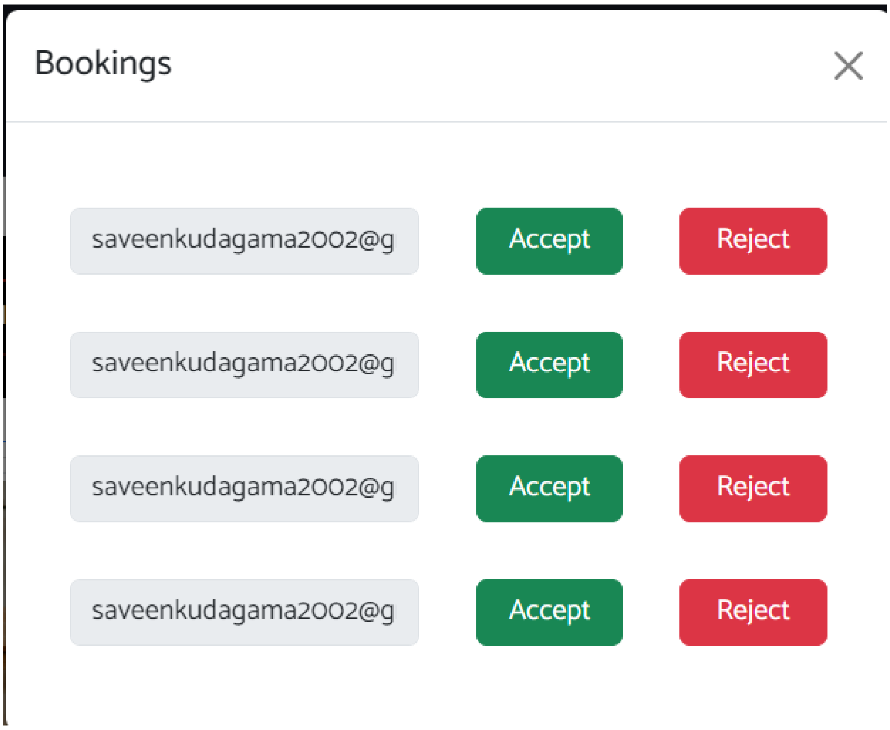
The last snap is the landlord dashboard of the system. He can see already added hostels in the dashboard if he wants, he can update or delete the added advertisement.

Also, there are two buttons for adding new hostels and viewing the bookings done by students.



Developed by: Wedamulla Madusanka

This is the page which is created for adding new advertisement regarding the hostel. Landlord can add hostels by entering the price, location, description and relevant images.



Bookings

saveenkudagama2002@g

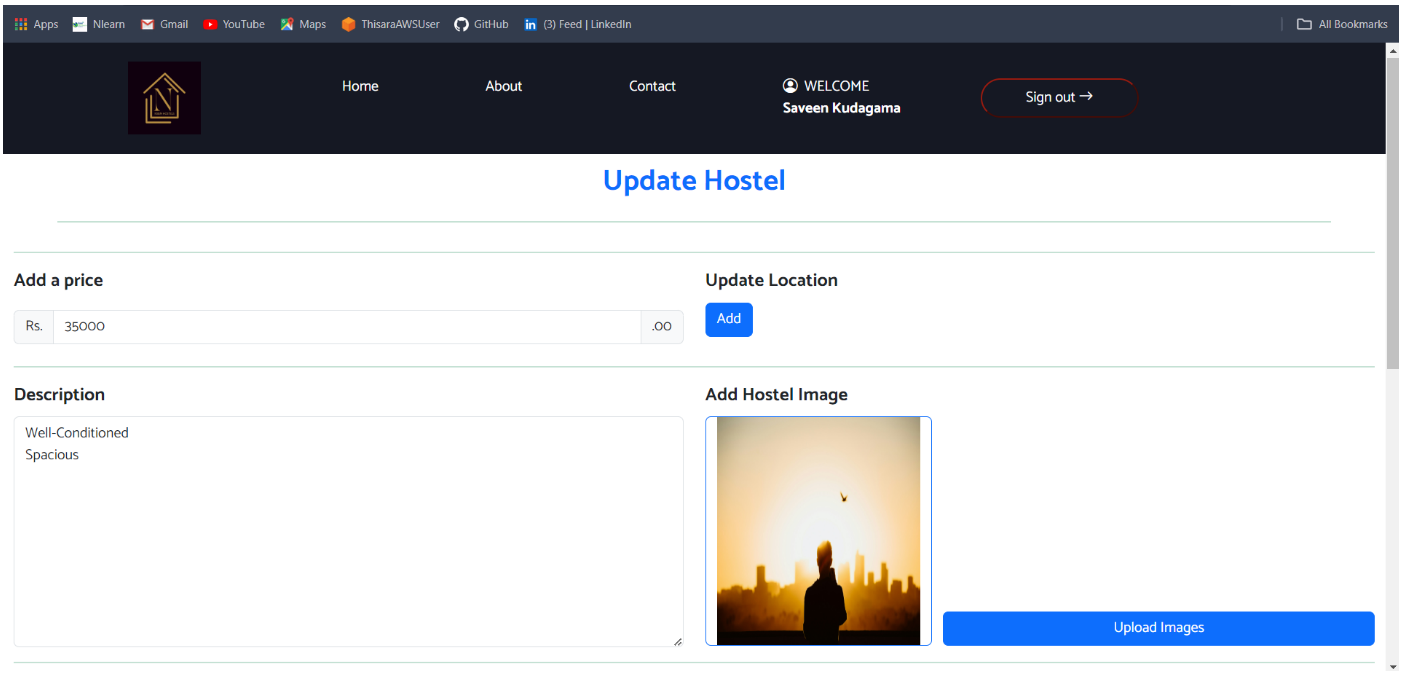
saveenkudagama2002@g

saveenkudagama2002@g

saveenkudagama2002@g

Developed by: Wedamulla Madusanka

This is how landlord can view the bookings done by the students. This window will popup when the user clicked on the **View Bookings** button.



Update Hostel

Add a price

Rs. 35000 .00

Update Location

Add

Description

Well-Conditioned
Spacious

Add Hostel Image

Upload Images

Developed by: Wedamulla Madusanka/ Kihaduwage Sahasra

This is the page which give access landlords to update the existing hostels.

Description of the test cases we have designed

When designing test cases, a tester must establish a collection of variables or circumstances that will be used to assess whether a system, piece of software, or application functions as intended. Here is a detailed steps how we created test cases:

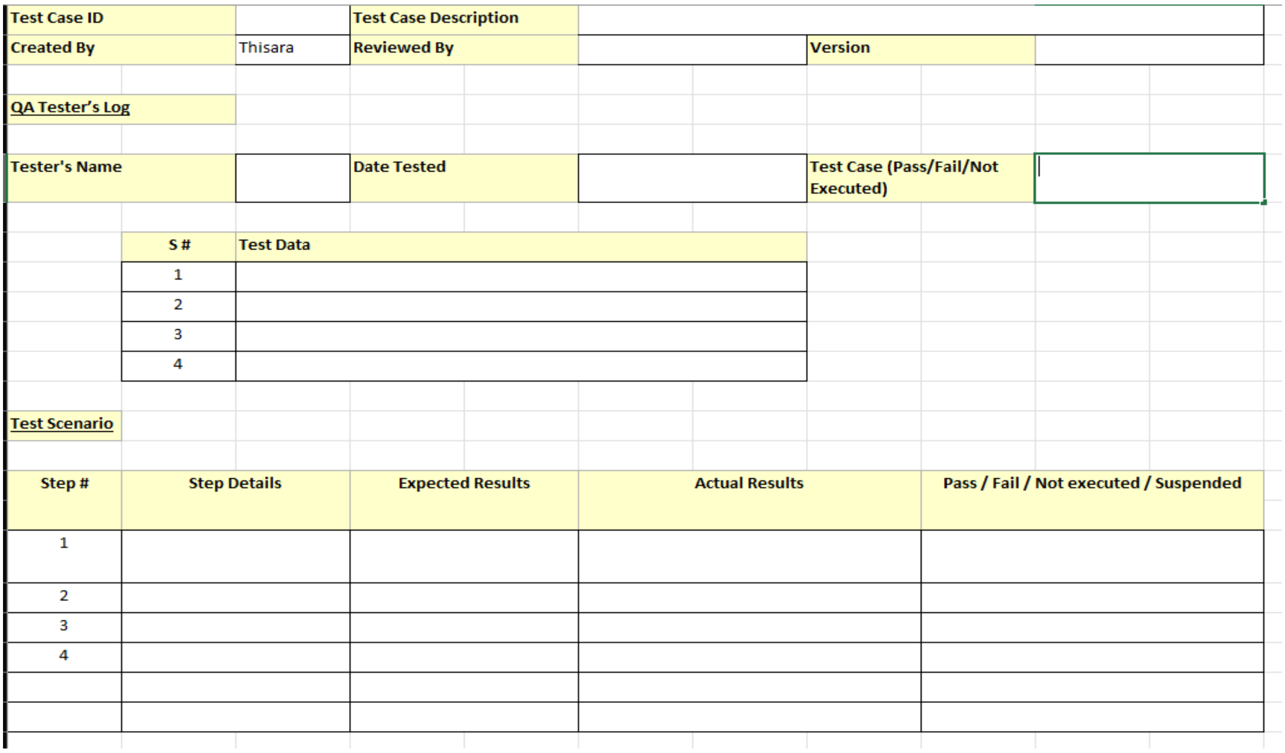
I. Recognize Requirements: To start, make sure you are aware of what the system or application you are evaluating has to offer. This covers both non-functional (performance, security, etc.) and functional requirements (what the system should be able to accomplish).

II. Determine Test Scenarios: Determine several test scenarios based on the requirements. These hypothetical situations reflect various routes or circumstances that the system could run into while in operation.

III. Make Test Cases: Make particular test cases for every test scenario. Test cases must to provide comprehensive, step-by-step guidelines for doing system tests. Every test case has to have a distinct goal, as well as inputs, expected outcomes, and any special requirements or constraints.

IV. Cover Both Positive and Negative eventualities: Make sure your test cases include both eventualities that may go wrong. Negative scenarios examine how the system responds to erroneous or unexpected inputs, whereas positive scenarios confirm that the system operates as intended under typical circumstances.

