Dharmsinh Desai University, Nadiad

Faculty of Technology

Department of Computer Engineering

B. Tech. CE Semester – VI

Subject: Service Oriented Computing (CE-619)

Project Title: PG Finder

By:

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Certificate

This is to certify that the project entitled as "PG Finder" is a

Bonafede report of the work carried out by:

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of Department of Computer Engineering, semester VI, under the guidance and supervision of Prof. Prashant M Jadhav and Prof. Ankit P. Vaishnav for the subject Advanced Technologies during the academic year 2021-2022.

Project Guide:	Head of the department:
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Contents:

Introduction

Our project PG finder will show user available PGs in Nadiad, Vadodara and Ahmedabad. User can contact the owner if he finds a PG which matches his requirements.

Technology Used

1. .NET Framework
2. Windows Communication Foundation (WCF)
3. SQL Server (For database)
4. Bootstrap (for UI of tables)
5. Font Awesome (for Icons)

Tools

1. Visual Studio (IDE)
2. Git and GitHub (version control)

Software Requirements Specifications

End Users:

1. User
2. Admin

Functional Requirements:

R1] Authentication of User

R1.1] Register User/ Sign Up

Desc: A user who doesn’t have existing account can sign up.
Input: User name for the web app, email id for contact and password to log in to our website.
Output: User will be redirected to login page upon successful sign up. We may show relevant errors.

R1.2] Log in

Desc: User can log in to our web app through this.
Input: User name and password
Output: Logged in and redirected to main page

R1.3] Update User

Desc: User can change password and other details.
Input: New Detail(s)
Output: Redirected to homepage.

R1.4] Log Out

Desc: Logout of the web app
Input: Click on logout button
Output: Redirected to login page and session abandoned

R2] Admin Functions

R1.5.1] Login

Desc: Login to admin dashboard
Input: username and password
Output: redirected to admin

R1.5.2] Delete User

Desc: Admin has authority to delete user
Input: Click on delete button
Output: Deleted user, shown new data in table

R1.5.2] Delete PG

Desc: Admin has authority to delete PG
Input: Click on delete button
Output: Deleted PG, shown new data in table

R1.5.2] Update PG

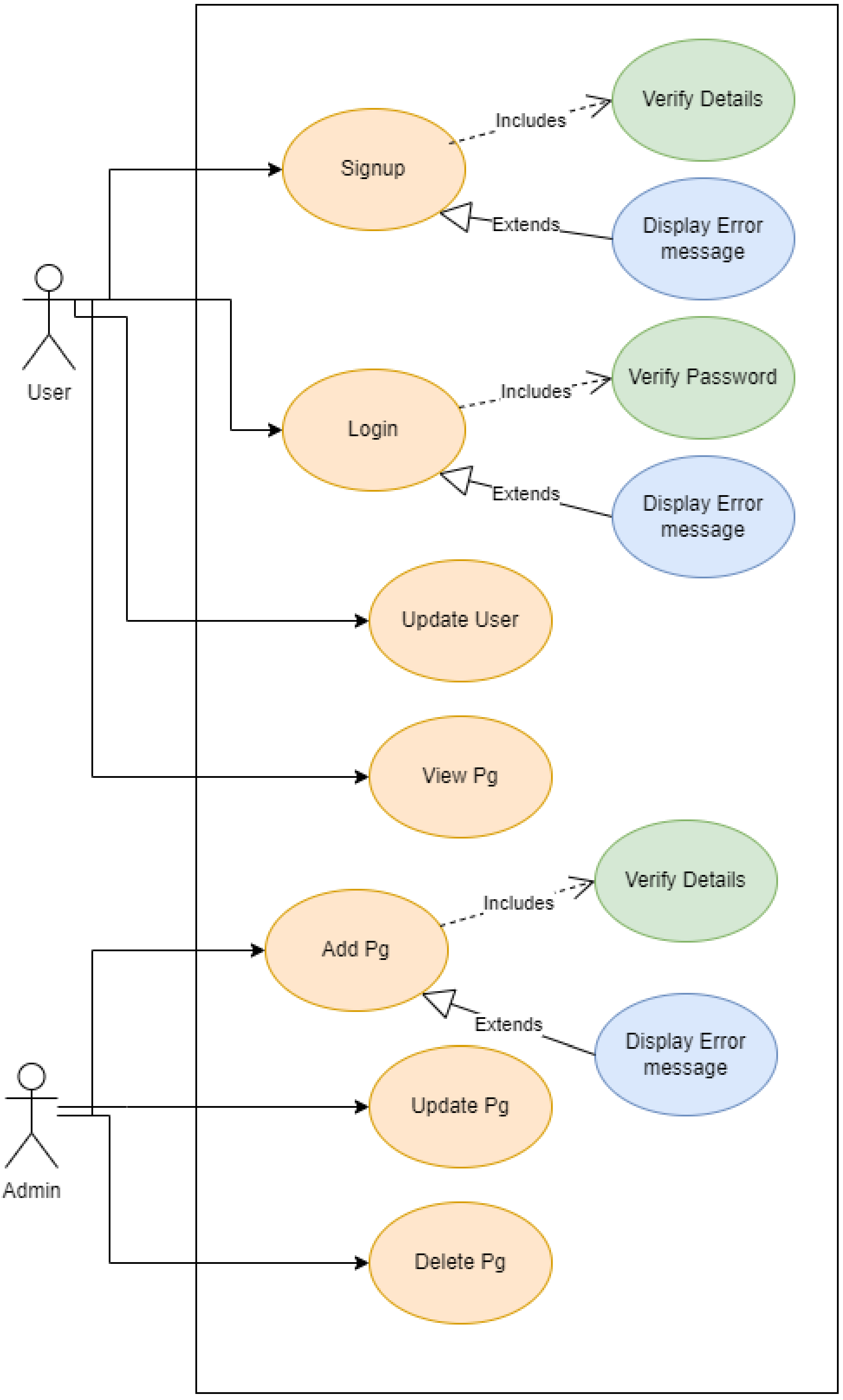
Desc: Admin has authority to Update PG
Input: Click on Update button and change details
Output: Updated PG details, shown new data in table

