Mini Project Report

on

“Property Management System”

Submitted by :

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Under the Guidance of

Dr. Prof. Sharmishta Desai

At

MIT-WPU
॥ विश्वशान्तिर्ध्रुवं ध्रुवा ॥

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MIT WORLD PEACE UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

School of Computer Engineering and Technology

I. Table of Contents

II. Abstract

The project focuses on providing Property Management to real estate agencies and civilians. This helps customer to save time and get best business solutions.
The real estate business deals with the development of the property and the lease, rent, sale of establishments. It is one of the fastest growing enterprises in India. It has potentially never ending growth. This project provides solutions for the customer to buy and sell property with ease. This project has also integrated machine learning to predict the estimated cost of a property the customer is interested in. Integrating a broker into the functionality of the website helps the owner of a property as they then don't have to worry about showing the property to the client. The website offers various services to the customers so that their buying experience is enhanced and completely hassle free.

III. Introduction (Motivation and objectives)

MOTIVATION:-
As a real estate agent one has to maintain a lot of data. He/ She is involved with clients who has to lease out, rent or sale the property and with the customer who intends to buy, rent or lease the property. Hence it involves lot of information exchange.

The advent of computers can ease out this hassle. With the organized data storage system it allows faster search time, interaction and deal methods. Indeed the DBMS application can be a boom to the field of property management.

OBJECTIVES:-

- The admin should have all type authority.
- The admin should maintain property type and identify it as residential or commercial.
- To manage the registration details, approval details and types of properties.
- To make the system useful for companies or builders to post and edit their offers and availability of the property.
- Manage the information of buyers.
- Editing, adding and updating of records which will result in proper management of data and types of properties

IV. Problem Definition

a. In the old existing Property Management System all information of the property or client proceeded manually and it had to maintain the record of the activity involved in manual system. At the time of searching the property all the records had to be scanned and even after that the people can't be sure they will find a proper property.
b. It was unreliable and efficient data entry was not possible. Same data is maintained in various file which is leading to redundancy of data. Retrieval of required information was difficult and time consuming. Security of data is very critical issue which was not addressed.
c. The new database system provide solution to all the problems which was faced by traditional file system. It will keep record of housing properties available on rent or for sale, and will work as connecting bridge between customer and property sellers. The system is highly flexible one and is very efficient to make easy interactions with the client.
d. Due to this system there is no need to visit various places in search of desired property. The client has to specify what they are looking for and the system accordingly provides the information. The information of various places in search of desired property is can be accessible at one place and you can book an appointment and have a look at the property that you wish to buy.
e. This system will provide a platform for people to sell and buy property. This will keep record of property either commercial and residential for sale or on rent with their rates and make available for the customers. It will also keep record of contact information of customer and send necessary notices and/or reminders to the customers.
f. This will help users to list their property for sale and rent and assist users to find properties, in the their desired areas with necessary amenities at a great price.
g. It keeps record of all deals that take place and can be easily accessible by the admin.
h. It also provides additional services of linking the users to a broker and financial consultant.
i. It is a great all in one service that can be easily accessible by users

V. Database Design (ER diagram)

Entities:

a. Broker
b. Financial Consultant
c. Owner
    i. Seller
    ii. Landlord
d. Customer
    i. Buyer
    ii. Tenant
e. Property
    i. Residential Property
    ii. Commercial Property
f. Registration

Relationship Set:

a. Broker and Owner
    i. Cardinality: One to Many
    Relationship: Assists (Binary Relationship, Degree: 2)
    A broker can assist many Owners sell their property.
b. Broker and Customer
    i. Cardinality: One to Many
    Relationship: Assists (Binary Relationship, Degree: 2)
    A broker can assist many Customers to choose the right property at good price.
c. Financial Consultant and Customer
    i. Cardinality: One to Many
    Relationship: Advises (Binary Relationship, Degree: 2)
    A financial customer can advise a customer on whether or not he should invest in the project and also advises type of loan to take if required.
d. Owner and Property
    i. Cardinality: One to Many
    Relationship: Lists (Binary Relationship, Degree: 2)
    An owner can list whichever property he likes for either sale or rent as per his choice. Owner can list many properties.
e. Customer and Property
    i. Cardinality: One to Many
    Relationship: Looks at (Binary Relationship)