V. Prioritize Test Cases: Test case prioritization should be done by taking into account several aspects including complexity, frequency of use, and criticality. This facilitates efficient resource allocation and guarantees that the system's most crucial components are adequately tested.



Test Case ID		Test Case Description			
Created By	Thisara	Reviewed By		Version	

QA Tester’s Log

Tester's Name		Date Tested		Test Case (Pass/Fail/Not Executed)	

S #	Test Data
1	
2	
3	
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1				
2				
3				
4				

Description of the structure and role of mock objects used

When testing and modeling system interactions without actually engaging with real data or other systems, mock objects may be very useful. The structure and function of a few fake objects that may be utilized in the context of this web application are described as follows:

1. UserMockObject:
   - Structure: User interactions throughout the system are simulated by this fake object. It can stand in for a variety of users, including web masters, students, wardens, and landlords.
   - Role: UserMockObject may be used to mimic user registration, login, and a range of user activities, such as controlling adverts for the warden, adding, modifying, or removing properties for landlords, and generating user accounts for web masters, students, and viewers.

2. AdvertisementMockObject:
   - Structure: This mock object represents advertisement data that landlords post for their properties.
   - Role: AdvertisementMockObject can be used to simulate the creation, modification, and deletion of property advertisements. It can also be used to simulate the approval or rejection process by the warden and interaction by students when browsing or reserving properties.

3. LocationMockObject:
   - Structure: The location information linked to attributes is represented by this fake object.
   - Role: The geographic data linked with properties may be simulated using LocationMockObject, enabling the testing of location-based features like mapping properties and clicking markers to get further information.

4. NotificationMockObject:
   - Structure: This dummy object replicates the messages that landlords receive when students make reservation requests.
   - Role: NotificationBy mimicking the sending and receiving of messages in the event that students make a property reservation request, MockObject may be used to test the notification system. Additionally, it may mimic how a landlord might react to a reservation request.

These mock objects make testing easier by offering regulated contexts for different web application operations. This way, developers can isolate and confirm the behavior of specific components without having to rely on real user data or third-party systems.

An explanation of how to run the unit tests and the integration tests

Unit Testing:

1. Tests of User Management:

- Examine the features for landlords, wardens, students, and web masters related to registration, login, and profile maintenance.
- Mock objects include DatabaseMockObject and UserMockObject, which are used to simulate database interactions.

2. Tests of Advertisement Management:

- Check how landlords are creating, editing, and removing real estate ads.
- Test the warden's approval or rejection procedure.
- Mock objects include UserMockObject, DatabaseMockObject, and AdvertisementMockObject.

3. Tests depending on Location:

- Examine the features that allow you to interact with location markers and view attributes on a map.
- Mock objects: MapServiceMockObject (to simulate map interactions), LocationMockObject, and AdvertisementMockObject.

4. Reservation and Notification Tests:

- Students should test the reservation procedure and the landlord notification mechanism.
- UserMockObject, AdvertisementMockObject, NotificationMockObject, and DatabaseMockObject are examples of mock objects.

Integration Testing:

1. Integration Tests for User Authentication:

- Examine the user registration, login, and profile management process from beginning to conclusion.
- Examine how the database, backend API, and frontend UI interact.
- Mock objects include DatabaseMockObject and UserMockObject.

2. Integration Tests for the Advertisement Lifecycle:

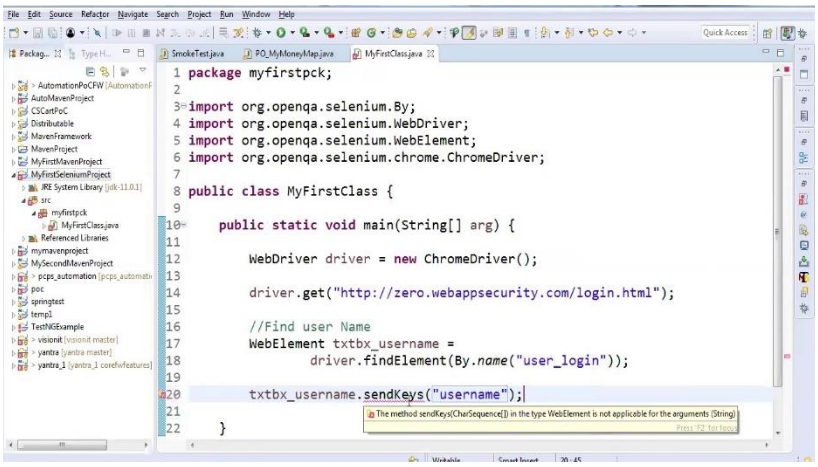
- Examine the whole lifetime of real estate ads, including their production, alteration, acceptance or rejection, and deletion.
- Examine how the warden, students, landlords, and database interact.
- Mock objects include UserMockObject, DatabaseMockObject, and AdvertisementMockObject.

3. Integration Tests Based on Location:

- Examine how the map's features work with property listings and marker interactions.
- Examine how the database, backend services, and frontend map user interface interact.
- Mock items: PlaceAdvertisementMockObject, MapServiceMockObject, and MockObject.

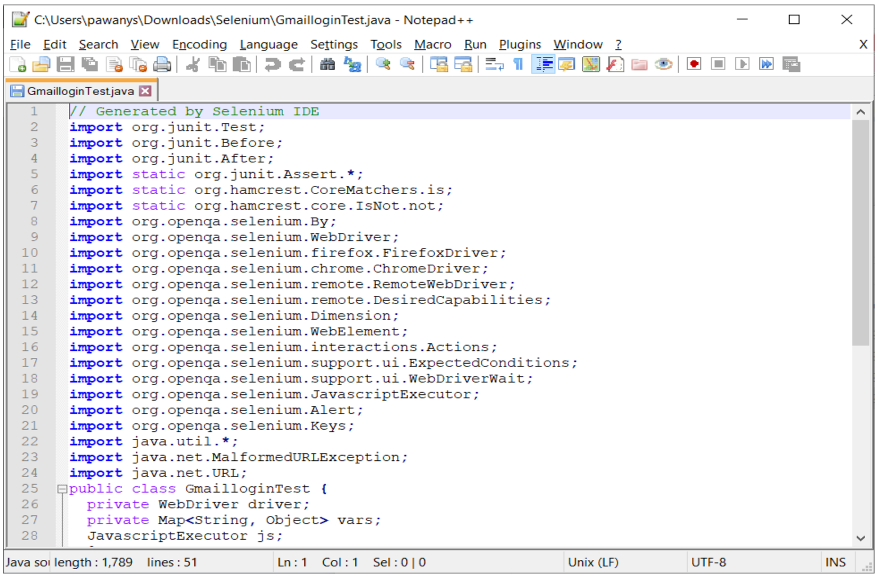
4. Integration Tests for Reservations and Notifications:

- Examine the complete process of students reserving properties and notifying landlords.
- Examine the communications between the database, notification system, landlords, and students.
- Mock items: Advertisement, UserMockObjectMockObject, NotificationDatabase, MockObjectMock-Object.



```java
package myfirstpck;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class MyFirstClass {

    public static void main(String[] arg) {

        WebDriver driver = new ChromeDriver();

        driver.get("http://zero.webappsecurity.com/login.html");

        //Find user Name
        WebElement txtbx_username =
                driver.findElement(By.name("user_login"));

        txtbx_username.sendKeys("username");
    }
```

The method sendKeys(CharSequence[]) in the type WebElement is not applicable for the arguments (String)


C:\Users\pawanys\Downloads\Selenium\GmailloginTest.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
GmailloginTest.java
Java sou length : 1,789 lines : 51 Ln : 1 Col : 1 Sel : 0 | 0 Unix (LF) UTF-8 INS

```java
// Generated by Selenium IDE
import org.junit.Test;
import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;
import static org.hamcrest.CoreMatchers.is;
import static org.hamcrest.core.IsNot.not;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.remote.RemoteWebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.Alert;
import org.openqa.selenium.Keys;
import java.util.*;
import java.net.MalformedURLException;
import java.net.URL;
public class GmailloginTest {
  private WebDriver driver;
  private Map<String, Object> vars;
  JavascriptExecutor js;
```

Functional Test Plan

A. User Management:

Objective: Ensure users can register, login, and manage their profiles correctly.

a. Sign up:

- Check to see that people can register using accurate information.
- Make sure that incorrect inputs (such as duplicate emails or missing fields) are handled correctly.

b. Sign in:

- Try logging in successfully with the correct credentials.
- Check error messages for username and password errors.

B. Advertisement Management:

Objective: Ensure landlords can add, update, and delete property advertisements, and the warden can approve/reject them.

a. Landlord Actions:

- Test adding a new property advertisement with all required details.
- Verify updating existing advertisements and deleting advertisements.
- Check error handling for missing or invalid information.

b. Warden Approval:

- Test warden's ability to view pending advertisements.
- Verify approving and rejecting advertisements with appropriate feedback.

C. Reservation and Notification:

Objective: Ensure students can reserve properties, and landlords receive notifications for reservation requests.