R1.5.2] Add PG

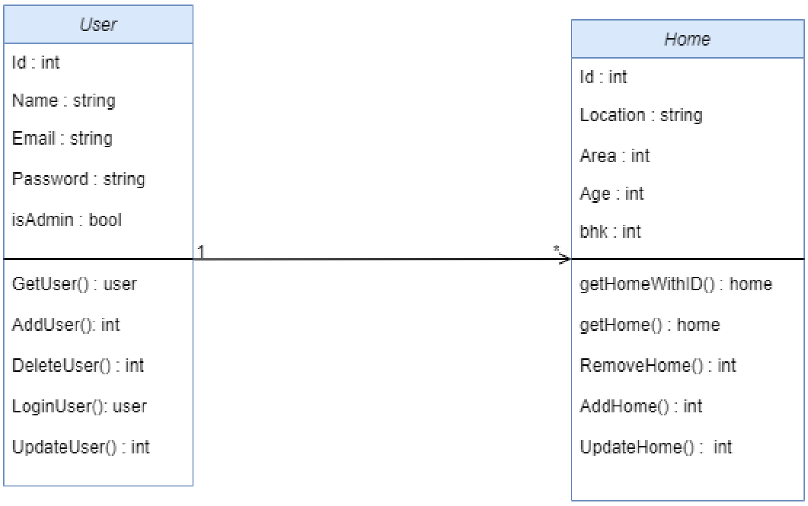
Desc: Admin has authority to Add PG
Input: Click on Add button and give details
Output: Added PG details, shown new data in table

Design

Use Case Diagram



Class Diagram



Data Dictionary

User:

Sr.No	Field	Datatype	Constraint
1	Id	int	Not null, Primary key
2	userName	Varchar	Not null, unique
3	Email	Varchar	Not null, unique
4	Password	Varchar	Not null
5	IsAdmin	bit	Not null, default = ((0))

Home:

Sr.No	Field	Datatype	Constraint
1	Id	int	Not null, Primary key
2	Location	Varchar	Not null
3	Area	int	Not null
4	Age	int	Not null
5	Bhk	int	Not null
6	Rent	int	Not null

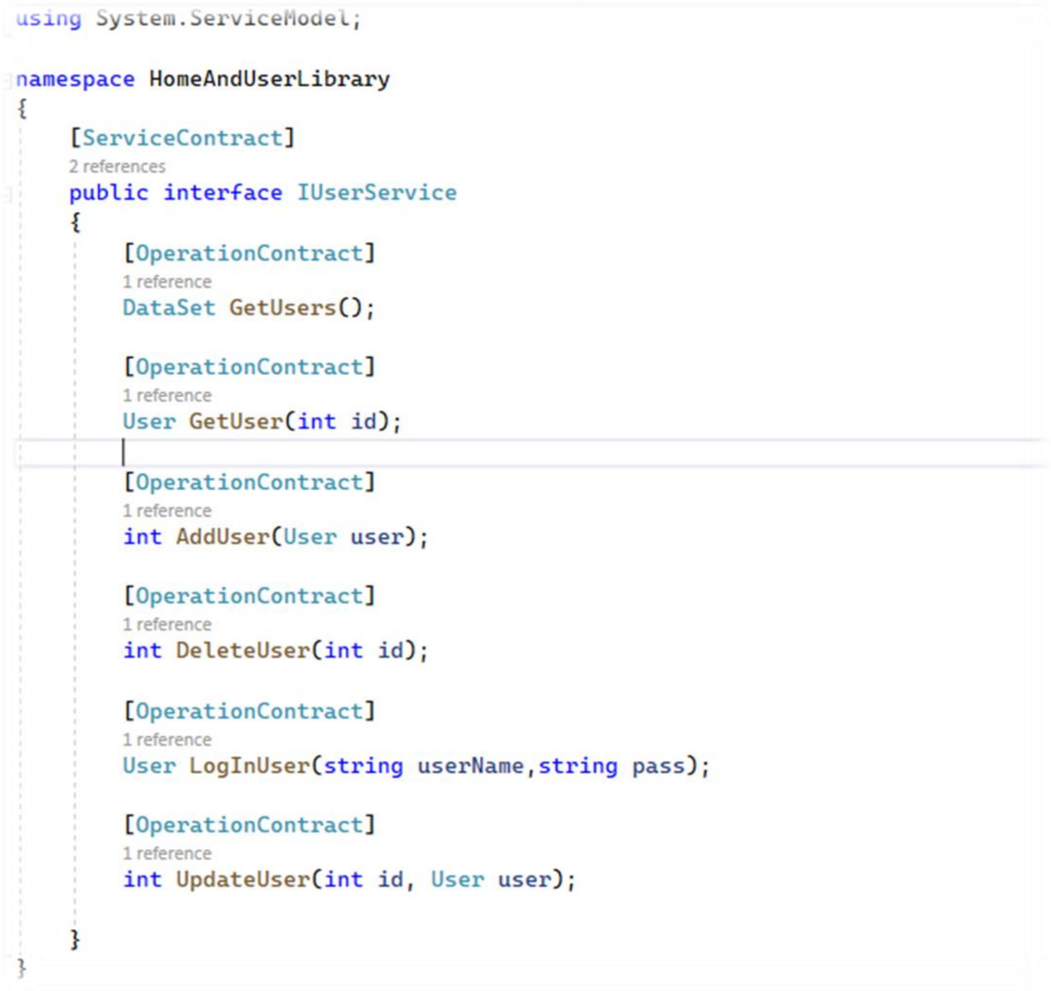
Implementation Details

Modules Implemented

1. User
   - ⇨ In User module, log in, log out, update user, sign up has been implemented by us.
2. PG
   - ⇨ All of PG modules functions are only given to super user i.e., admin. He can delete, update and add new PGs on the site which will be seen by the users. To do this he has to log in with the admin's credentials.

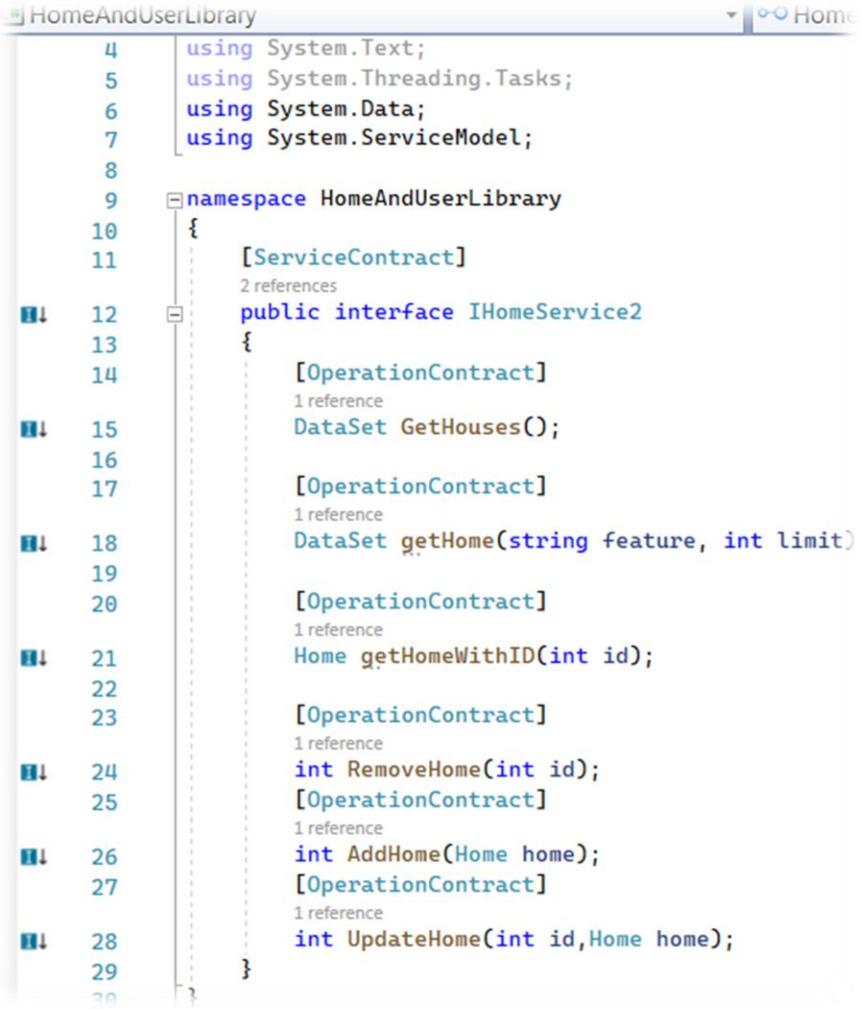
Function prototypes which implement major functionalities