A customer can look at as many properties as he like. He can sell or rent more than one property as well

f. Registration, Owner, Property and Customer

i. Aggregation
Relationship (Degree 4 relationship)

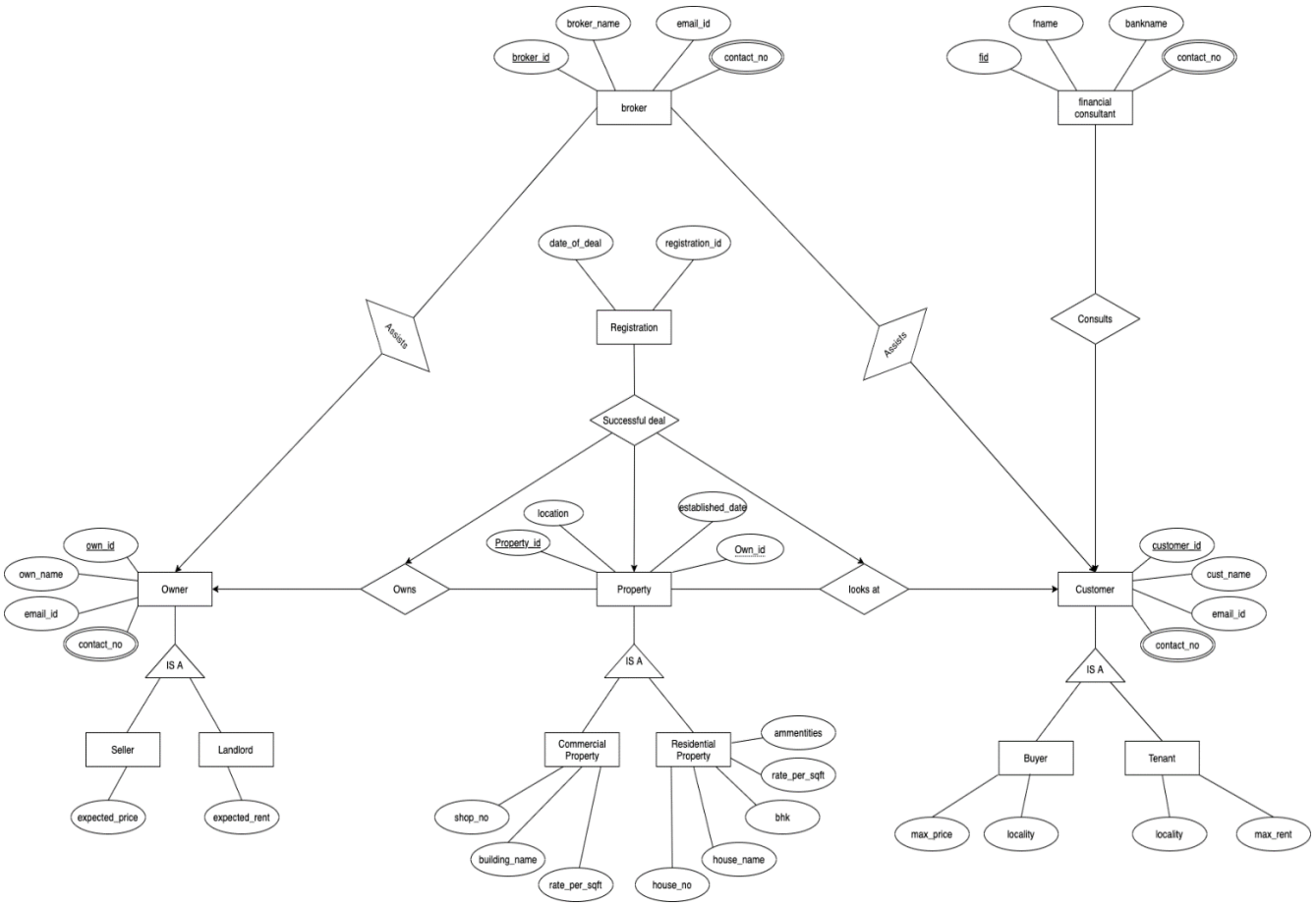