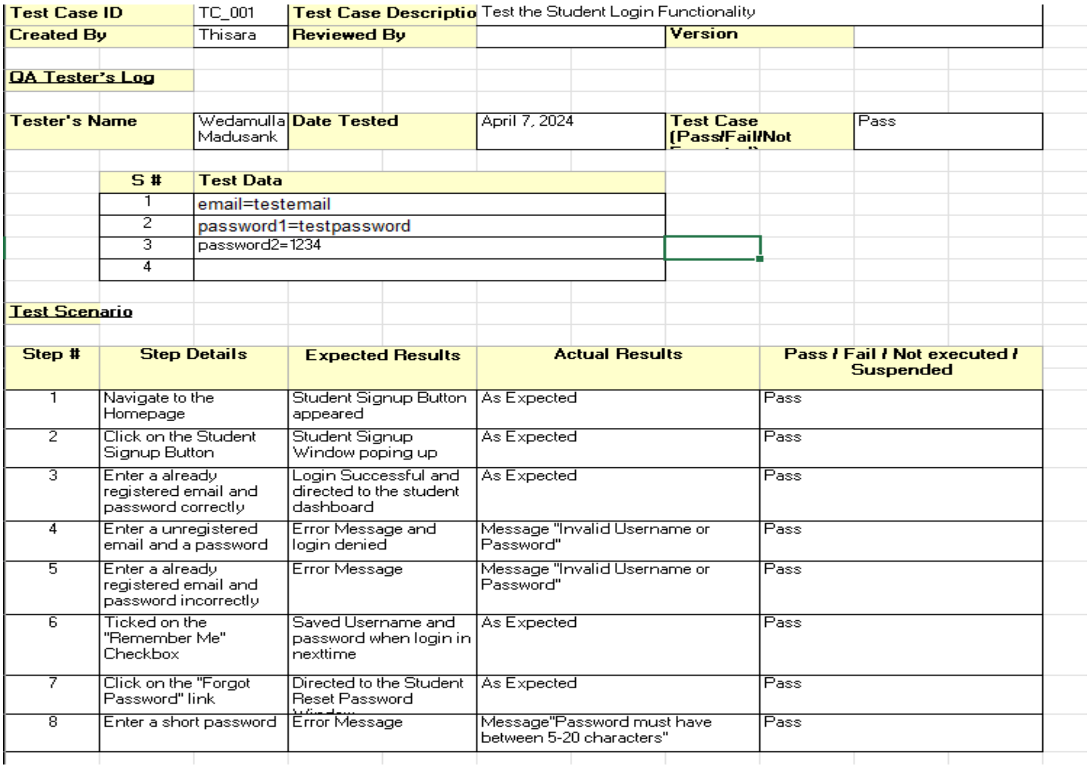
a. Procedure for Reservations:

- Try having a student reserve a property.
- Check to make sure the reservation appears in the system.

b. Notification to Landlord:

- Verify that notices of reservation requests are sent to landlords.
- Check the landlords' authority to approve or disapprove reservations.

Test Cases



Test Case ID	TC_001	**Test Case Descriptio**	Test the Student Login Functionality		
Created By	Thisara	**Reviewed By**		**Version**	

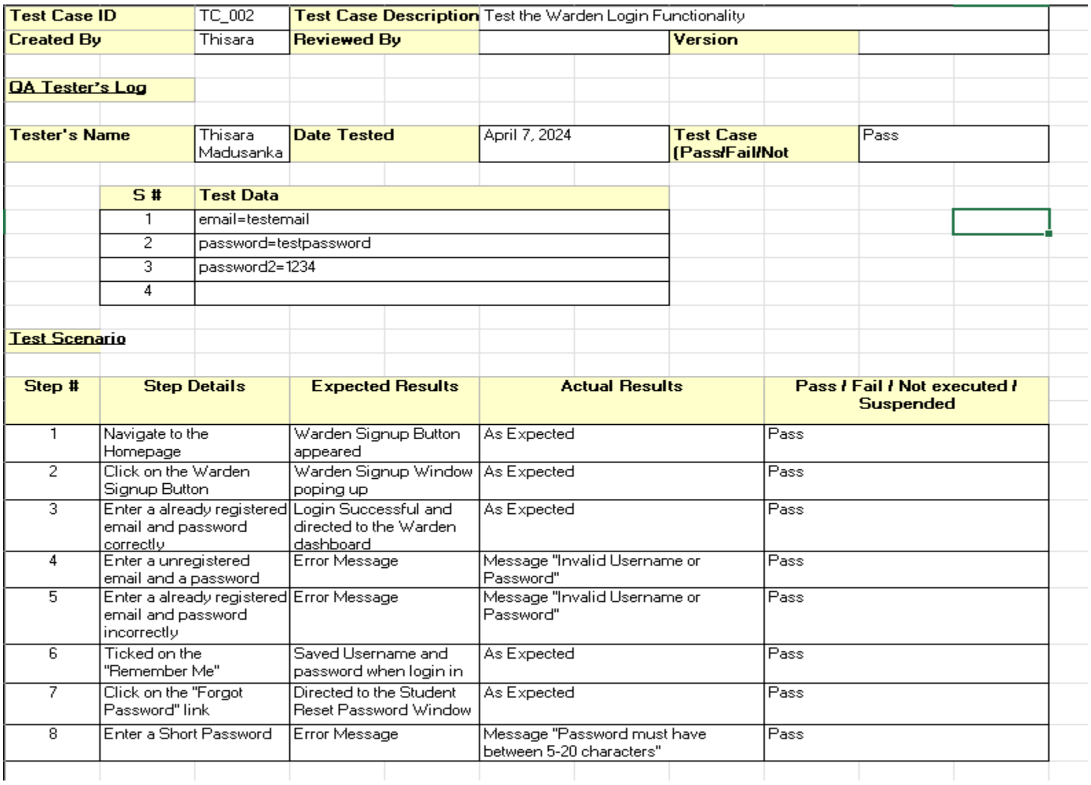
QA Tester's Log

Tester's Name	Wedamulla Madusank	**Date Tested**	April 7, 2024	**Test Case (Pass/Fail/Not**	Pass

S #	Test Data
1	email=testemail
2	password1=testpassword
3	password2=1234
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to the Homepage	Student Signup Button appeared	As Expected	Pass
2	Click on the Student Signup Button	Student Signup Window poping up	As Expected	Pass
3	Enter a already registered email and password correctly	Login Successful and directed to the student dashboard	As Expected	Pass
4	Enter a unregistered email and a password	Error Message and login denied	Message "Invalid Username or Password"	Pass
5	Enter a already registered email and password incorrectly	Error Message	Message "Invalid Username or Password"	Pass
6	Ticked on the "Remember Me" Checkbox	Saved Username and password when login in nexttime	As Expected	Pass
7	Click on the "Forgot Password" link	Directed to the Student Reset Password	As Expected	Pass
8	Enter a short password	Error Message	Message"Password must have between 5-20 characters"	Pass



Test Case ID	TC_002	**Test Case Description**	Test the Warden Login Functionality		
Created By	Thisara	**Reviewed By**		**Version**	

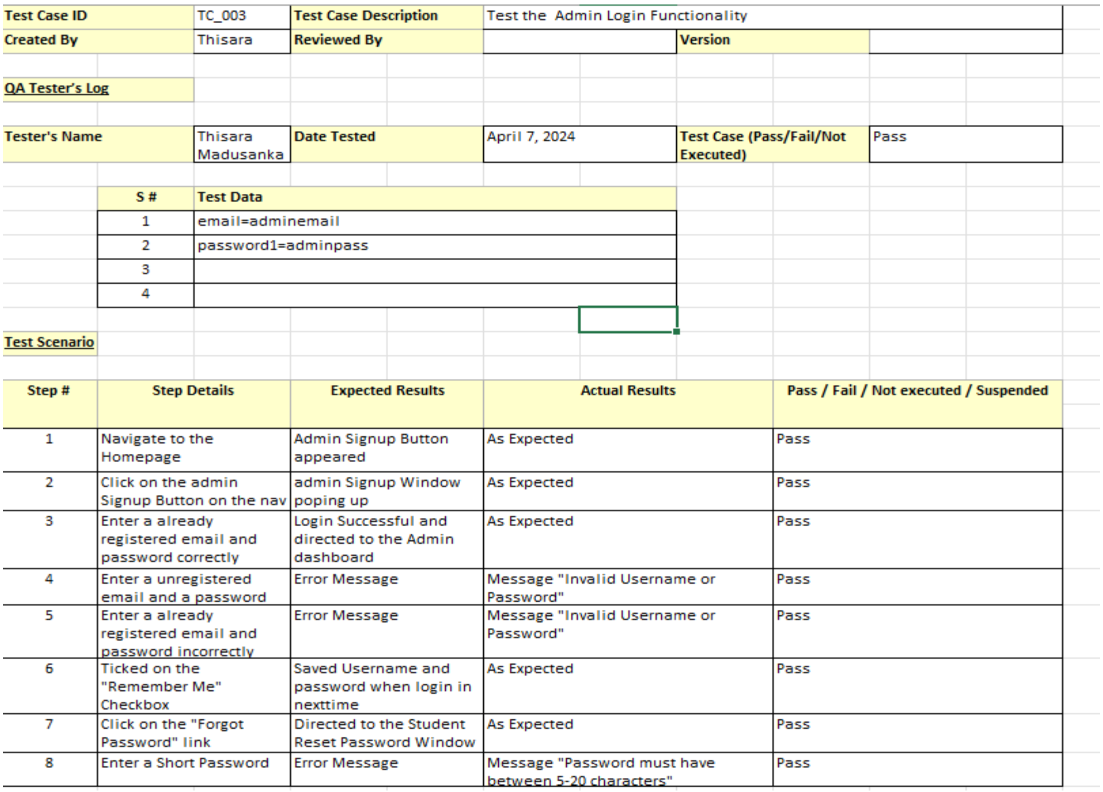
QA Tester's Log

Tester's Name	Thisara Madusanka	**Date Tested**	April 7, 2024	**Test Case (Pass/Fail/Not**	Pass

S #	Test Data
1	email=testemail
2	password=testpassword
3	password2=1234
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to the Homepage	Warden Signup Button appeared	As Expected	Pass
2	Click on the Warden Signup Button	Warden Signup Window poping up	As Expected	Pass
3	Enter a already registered email and password correctly	Login Successful and directed to the Warden dashboard	As Expected	Pass
4	Enter a unregistered email and a password	Error Message	Message "Invalid Username or Password"	Pass
5	Enter a already registered email and password incorrectly	Error Message	Message "Invalid Username or Password"	Pass
6	Ticked on the "Remember Me"	Saved Username and password when login in	As Expected	Pass
7	Click on the "Forgot Password" link	Directed to the Student Reset Password Window	As Expected	Pass
8	Enter a Short Password	Error Message	Message "Password must have between 5-20 characters"	Pass



Test Case ID	TC_003	Test Case Description	Test the Admin Login Functionality		
Created By	Thisara	Reviewed By		Version	