Major Functions of the user:



```
using System.ServiceModel;

namespace HomeAndUserLibrary
{
    [ServiceContract]
    2 references
    public interface IUserService
    {
        [OperationContract]
        1 reference
        DataSet GetUsers();

        [OperationContract]
        1 reference
        User GetUser(int id);

        [OperationContract]
        1 reference
        int AddUser(User user);

        [OperationContract]
        1 reference
        int DeleteUser(int id);

        [OperationContract]
        1 reference
        User LogInUser(string userName,string pass);

        [OperationContract]
        1 reference
        int UpdateUser(int id, User user);

    }
}
```

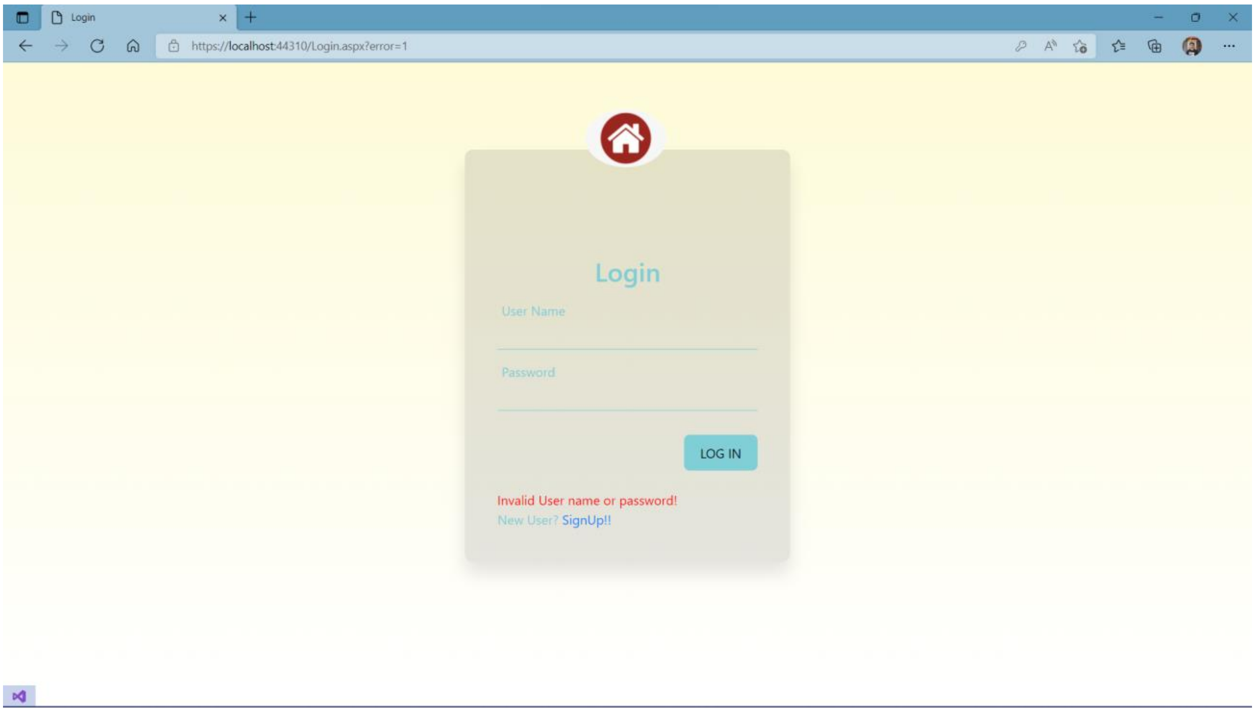
Major Functions of the PG accessible by the admin:



```
using System.Text;
using System.Threading.Tasks;
using System.Data;
using System.ServiceModel;

namespace HomeAndUserLibrary
{
    [ServiceContract]
    2 references
    public interface IHomeService2
    {
        [OperationContract]
        1 reference
        DataSet GetHouses();

        [OperationContract]
        1 reference
        DataSet getHome(string feature, int limit)

        [OperationContract]
        1 reference
        Home getHomeWithID(int id);

        [OperationContract]
        1 reference
        int RemoveHome(int id);
        [OperationContract]
        1 reference
        int AddHome(Home home);
        [OperationContract]
        1 reference
        int UpdateHome(int id,Home home);
    }
}
```

Testing

Login using wrong credentials.