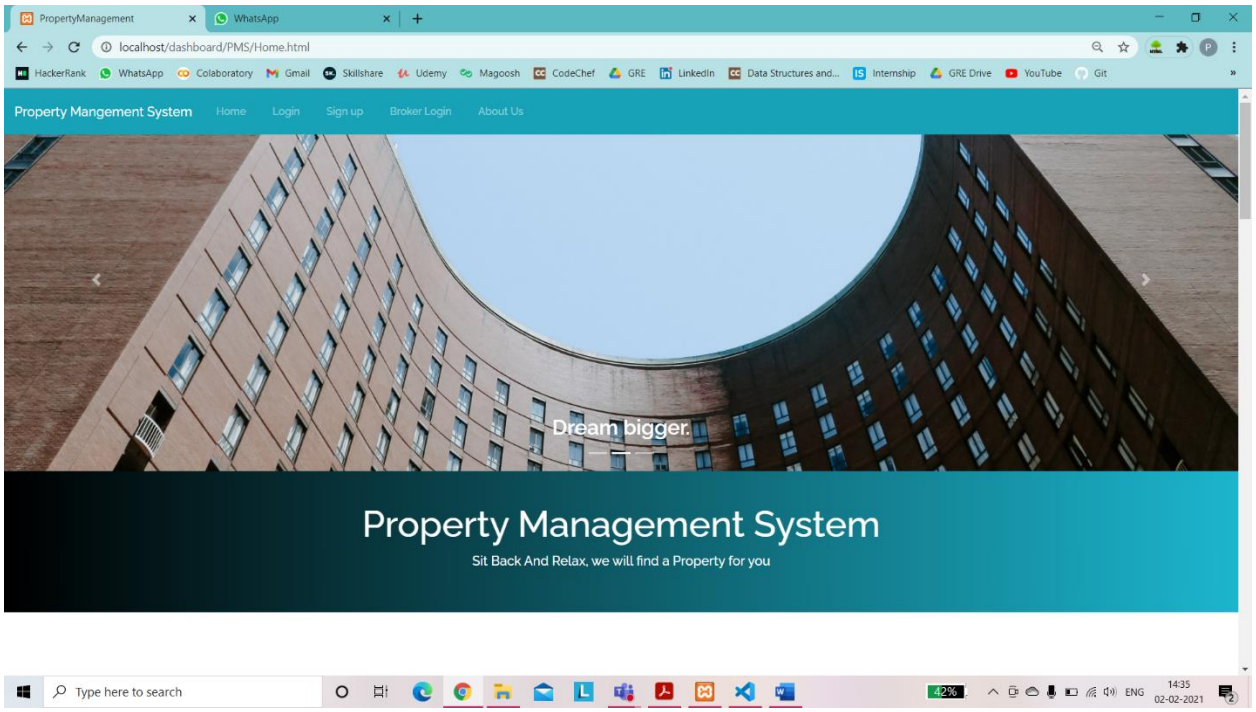
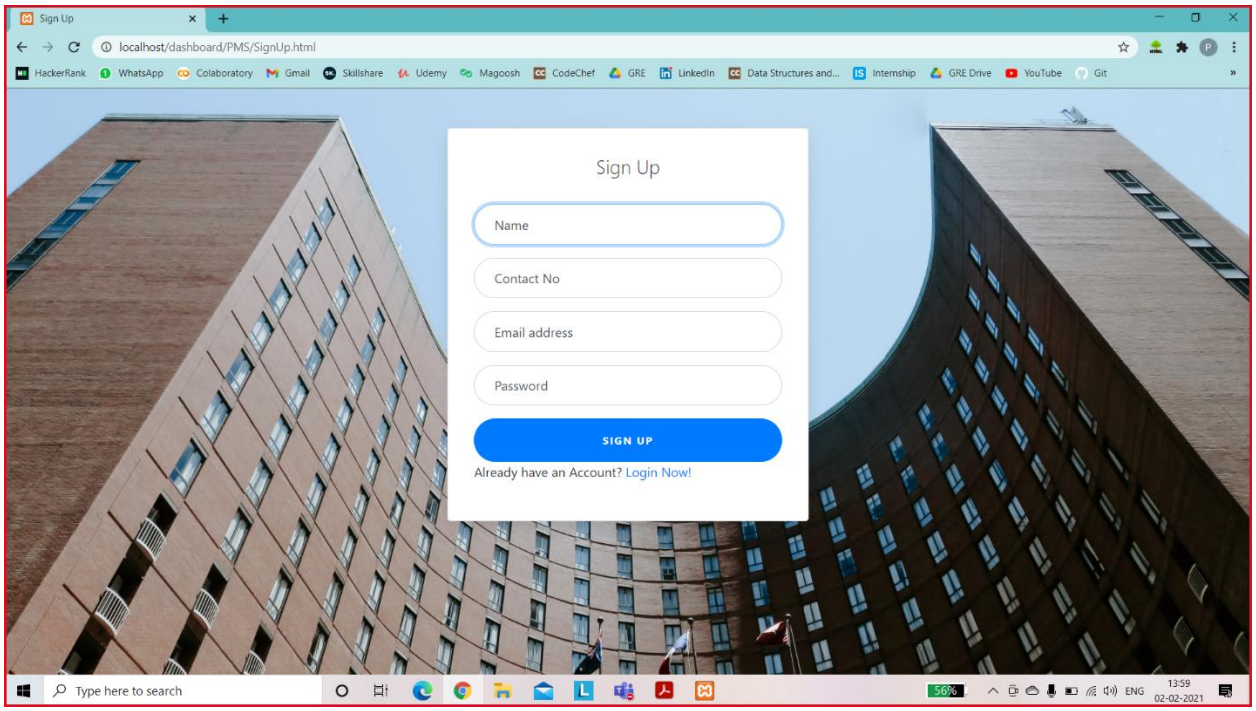
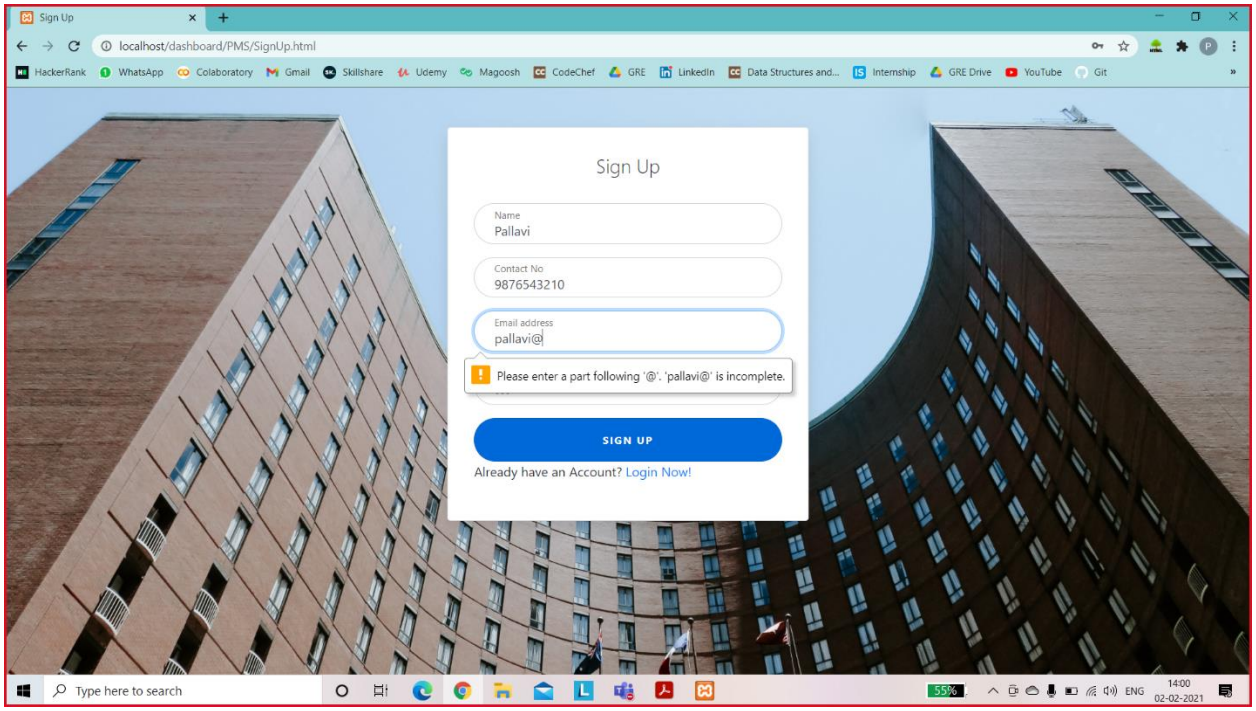