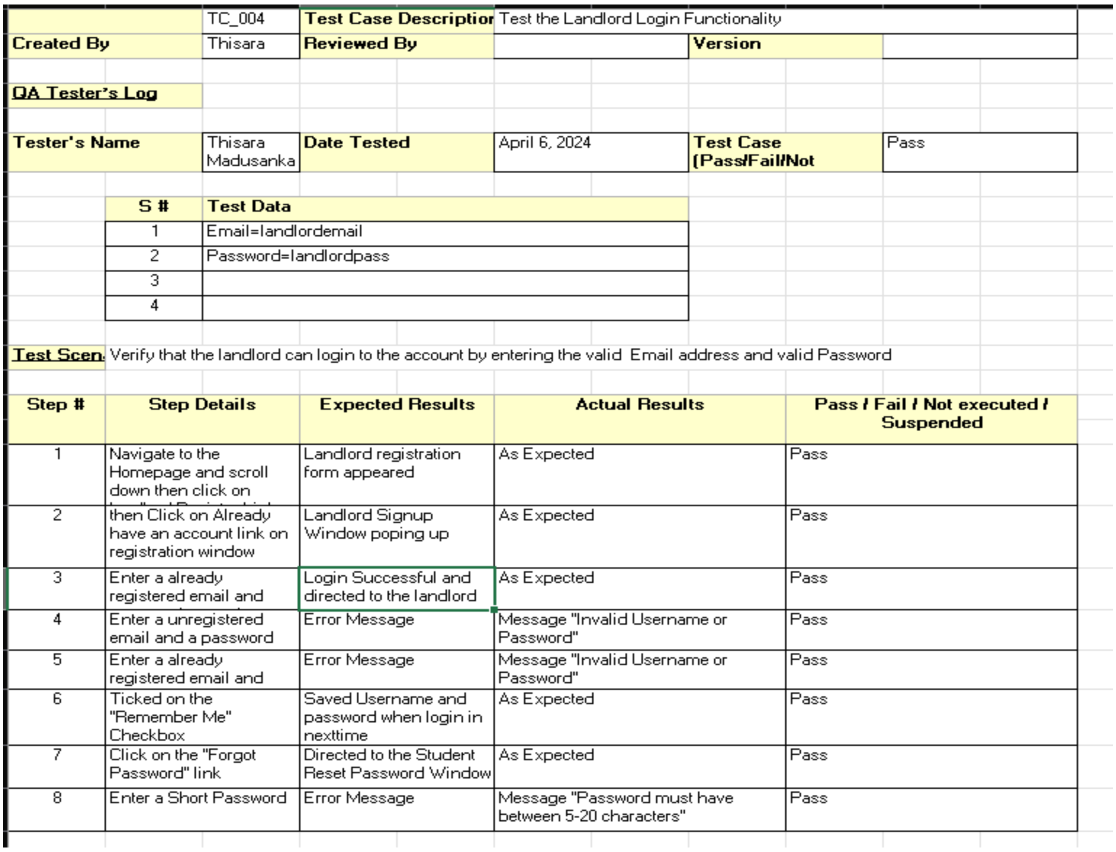
QA Tester's Log

Tester's Name	Thisara Madusanka	Date Tested	April 7, 2024	Test Case (Pass/Fail/Not Executed)	Pass

S #	Test Data
1	email=adminemail
2	password1=adminpass
3	
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to the Homepage	Admin Signup Button appeared	As Expected	Pass
2	Click on the admin Signup Button on the nav	admin Signup Window poping up	As Expected	Pass
3	Enter a already registered email and password correctly	Login Successful and directed to the Admin dashboard	As Expected	Pass
4	Enter a unregistered email and a password	Error Message	Message "Invalid Username or Password"	Pass
5	Enter a already registered email and password incorrectly	Error Message	Message "Invalid Username or Password"	Pass
6	Ticked on the "Remember Me" Checkbox	Saved Username and password when login in nexttime	As Expected	Pass
7	Click on the "Forgot Password" link	Directed to the Student Reset Password Window	As Expected	Pass
8	Enter a Short Password	Error Message	Message "Password must have between 5-20 characters"	Pass



	TC_004	Test Case Descriptior	Test the Landlord Login Functionality		
Created By	Thisara	Reviewed By		Version	

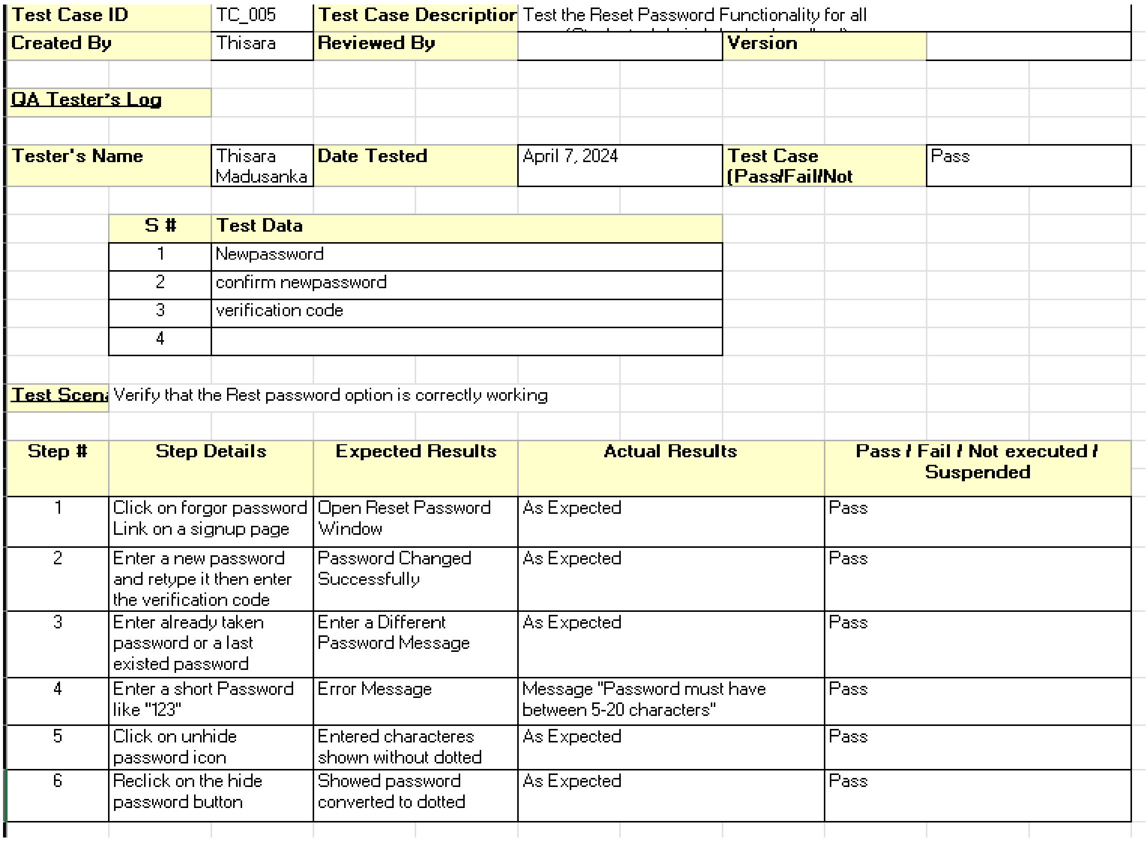
QA Tester's Log

Tester's Name	Thisara Madusanka	Date Tested	April 6, 2024	Test Case (Pass/Fail/Not	Pass

S #	Test Data
1	Email=landlordemail
2	Password=landlordpass
3	
4	

Test Scen Verify that the landlord can login to the account by entering the valid Email address and valid Password

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to the Homepage and scroll down then click on	Landlord registration form appeared	As Expected	Pass
2	then Click on Already have an account link on registration window	Landlord Signup Window poping up	As Expected	Pass
3	Enter a already registered email and	Login Successful and directed to the landlord	As Expected	Pass
4	Enter a unregistered email and a password	Error Message	Message "Invalid Username or Password"	Pass
5	Enter a already registered email and	Error Message	Message "Invalid Username or Password"	Pass
6	Ticked on the "Remember Me" Checkbox	Saved Username and password when login in nexttime	As Expected	Pass
7	Click on the "Forgot Password" link	Directed to the Student Reset Password Window	As Expected	Pass
8	Enter a Short Password	Error Message	Message "Password must have between 5-20 characters"	Pass



Test Case ID	TC_005	**Test Case Descriptior**	Test the Reset Password Functionality for all		
Created By	Thisara	**Reviewed By**		**Version**	

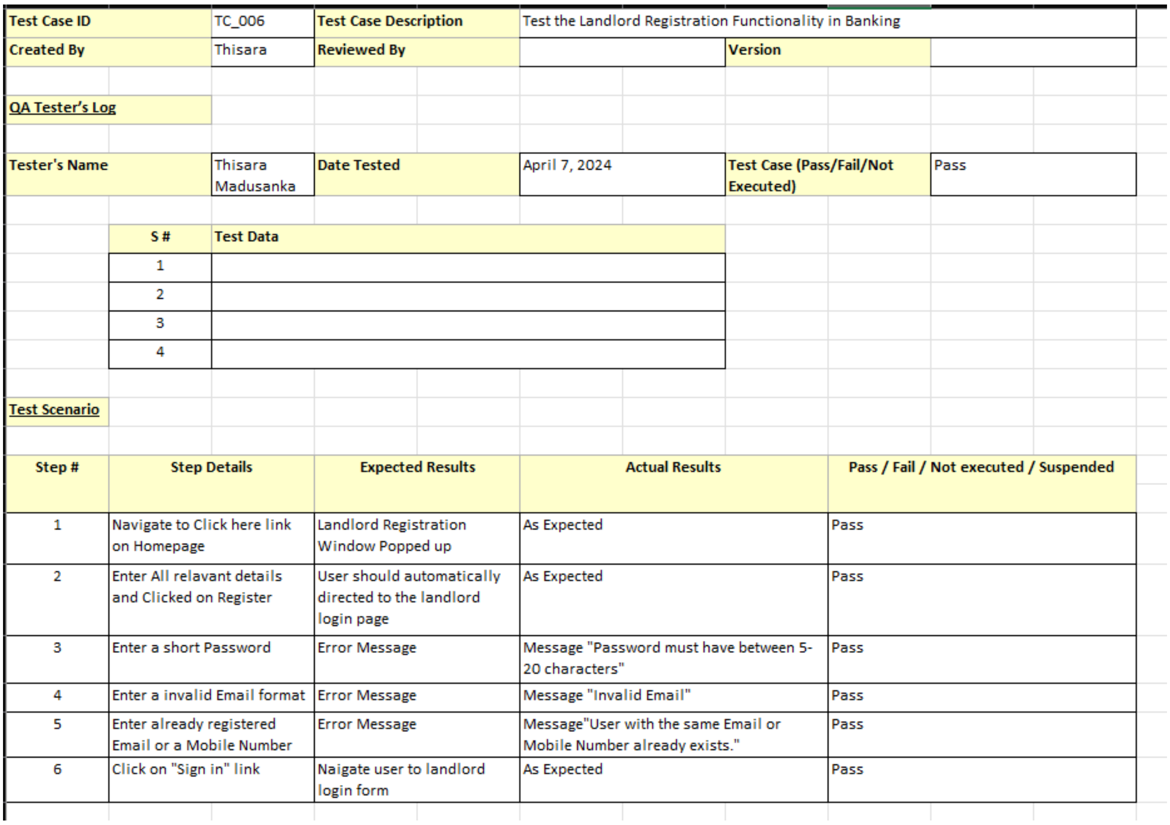
QA Tester's Log

Tester's Name	Thisara Madusanka	**Date Tested**	April 7, 2024	**Test Case (Pass/Fail/Not**	Pass