Login

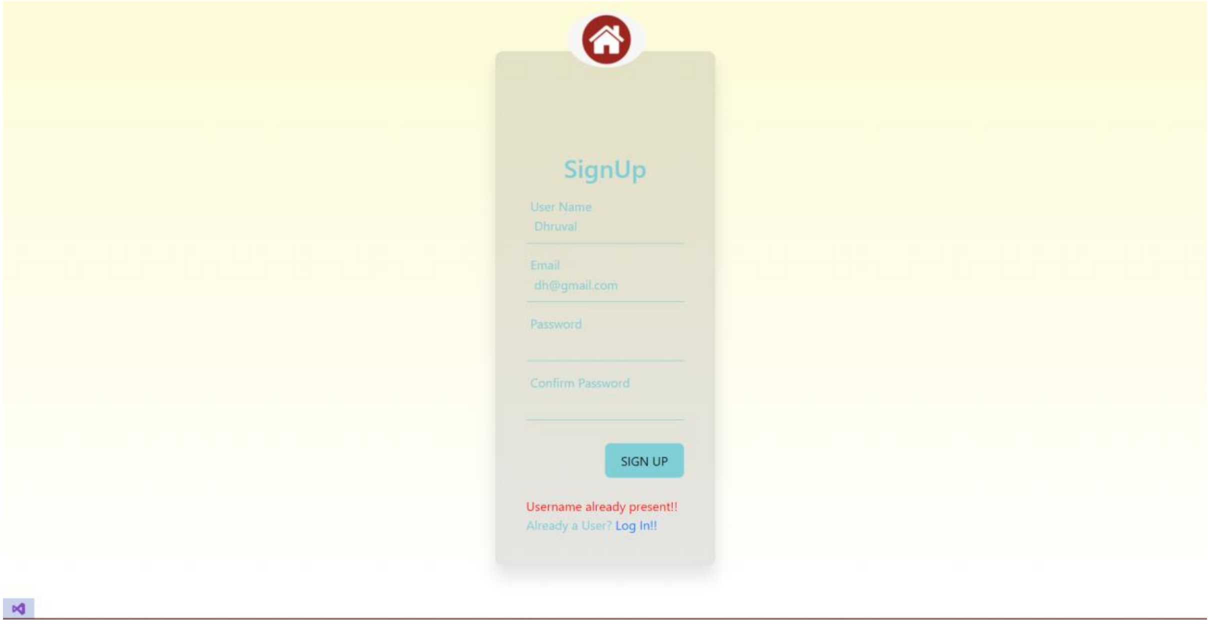
User Name

Password

Invalid User name or password!

New User? SignUp!!

Username already exists:



SignUp

User Name
Dhruval

Email
dh@gmail.com

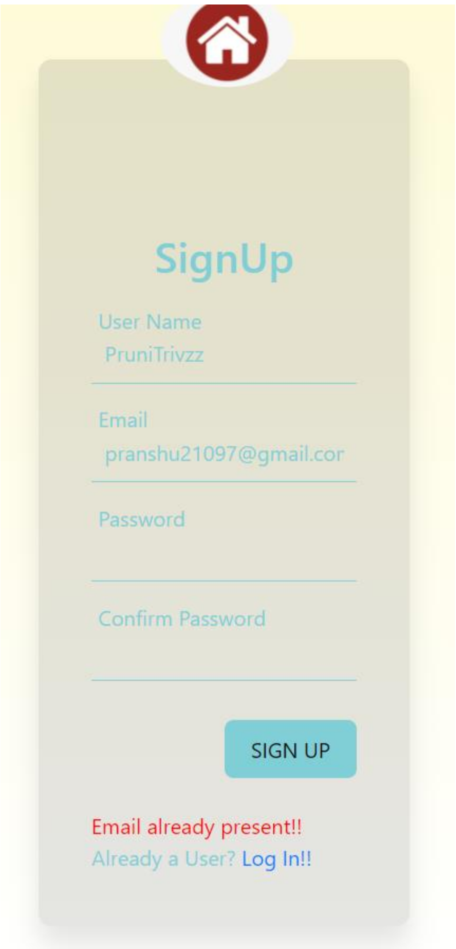
Password

Confirm Password

Username already present!!

Already a User? Log In!!

Email Id already exists:



User Name
PruniTrivzz

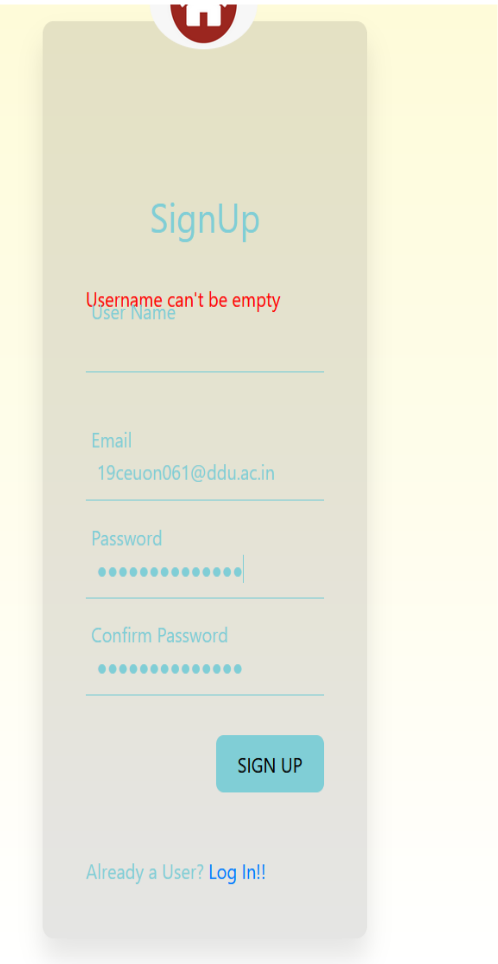
Email
pranshu21097@gmail.cor

Password

Confirm Password

Email already present!!
Already a User? Log In!!

Empty Username:



Username can't be empty
User Name

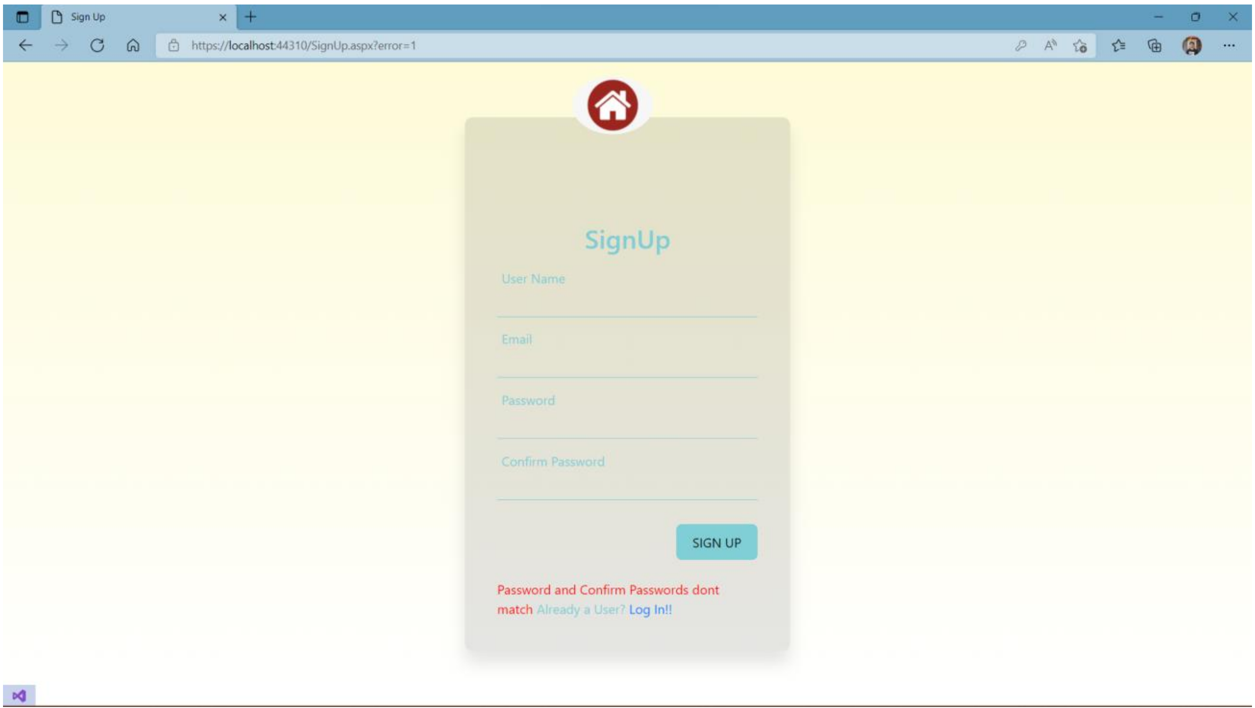
Email
19ceuon061@ddu.ac.in

Password
••••••••••••••

Confirm Password
••••••••••••••

Already a User? Log In!!