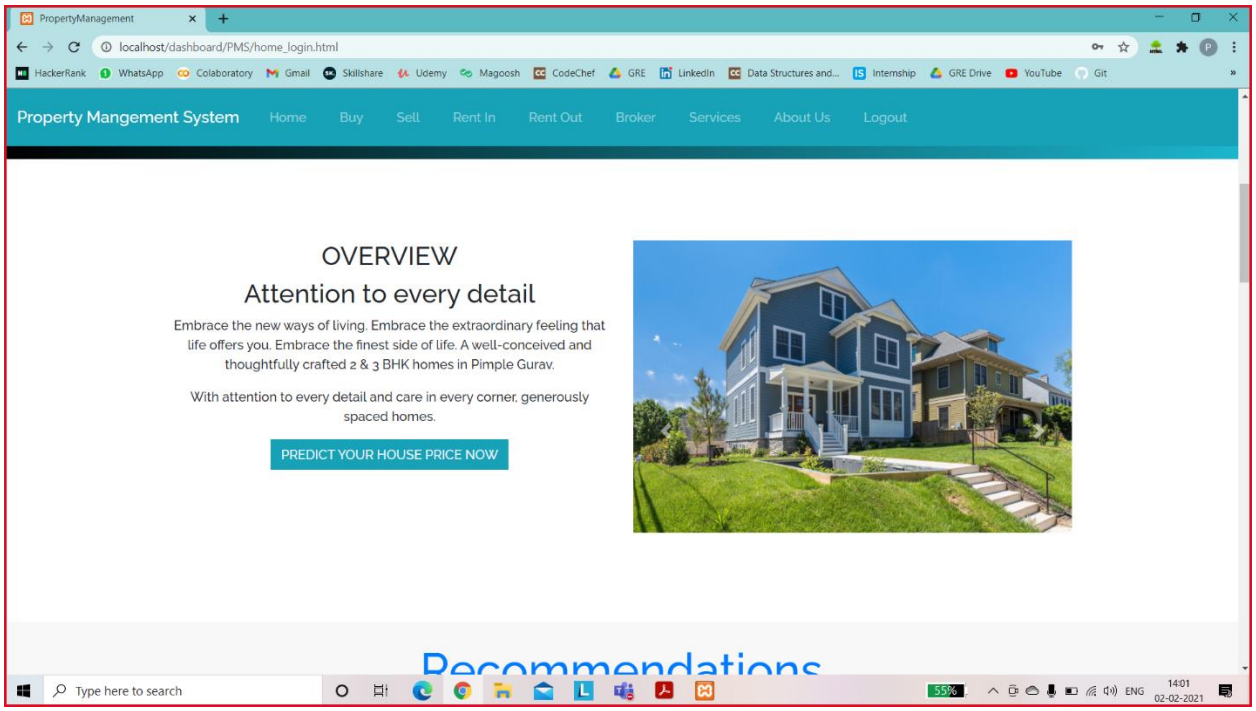
Figure 1 Entity Relationship Diagram

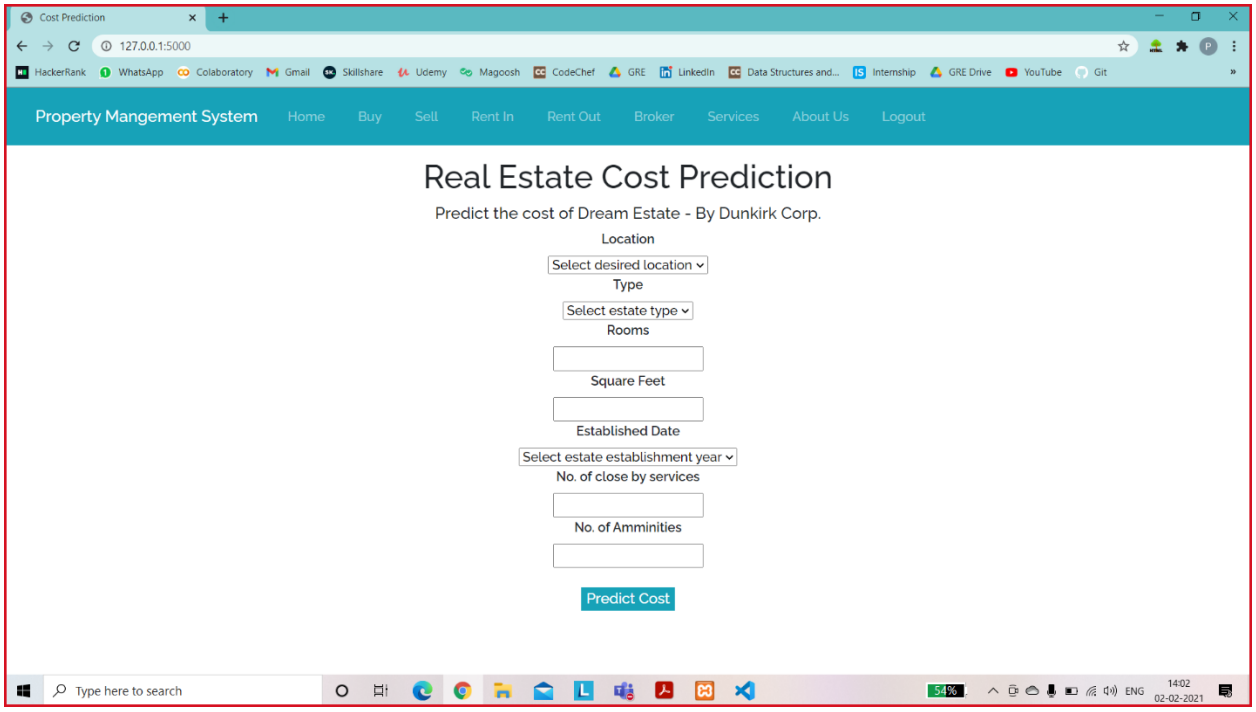
VI. GUI (Screen Shots) with client side validations