S #	Test Data
1	Newpassword
2	confirm newpassword
3	verification code
4	

Test Scena Verify that the Rest password option is correctly working

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Click on forgor password Link on a signup page	Open Reset Password Window	As Expected	Pass
2	Enter a new password and retype it then enter the verification code	Password Changed Successfully	As Expected	Pass
3	Enter already taken password or a last existed password	Enter a Different Password Message	As Expected	Pass
4	Enter a short Password like "123"	Error Message	Message "Password must have between 5-20 characters"	Pass
5	Click on unhide password icon	Entered characteres shown without dotted	As Expected	Pass
6	Reclick on the hide password button	Showed password converted to dotted	As Expected	Pass



Test Case ID	TC_006	**Test Case Description**	Test the Landlord Registration Functionality in Banking		
Created By	Thisara	**Reviewed By**		**Version**	

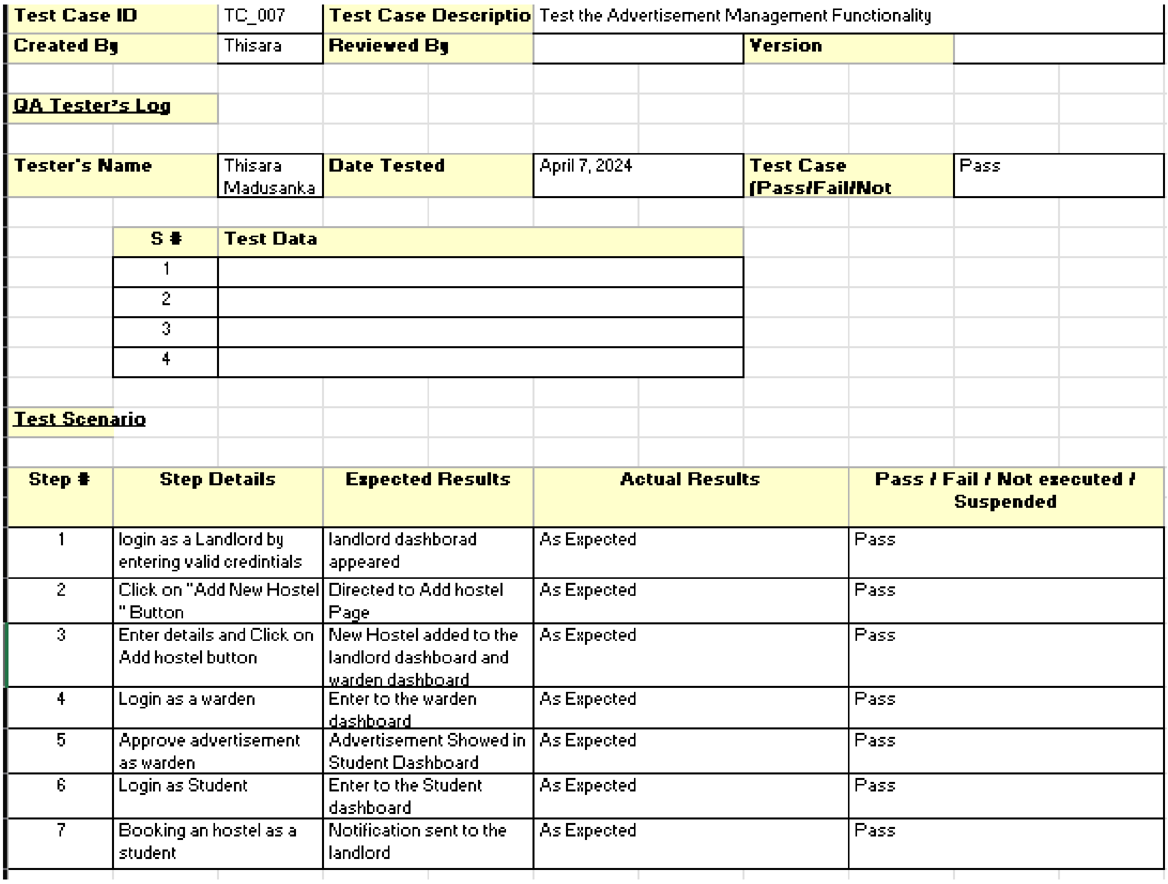
QA Tester's Log

Tester's Name	Thisara Madusanka	**Date Tested**	April 7, 2024	**Test Case (Pass/Fail/Not Executed)**	Pass

S #	Test Data
1	
2	
3	
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Navigate to Click here link on Homepage	Landlord Registration Window Popped up	As Expected	Pass
2	Enter All relavant details and Clicked on Register	User should automatically directed to the landlord login page	As Expected	Pass
3	Enter a short Password	Error Message	Message "Password must have between 5-20 characters"	Pass
4	Enter a invalid Email format	Error Message	Message "Invalid Email"	Pass
5	Enter already registered Email or a Mobile Number	Error Message	Message"User with the same Email or Mobile Number already exists."	Pass
6	Click on "Sign in" link	Naigate user to landlord login form	As Expected	Pass



Test Case ID	TC_007	Test Case Descriptio	Test the Advertisement Management Functionality		
Created By	Thisara	Reviewed By		Version	

QA Tester's Log

Tester's Name	Thisara Madusanka	Date Tested	April 7, 2024	Test Case (Pass/Fail/Not	Pass

S #	Test Data
1	
2	
3	
4	

Test Scenario

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	login as a Landlord by entering valid credintials	landlord dashborad appeared	As Expected	Pass
2	Click on "Add New Hostel " Button	Directed to Add hostel Page	As Expected	Pass
3	Enter details and Click on Add hostel button	New Hostel added to the landlord dashboard and warden dashboard	As Expected	Pass
4	Login as a warden	Enter to the warden dashboard	As Expected	Pass
5	Approve advertisement as warden	Advertisement Showed in Student Dashboard	As Expected	Pass
6	Login as Student	Enter to the Student dashboard	As Expected	Pass
7	Booking an hostel as a student	Notification sent to the landlord	As Expected	Pass

Critical Analysis of Our Test Strategy

The test strategy attempts to fully verify a web application's performance, security, usability, and functionality in accordance with the scenario's specifications. It includes a range of user roles, including web masters, students, wardens, and landlords, making sure the application responds appropriately to each sort of user and their activities. The plan addresses every significant feature of the online application, such as role-based access control, reservation and notification systems, user and advertisement management, location-based functionality, article management, error handling, cross-browser compatibility, mobile responsiveness, and performance testing. Additionally, user input and output validation is implemented to guarantee data confidentiality, integrity, and appropriate error handling.

To guarantee a smooth transition between databases, backend services, and frontend user interface, integration testing is included. To guarantee a seamless and easy-to-use interface on various screens and devices, user experience testing is carried out. To make sure the application can withstand anticipated traffic levels without experiencing downtime or performance degradation, error handling and performance testing are also carried out.