Password and confirm password don’t match on sign up page



https://localhost:44310/SignUp.aspx?error=1

User Name

Email

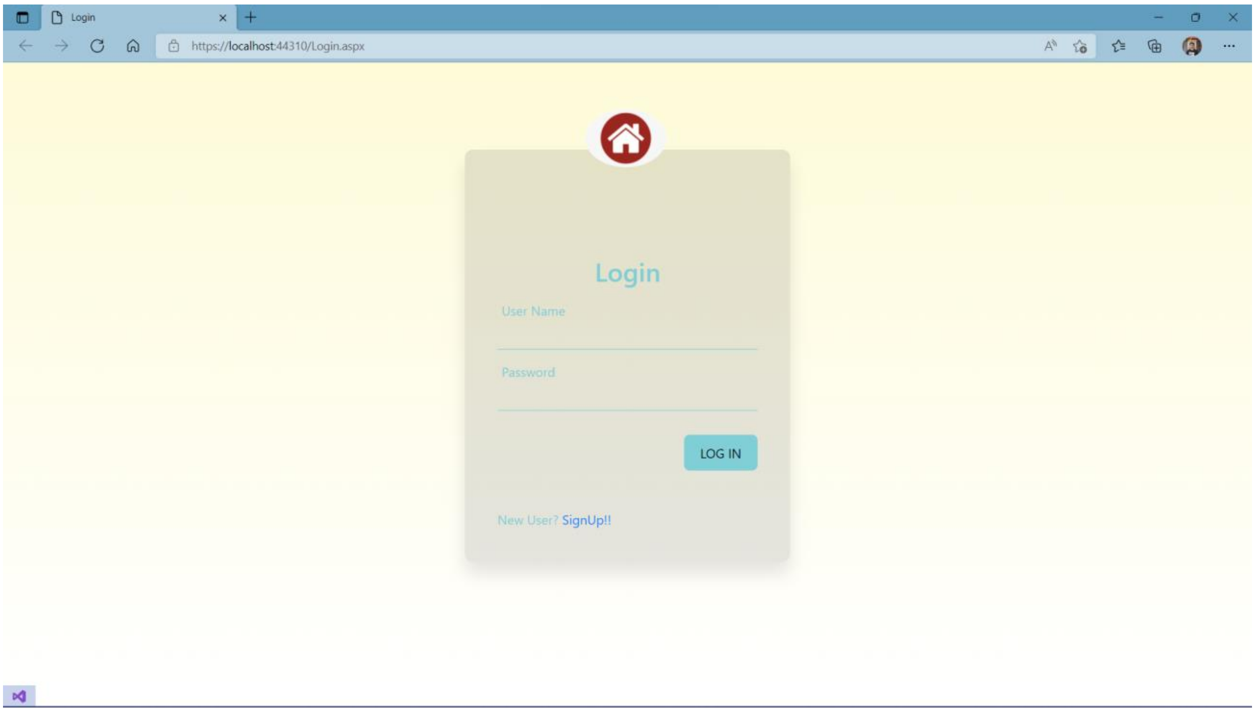
Password

Confirm Password

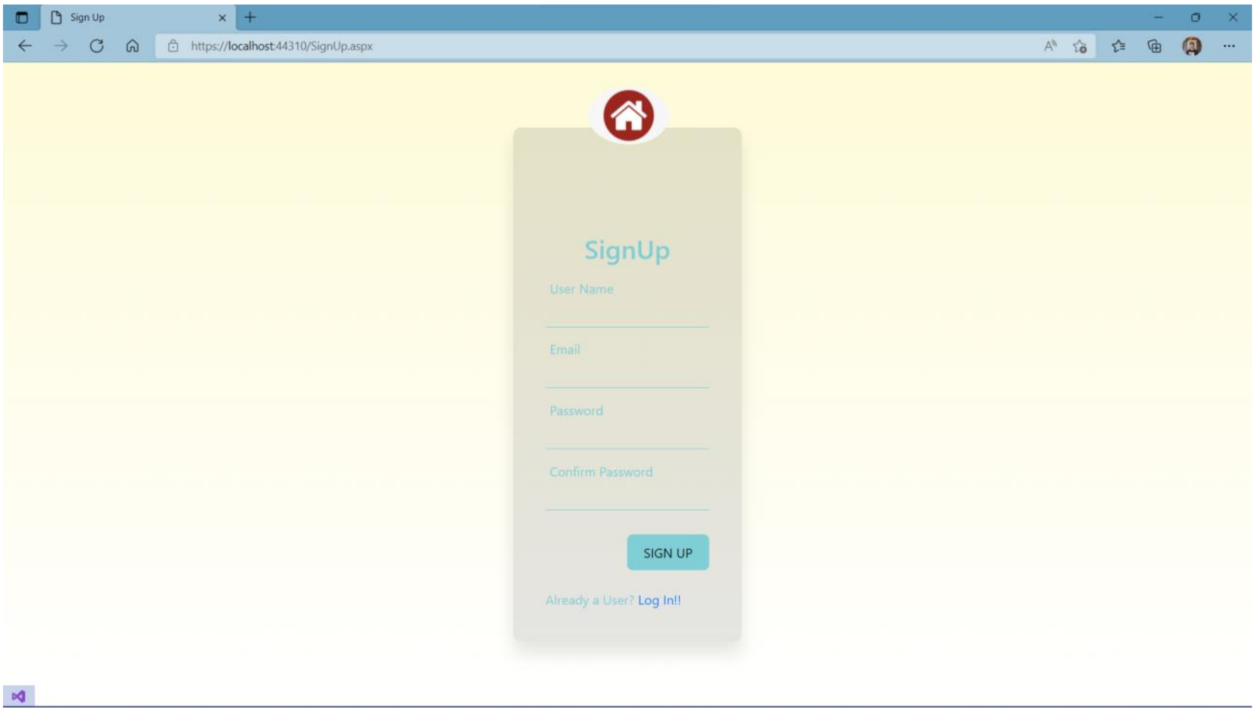
Password and Confirm Passwords dont match Already a User? Log In!!