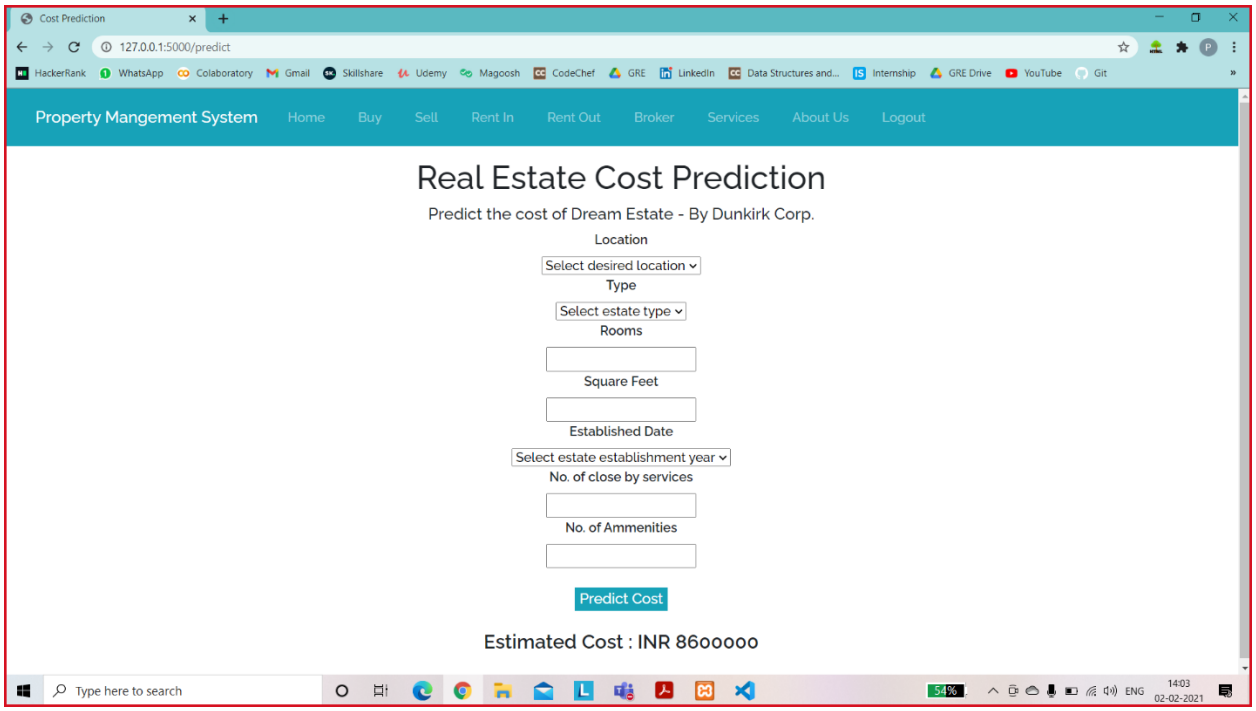


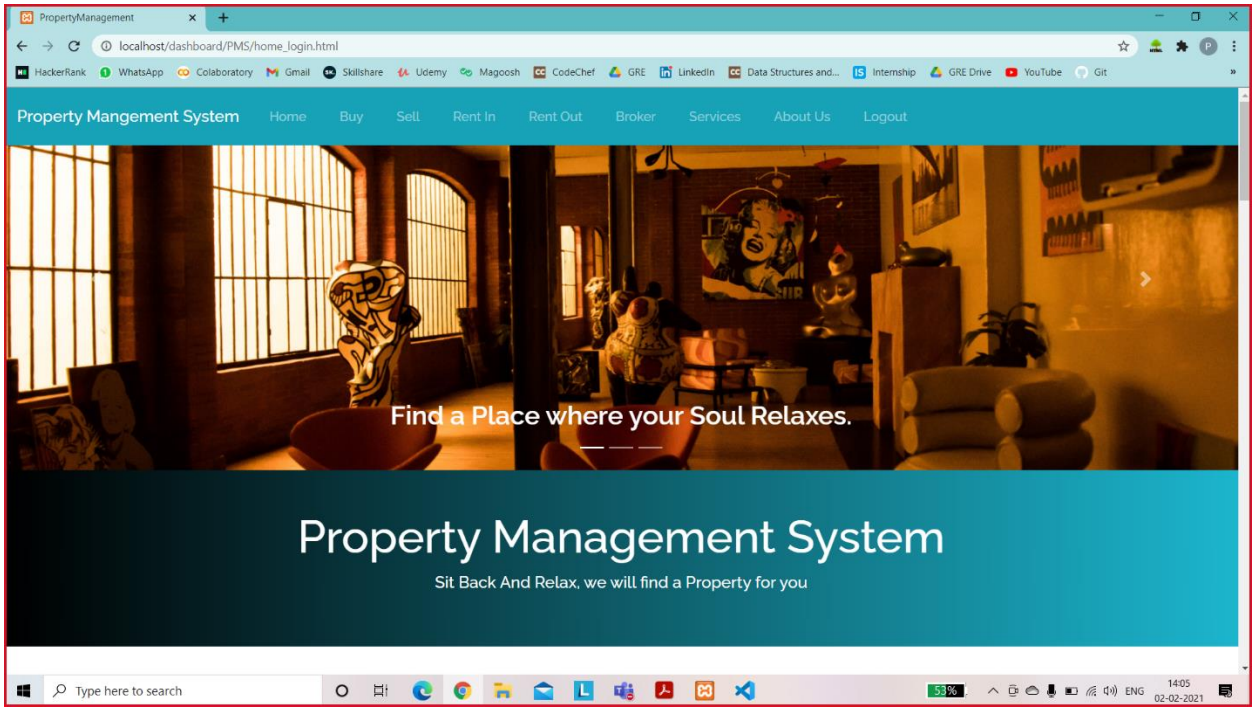

Sign Up
localhost/dashboard/PMS/SignUp.html
Sign Up
Name
Contact No
Email address
Password
SIGN UP
Already have an Account? Login Now!