Used Tools and Technologies

UI and UX Designing

- Tools: Figma

Front-end and Back-end Development

- Tools: Visual Studio Code
- Technologies : PHP / JavaScript / HTML / CSS

Database Management

- Tools : MySQL Work Bench / Heidi SQL

Hosting

- Tools: Xampp Server

Google Maps

- Technologies : Google Maps API

Designing Test Cases

- Tools : Microsoft Excel

Documentation

- Tools : Microsoft Word

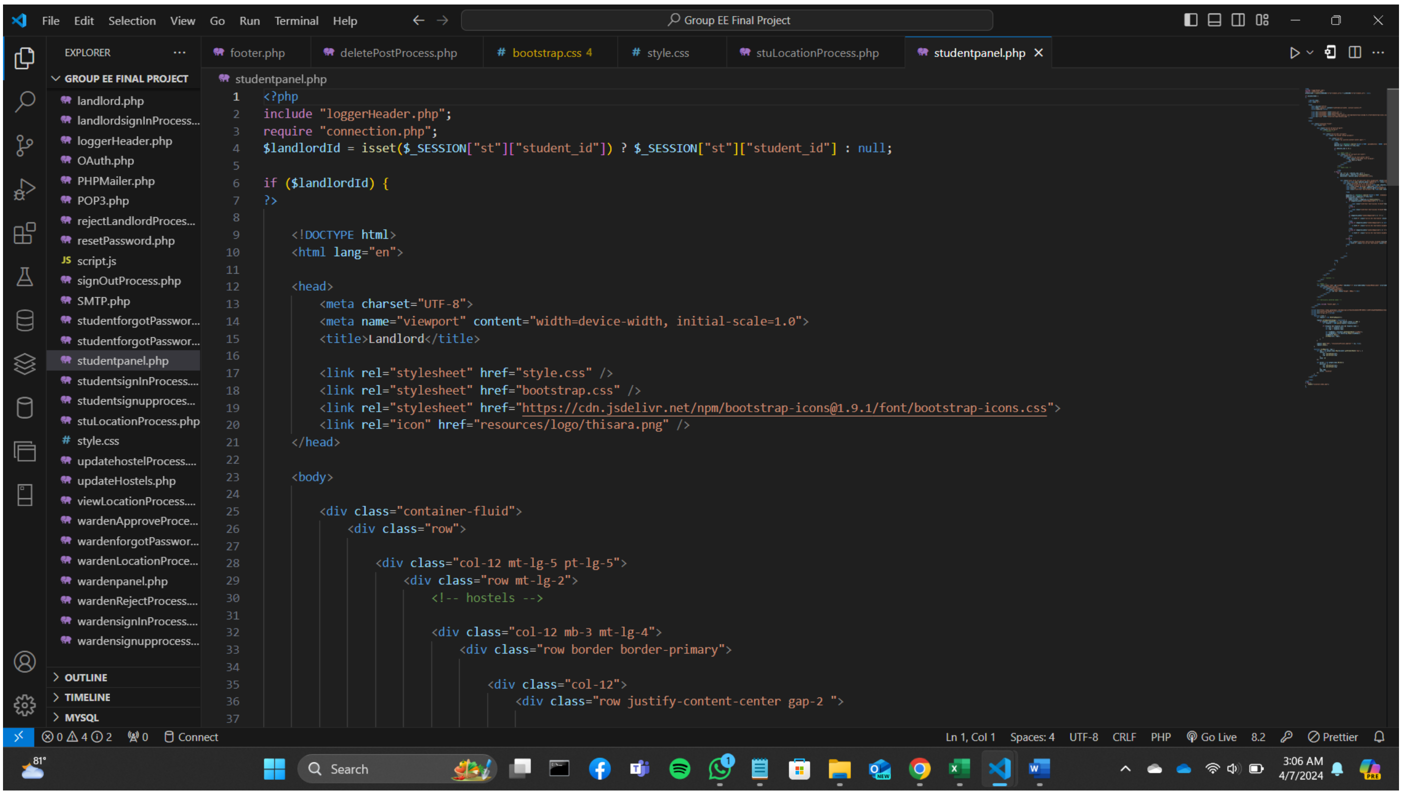
Workload Matrix

Individual Contribution Matrix

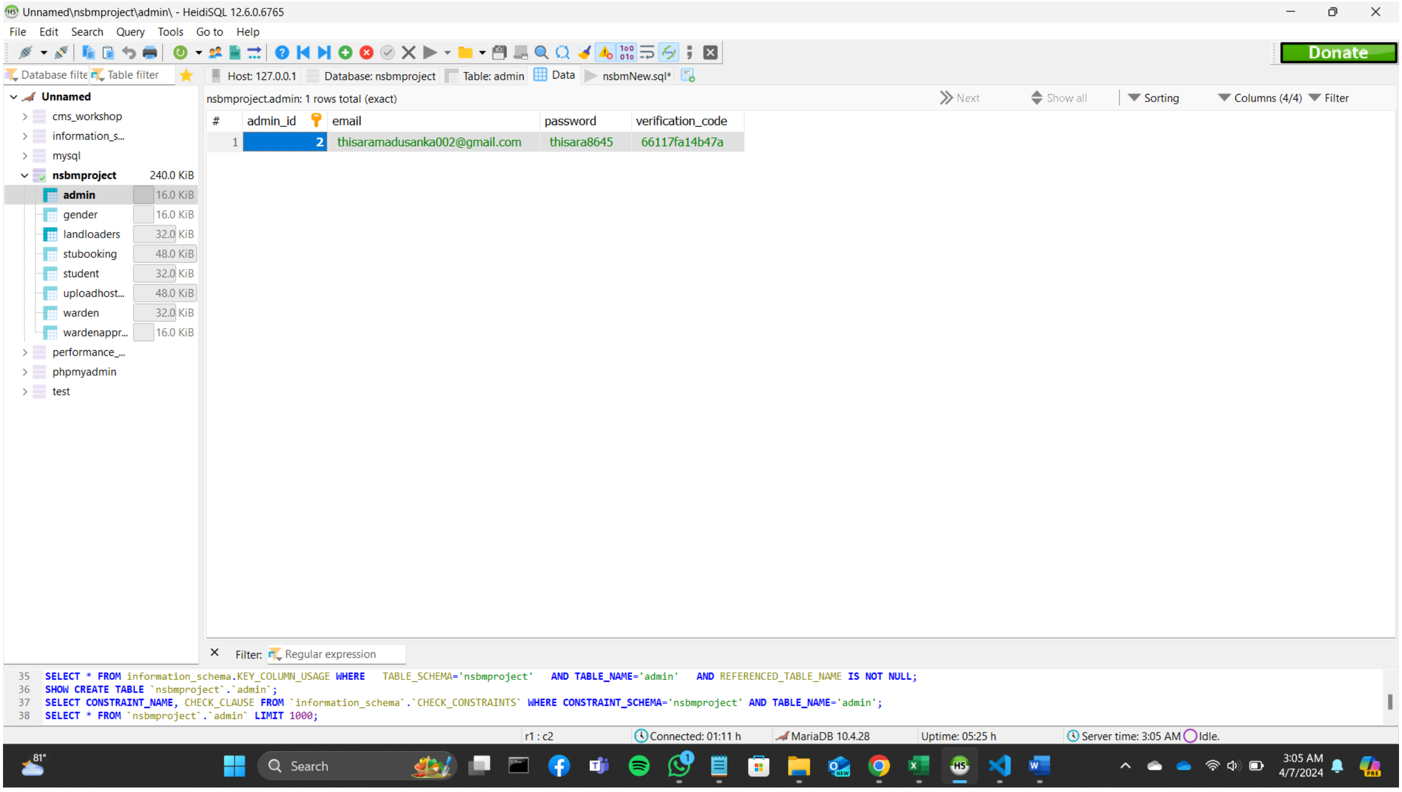
Plymouth ID	Name (as appeared in DLE)	Contributed Section
10899603	Wedamulla Madusanka	• Design the Homepage of the Website • Develop Database Connectivity with the Application • Design and configure all the processes regarding landlord(sign in, signup, add hostel, update hostel, delete hostel, view bookings) • Finalize Documentation • Developing Testcases
10899521	Badal Gamage	• Unit Testing • Design and configure all the processes regarding Warden(login, accept ads, warden dashboard) • Developing Test-cases
10899621	Chathupraba Munasinghe	• Web hosting • Design and configure all the processes regarding Student.(Logi n, Reset password, booking) • Forget Password Form and related email configurations.
10899556	Yaddehi Sankalpa	• UI and UX Designing • Design and configure all the processes regarding Admin(Sign in students ,Sign in wardens, sing up, admin dashboard) • Map related Coding and Configurations on footer • Integration Testing

10899685	Kihaduwage Sahasra	• Design webpages using CSS and Java-Script • Unit Testing • Adding maps to the cards on dashboards • Design and configure all the processes regarding Warden(login, accept ads, warden dashboard)
10899600	Senanayake Liyanage	• UI and UX Designing • Integration Testing • Header and Footer Design • Design and configure all the processes regarding Student.(Logi n, Reset password, booking)

Other Supported Snaps



```
<?php
include "loggerHeader.php";
require "connection.php";
$landlordId = isset($_SESSION["st"]["student_id"]) ? $_SESSION["st"]["student_id"] : null;

if ($landlordId) {
?>

    <!DOCTYPE html>
    <html lang="en">

    <head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Landlord</title>

        <link rel="stylesheet" href="style.css" />
        <link rel="stylesheet" href="bootstrap.css" />
        <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.9.1/font/bootstrap-icons.css">
        <link rel="icon" href="resources/logo/thisara.png" />
    </head>

    <body>

        <div class="container-fluid">
            <div class="row">

                <div class="col-12 mt-lg-5 pt-lg-5">
                    <div class="row mt-lg-2">
                        <!-- hostels -->

                        <div class="col-12 mb-3 mt-lg-4">
                            <div class="row border border-primary">

                                <div class="col-12">
                                    <div class="row justify-content-center gap-2 ">

```



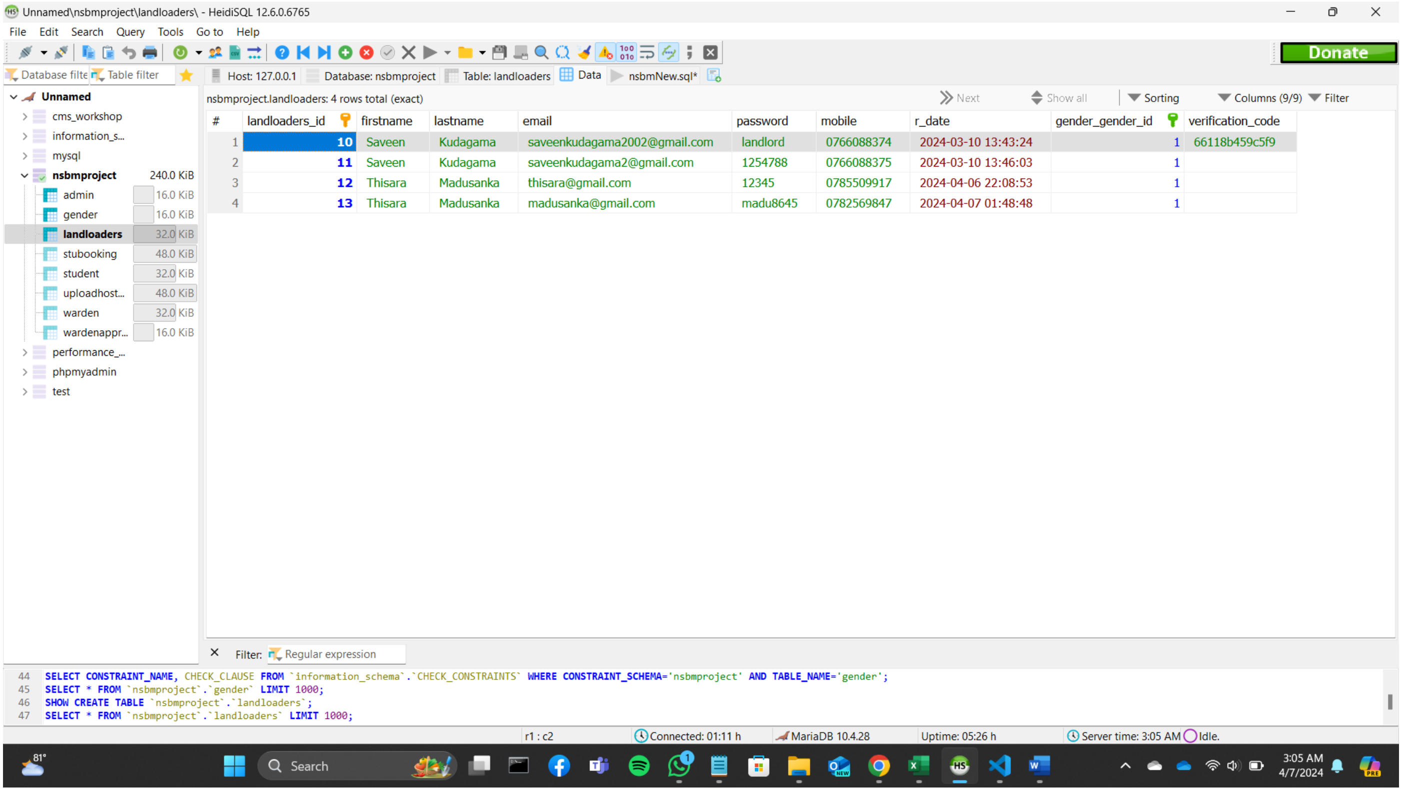
nsbmproject.admin: 1 rows total (exact)