Screen Shots of Project

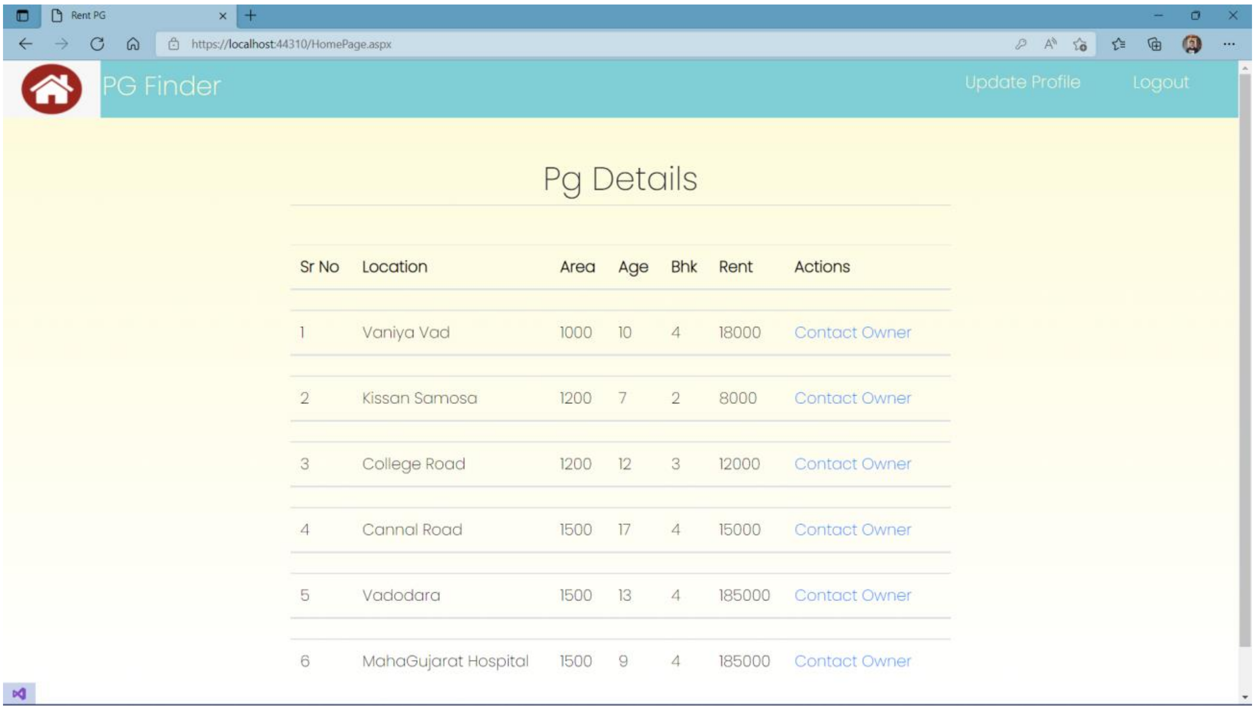
Log in Page



Sign Up Page



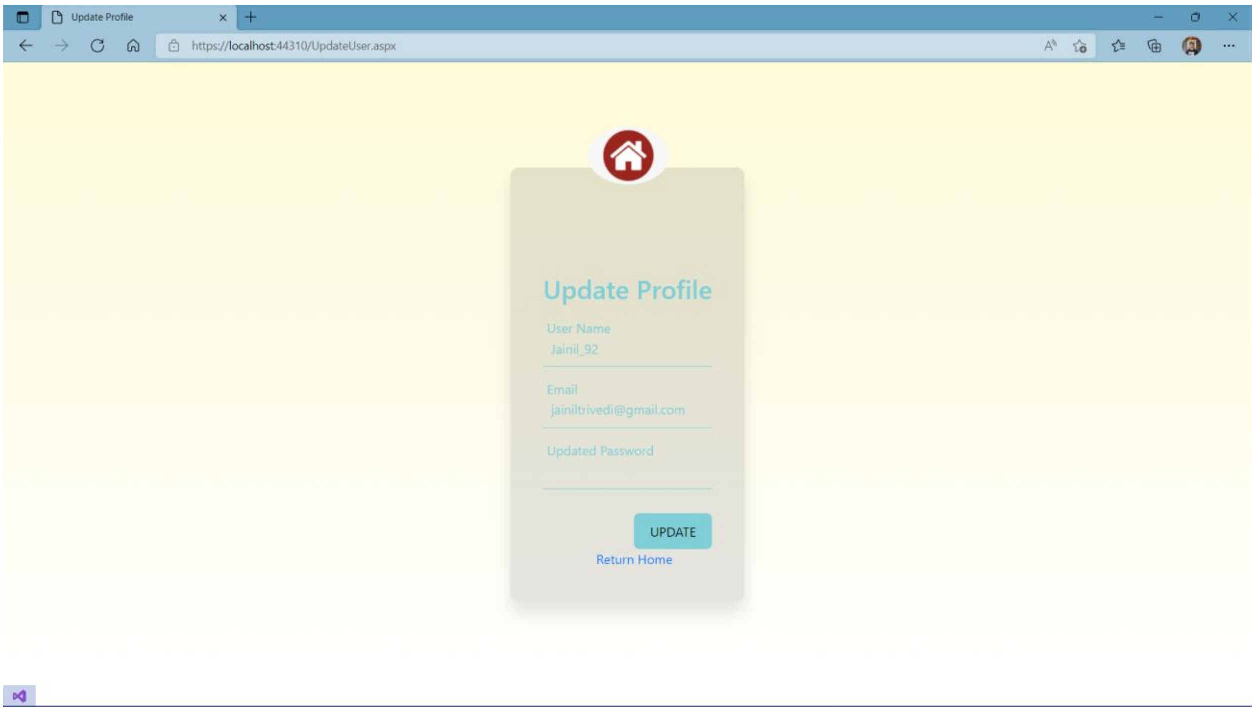
Logged In, User Home page



Pg Details

Sr No	Location	Area	Age	Bhk	Rent	Actions
1	Vaniya Vad	1000	10	4	18000	Contact Owner
2	Kissan Samosa	1200	7	2	8000	Contact Owner
3	College Road	1200	12	3	12000	Contact Owner
4	Cannal Road	1500	17	4	15000	Contact Owner
5	Vadodara	1500	13	4	185000	Contact Owner
6	MahaGujarat Hospital	1500	9	4	185000	Contact Owner