#	admin_id	email	password	verification_code
1	2	thisaramadusanka002@gmail.com	thisara8645	66117fa14b47a

```
35 SELECT * FROM information_schema.KEY_COLUMN_USAGE WHERE   TABLE_SCHEMA='nsbmproject'   AND TABLE_NAME='admin'   AND REFERENCED_TABLE_NAME IS NOT NULL;
36 SHOW CREATE TABLE `nsbmproject`.`admin`;
37 SELECT CONSTRAINT_NAME, CHECK_CLAUSE FROM `information_schema`.`CHECK_CONSTRAINTS` WHERE CONSTRAINT_SCHEMA='nsbmproject' AND TABLE_NAME='admin';
38 SELECT * FROM `nsbmproject`.`admin` LIMIT 1000;
```

r1 : c2 | Connected: 01:11 h | MariaDB 10.4.28 | Uptime: 05:25 h | Server time: 3:05 AM | Idle.

3:05 AM
4/7/2024



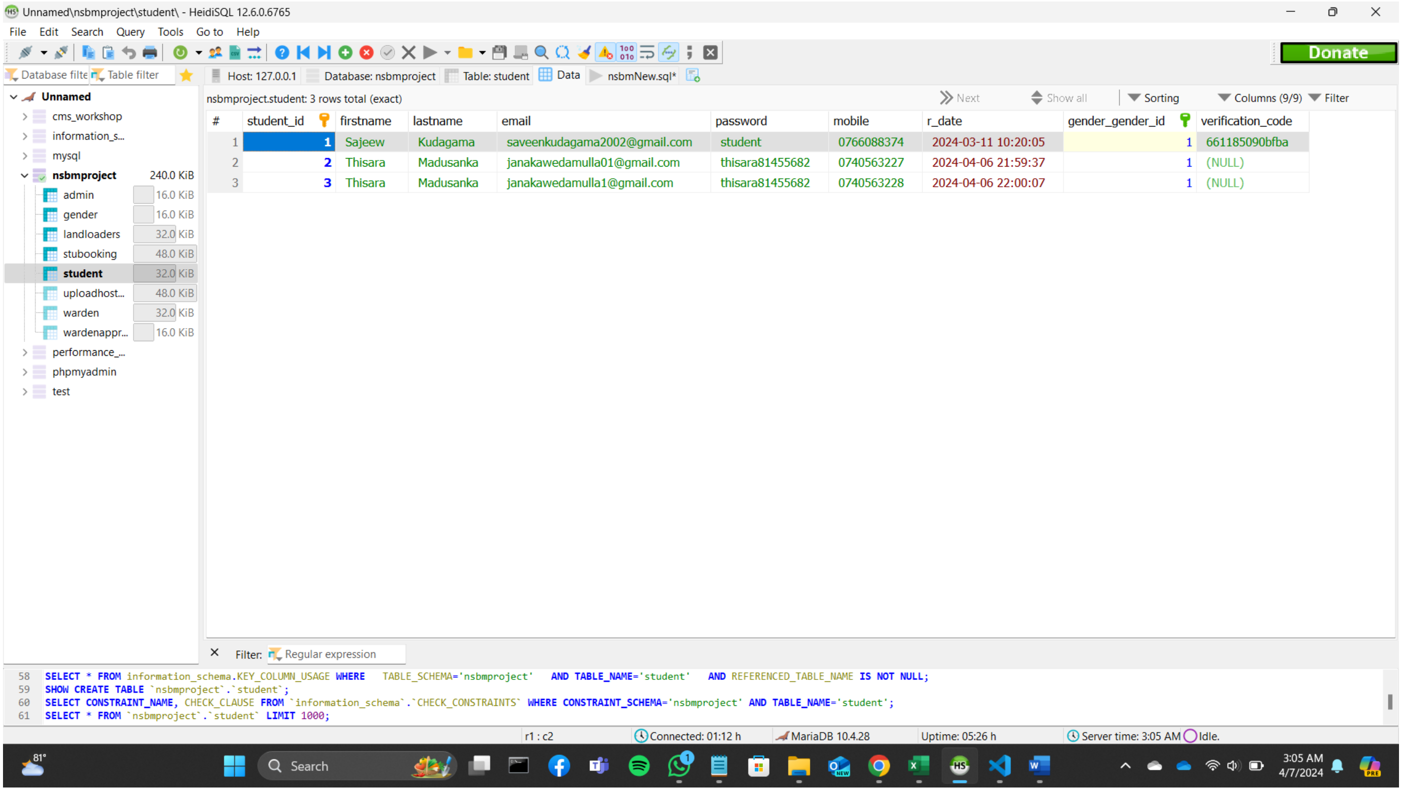
nsbmproject.landloaders: 4 rows total (exact)

#	landloaders_id	firstname	lastname	email	password	mobile	r_date	gender_gender_id	verification_code
1	10	Saveen	Kudagama	saveenkudagama2002@gmail.com	landlord	0766088374	2024-03-10 13:43:24	1	66118b459c5f9
2	11	Saveen	Kudagama	saveenkudagama2@gmail.com	1254788	0766088375	2024-03-10 13:46:03	1	
3	12	Thisara	Madusanka	thisara@gmail.com	12345	0785509917	2024-04-06 22:08:53	1	
4	13	Thisara	Madusanka	madusanka@gmail.com	madu8645	0782569847	2024-04-07 01:48:48	1	

```
44 SELECT CONSTRAINT_NAME, CHECK_CLAUSE FROM `information_schema`.`CHECK_CONSTRAINTS` WHERE CONSTRAINT_SCHEMA='nsbmproject' AND TABLE_NAME='gender';
45 SELECT * FROM `nsbmproject`.`gender` LIMIT 1000;
46 SHOW CREATE TABLE `nsbmproject`.`landloaders`;
47 SELECT * FROM `nsbmproject`.`landloaders` LIMIT 1000;
```

r1 : c2 | Connected: 01:11 h | MariaDB 10.4.28 | Uptime: 05:26 h | Server time: 3:05 AM | Idle.

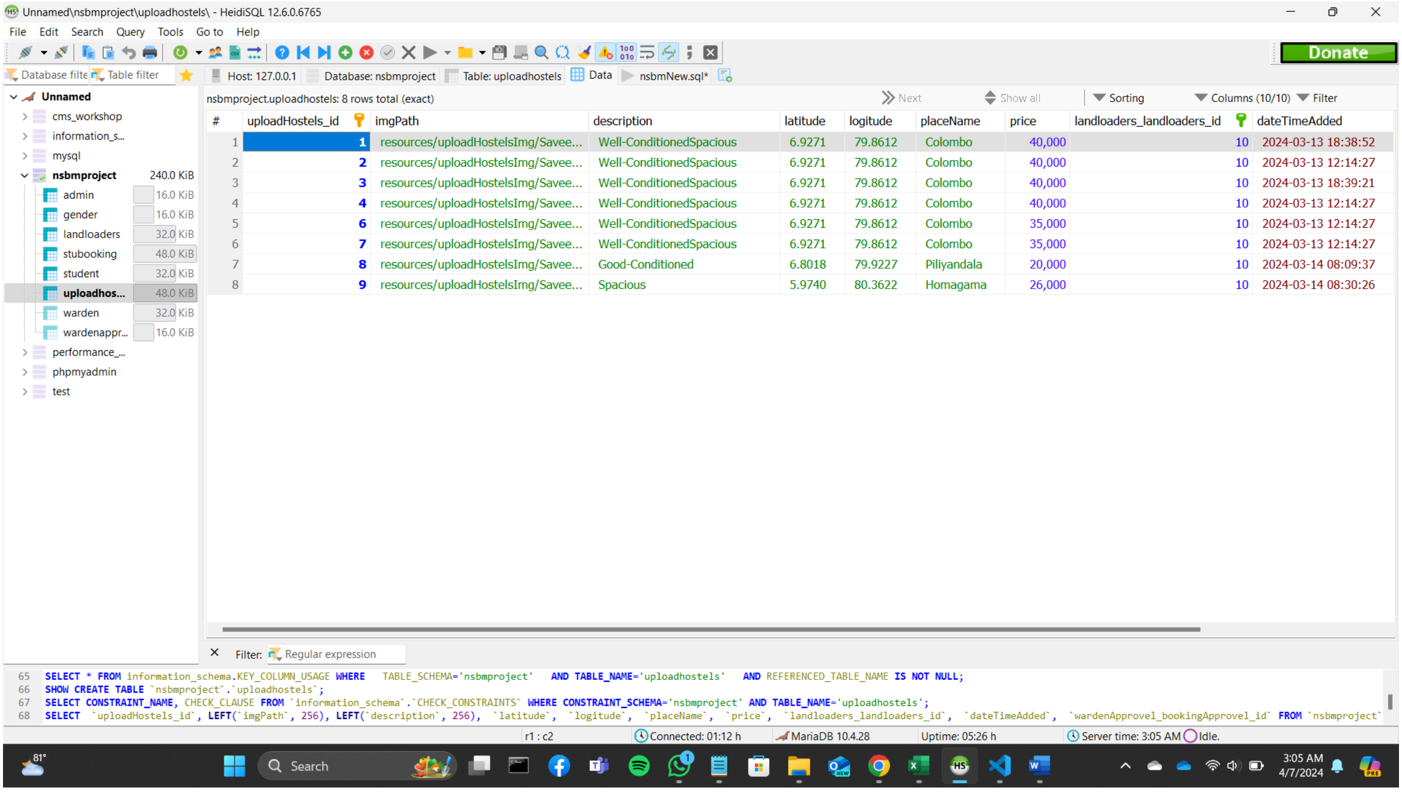
3:05 AM
4/7/2024


Unnamed\nsbmproject\student\ - HeidiSQL 12.6.0.6765
File Edit Search Query Tools Go to Help
Donate
Database filte Table filter
Host: 127.0.0.1 Database: nsbmproject Table: student Data nsbmNew.sql*
Unnamed
cms_workshop
information_s...
mysql
nsbmproject 240.0 KiB
admin 16.0 KiB
gender 16.0 KiB
landloaders 32.0 KiB
stubooking 48.0 KiB
student 32.0 KiB
uploadhost... 48.0 KiB
warden 32.0 KiB
wardenappr... 16.0 KiB
performance_...
phpmyadmin
test
Next Show all Sorting Columns (9/9) Filter
Filter: Regular expression
r1 : c2 Connected: 01:12 h MariaDB 10.4.28 Uptime: 05:26 h Server time: 3:05 AM Idle.
81° Search 3:05 AM 4/7/2024

nsbmproject.student: 3 rows total (exact)