Update Profile



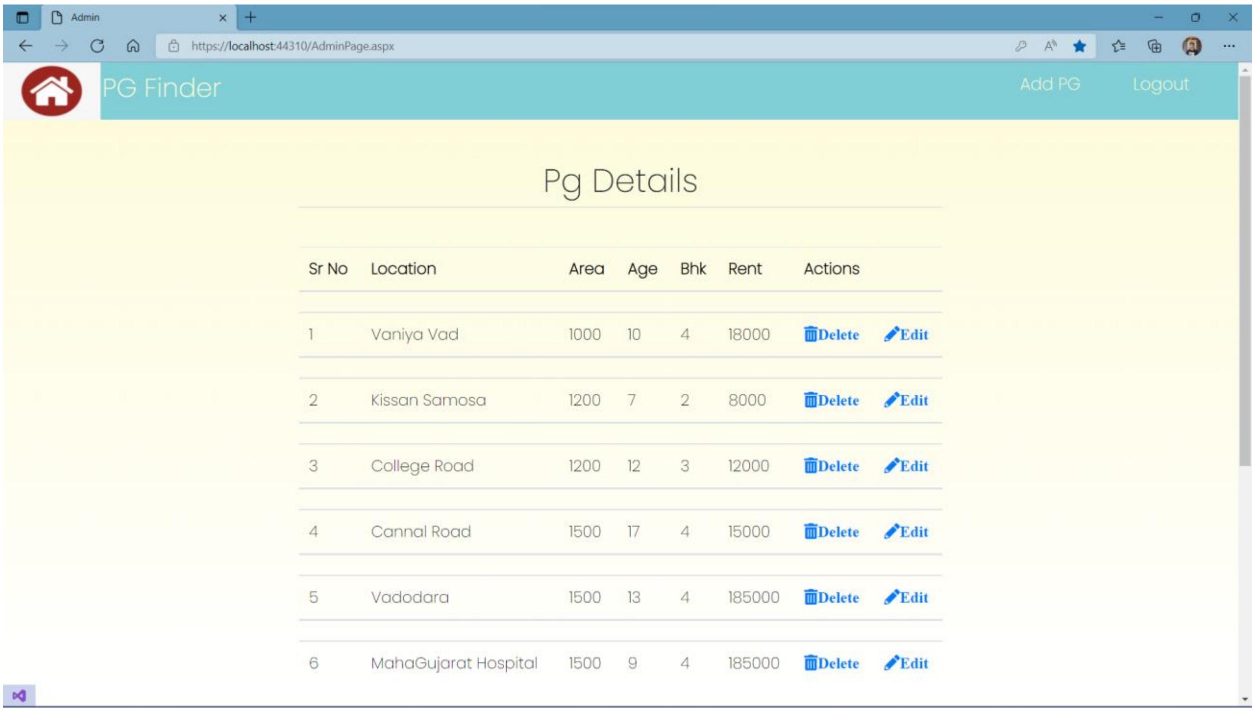
Update Profile

User Name
Jainil_92

Email
jainiltrivedi@gmail.com

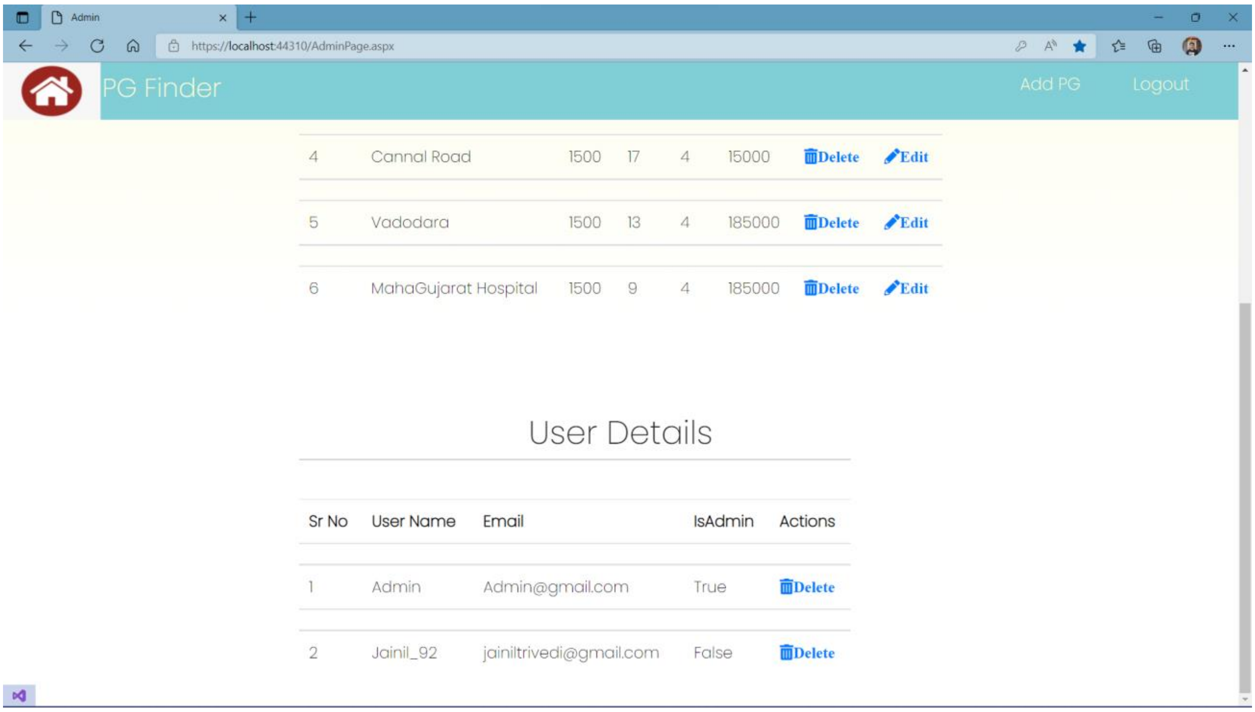
Updated Password

Admin Dash board



Pg Details

Sr No	Location	Area	Age	Bhk	Rent	Actions	
1	Vaniya Vad	1000	10	4	18000	Delete	Edit
2	Kissan Samosa	1200	7	2	8000	Delete	Edit
3	College Road	1200	12	3	12000	Delete	Edit
4	Cannal Road	1500	17	4	15000	Delete	Edit
5	Vadodara	1500	13	4	185000	Delete	Edit
6	MahaGujarat Hospital	1500	9	4	185000	Delete	Edit