#	student_id	firstname	lastname	email	password	mobile	r_date	gender_gender_id	verification_code
1	1	Sajeew	Kudagama	saveenkudagama2002@gmail.com	student	0766088374	2024-03-11 10:20:05	1	661185090bfba
2	2	Thisara	Madusanka	janakawedamulla01@gmail.com	thisara81455682	0740563227	2024-04-06 21:59:37	1	(NULL)
3	3	Thisara	Madusanka	janakawedamulla1@gmail.com	thisara81455682	0740563228	2024-04-06 22:00:07	1	(NULL)

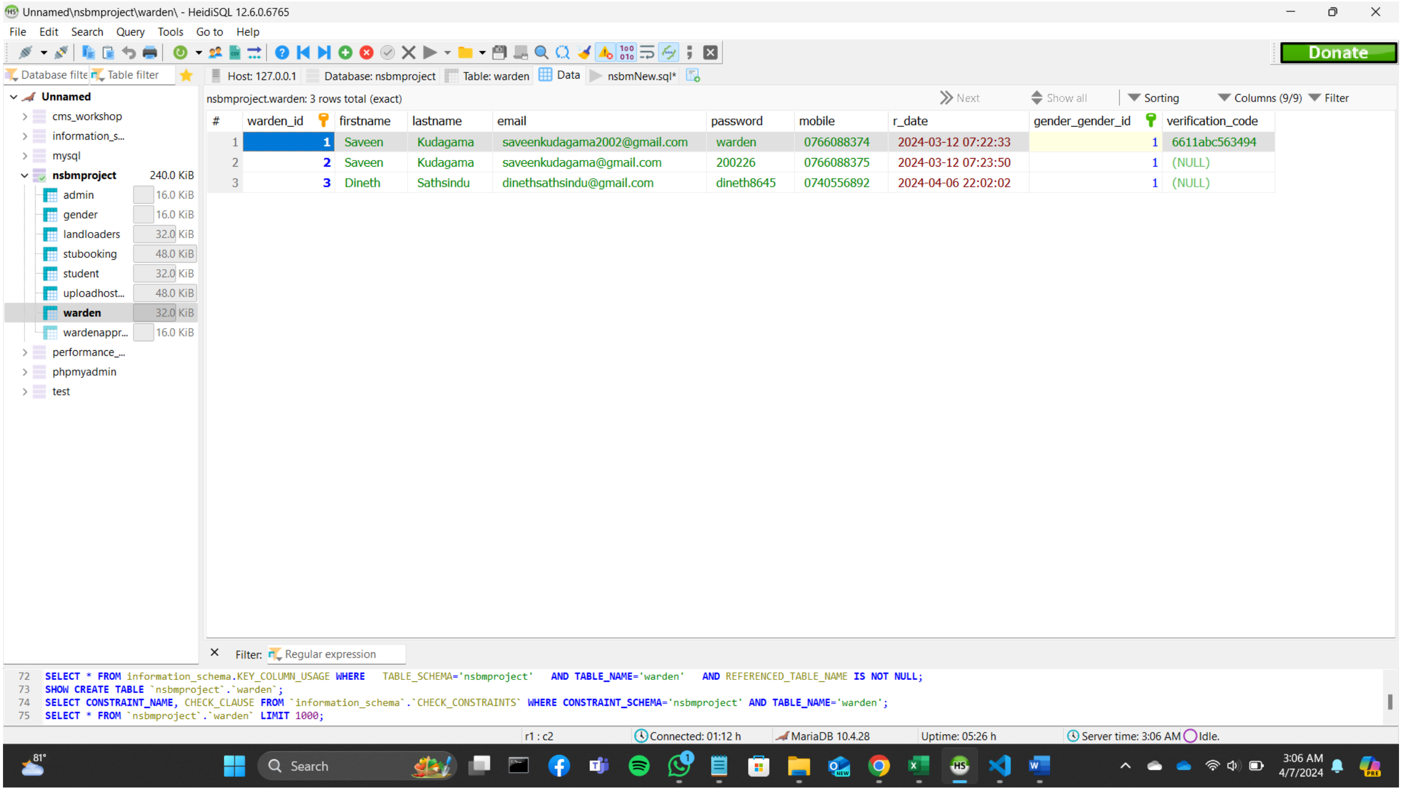
```
SELECT * FROM information_schema.KEY_COLUMN_USAGE WHERE   TABLE_SCHEMA='nsbmproject'   AND TABLE_NAME='student'   AND REFERENCED_TABLE_NAME IS NOT NULL;
SHOW CREATE TABLE `nsbmproject`.`student`;
SELECT CONSTRAINT_NAME, CHECK_CLAUSE FROM `information_schema`.`CHECK_CONSTRAINTS` WHERE CONSTRAINT_SCHEMA='nsbmproject' AND TABLE_NAME='student';
SELECT * FROM `nsbmproject`.`student` LIMIT 1000;
```


Unnamed\nsbmproject\uploadhostels\ - HeidiSQL 12.6.0.6765
File Edit Search Query Tools Go to Help
Donate
Database filte Table filter
Host: 127.0.0.1 Database: nsbmproject Table: uploadhostels Data nsbmNew.sql*
Unnamed
cms_workshop
information_s...
mysql
nsbmproject 240.0 KiB
admin 16.0 KiB
gender 16.0 KiB
landloaders 32.0 KiB
stubooking 48.0 KiB
student 32.0 KiB
uploadhos... 48.0 KiB
warden 32.0 KiB
wardenappr... 16.0 KiB
performance_...
phpmyadmin
test
Next Show all Sorting Columns (10/10) Filter
Filter: Regular expression
r1 : c2 Connected: 01:12 h MariaDB 10.4.28 Uptime: 05:26 h Server time: 3:05 AM Idle.
81° Search 3:05 AM 4/7/2024

nsbmproject.uploadhostels: 8 rows total (exact)

#	uploadHostels_id	imgPath	description	latitude	logitude	placeName	price	landloaders_landloaders_id	dateTimeAdded
1	1	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	40,000	10	2024-03-13 18:38:52
2	2	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	40,000	10	2024-03-13 12:14:27
3	3	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	40,000	10	2024-03-13 18:39:21
4	4	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	40,000	10	2024-03-13 12:14:27
5	6	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	35,000	10	2024-03-13 12:14:27
6	7	resources/uploadHostelsImg/Savee...	Well-ConditionedSpacious	6.9271	79.8612	Colombo	35,000	10	2024-03-13 12:14:27
7	8	resources/uploadHostelsImg/Savee...	Good-Conditioned	6.8018	79.9227	Piliyandala	20,000	10	2024-03-14 08:09:37
8	9	resources/uploadHostelsImg/Savee...	Spacious	5.9740	80.3622	Homagama	26,000	10	2024-03-14 08:30:26

```
SELECT * FROM information_schema.KEY_COLUMN_USAGE WHERE   TABLE_SCHEMA='nsbmproject'   AND TABLE_NAME='uploadhostels'   AND REFERENCED_TABLE_NAME IS NOT NULL;
SHOW CREATE TABLE `nsbmproject`.`uploadhostels`;
SELECT CONSTRAINT_NAME, CHECK_CLAUSE FROM `information_schema`.`CHECK_CONSTRAINTS` WHERE CONSTRAINT_SCHEMA='nsbmproject' AND TABLE_NAME='uploadhostels';
SELECT  `uploadHostels_id`, LEFT(`imgPath`, 256), LEFT(`description`, 256),  `latitude`,  `logitude`,  `placeName`,  `price`,  `landloaders_landloaders_id`,  `dateTimeAdded`,  `wardenApprovel_bookingApprovel_id` FROM `nsbmproject`
```



nsbmproject.warden: 3 rows total (exact)

#	warden_id	firstname	lastname	email	password	mobile	r_date	gender_gender_id	verification_code
1	1	Saveen	Kudagama	saveenkudagama2002@gmail.com	warden	0766088374	2024-03-12 07:22:33	1	6611abc563494
2	2	Saveen	Kudagama	saveenkudagama@gmail.com	200226	0766088375	2024-03-12 07:23:50	1	(NULL)
3	3	Dineth	Sathsindu	dinethsathsindu@gmail.com	dineth8645	0740556892	2024-04-06 22:02:02	1	(NULL)

```
SELECT * FROM information_schema.KEY_COLUMN_USAGE WHERE   TABLE_SCHEMA='nsbmproject'   AND TABLE_NAME='warden'   AND REFERENCED_TABLE_NAME IS NOT NULL;
SHOW CREATE TABLE `nsbmproject`.`warden`;
SELECT CONSTRAINT_NAME, CHECK_CLAUSE FROM `information_schema`.`CHECK_CONSTRAINTS` WHERE CONSTRAINT_SCHEMA='nsbmproject' AND TABLE_NAME='warden';
SELECT * FROM `nsbmproject`.`warden` LIMIT 1000;
```