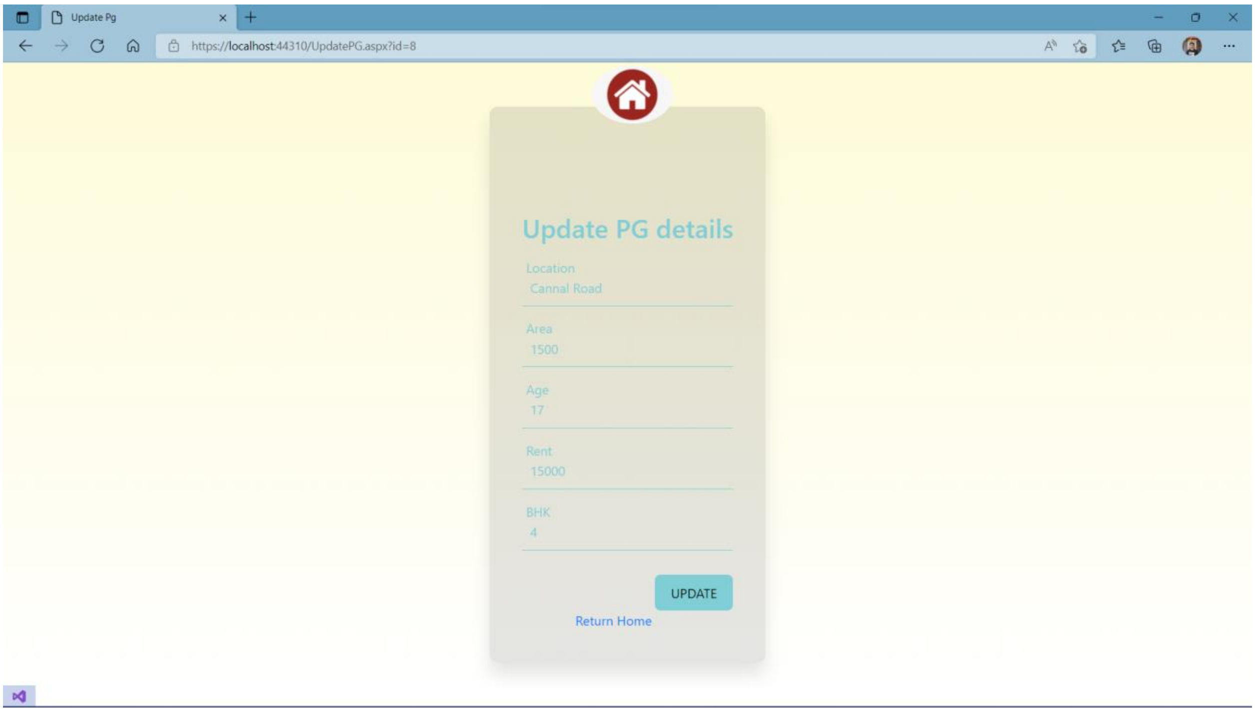


4	Cannal Road	1500	17	4	15000	Delete	Edit
5	Vadodara	1500	13	4	185000	Delete	Edit
6	MahaGujarat Hospital	1500	9	4	185000	Delete	Edit

User Details

Sr No	User Name	Email	IsAdmin	Actions
1	Admin	Admin@gmail.com	True	Delete
2	Jainil_92	jainiltrivedi@gmail.com	False	Delete

Update PG



Update PG details

Location
Cannal Road

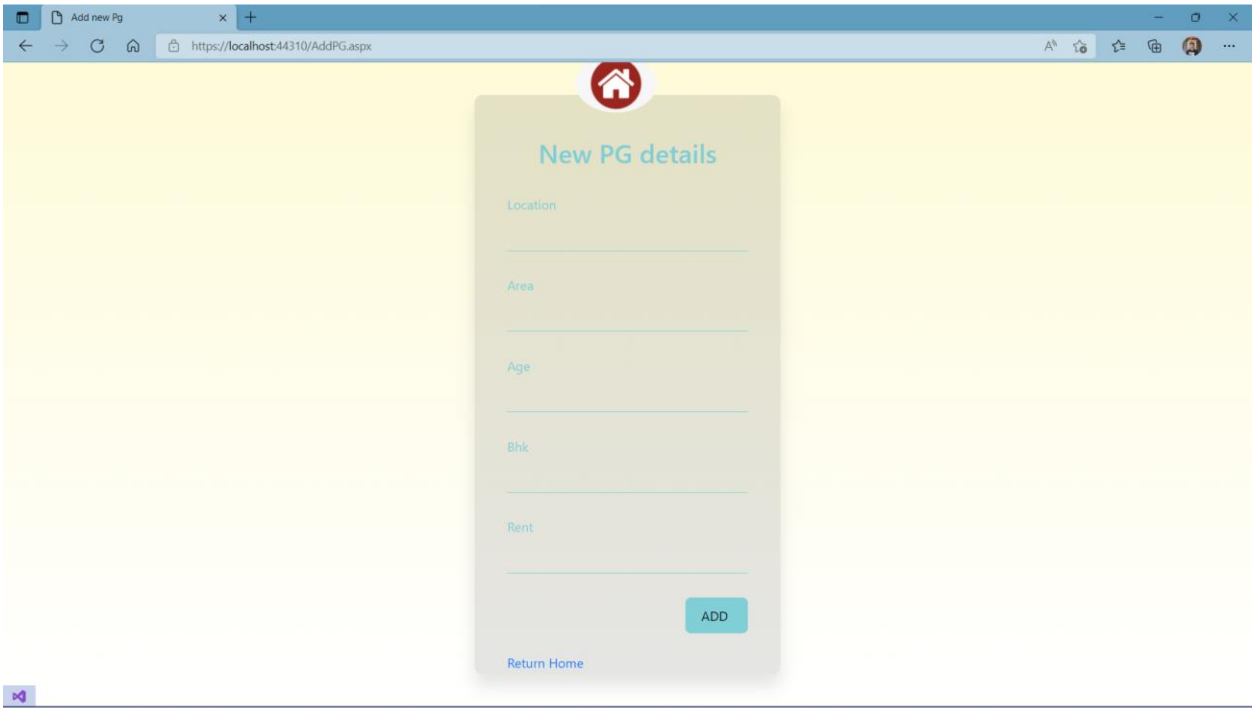
Area
1500

Age
17

Rent
15000

BHK
4

Add new PG



New PG details

Location

Area

Age

Bhk

Rent

Conclusion

We have successfully implemented PG finder.

All the functionalities listed in our SRS have been divided into two modules user and PG/Home/Admin functions. We have also made some validations check to prevent malicious activities. We have also tested our web app as a whole and it passes those tests.

We have implemented Create user through sign in, Read user through log in and showing details on admin dashboard, Update user through update profile and Delete user by allowing admin to delete a user if he wants or finds them malicious.

We have also implemented Create PG, Delete PG and Update Pg which can be done only by admin through admin dashboard. We have also implemented Read PG by showing details of PG on both user's home page and admin dashboard.

Limitations and Future Extension

1. User can't contact owner, we have not made any arrangements for the same.
   In future, we would like to make these arrangements
2. For now, only admin can add PG, while we should allow others also to add PG to expand our reach. Also add PG from more regions.
   We would like to add these features in future.
3. Add other features to identify users, so that they can't cheat. Like email verification, biometrics etc.
   In future, we would like to add this feature.
4. We can have/save more details of the PG like photos, exact address, owner contact (for now we have email) etc. to easy users in finding their choice of PG.
   This must be implemented in near future.

Bibliography

- https://docs.microsoft.com/en-us/dotnet/framework/wcf/
- Lecture materials provided.