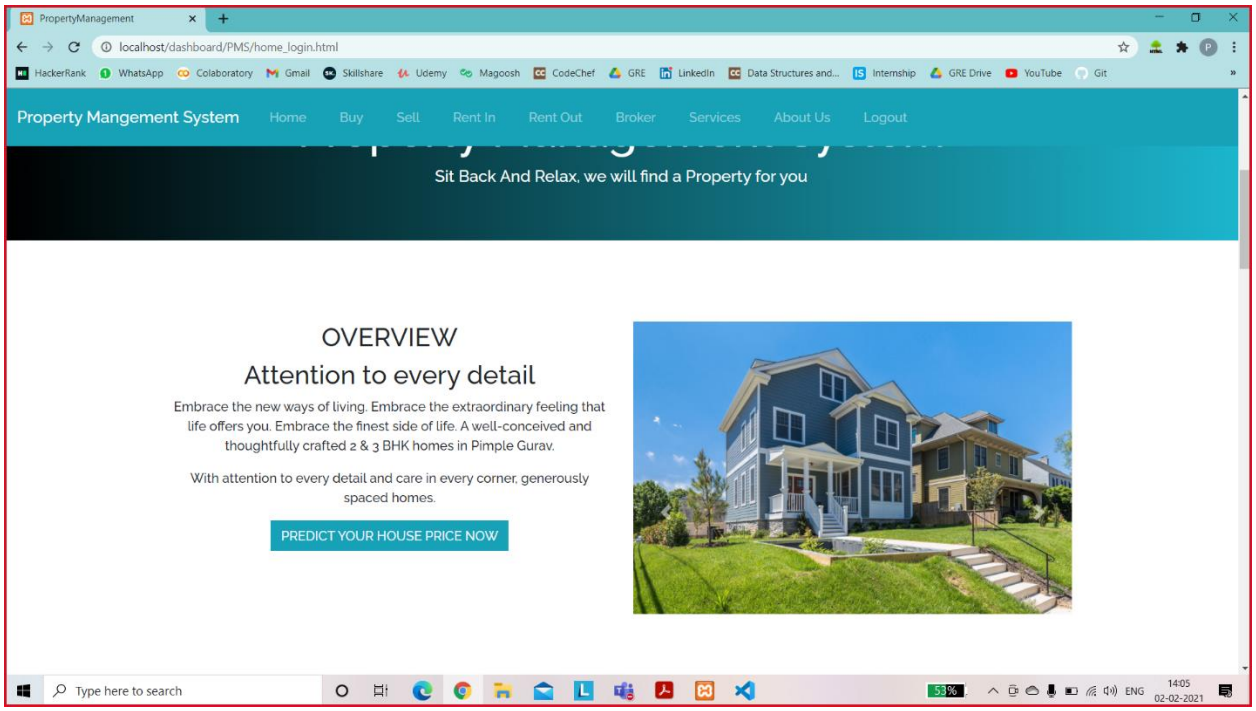

Sign Up
localhost/dashboard/PMS/SignUp.html
Sign Up
Name
Pallavi
Contact No
9876543210
Email address
pallavi@
Please enter a part following '@'. 'pallavi@' is incomplete.
SIGN UP
Already have an Account? Login Now!


PropertyManagement
localhost/dashboard/PMS/home_login.html
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
OVERVIEW
Attention to every detail
Embrace the new ways of living. Embrace the extraordinary feeling that life offers you. Embrace the finest side of life. A well-conceived and thoughtfully crafted 2 & 3 BHK homes in Pimple Gurav.
With attention to every detail and care in every corner, generously spaced homes.
PREDICT YOUR HOUSE PRICE NOW
Recommendations
Type here to search


Cost Prediction
127.0.0.1:5000
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Real Estate Cost Prediction
Predict the cost of Dream Estate - By Dunkirk Corp.
Location
Select desired location
Type
Select estate type
Rooms
Square Feet
Established Date
Select estate establishment year
No. of close by services
No. of Amminities
Predict Cost
Type here to search


Cost Prediction
127.0.0.1:5000/predict
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Real Estate Cost Prediction
Predict the cost of Dream Estate - By Dunkirk Corp.
Location
Select desired location
Type
Select estate type
Rooms
Square Feet
Established Date
Select estate establishment year
No. of close by services
No. of Ammenities
Predict Cost
Estimated Cost : INR 8600000


PropertyManagement
localhost/dashboard/PMS/home_login.html
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Find a Place where your Soul Relaxes.
Property Management System
Sit Back And Relax, we will find a Property for you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Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Sit Back And Relax, we will find a Property for you
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Attention to every detail
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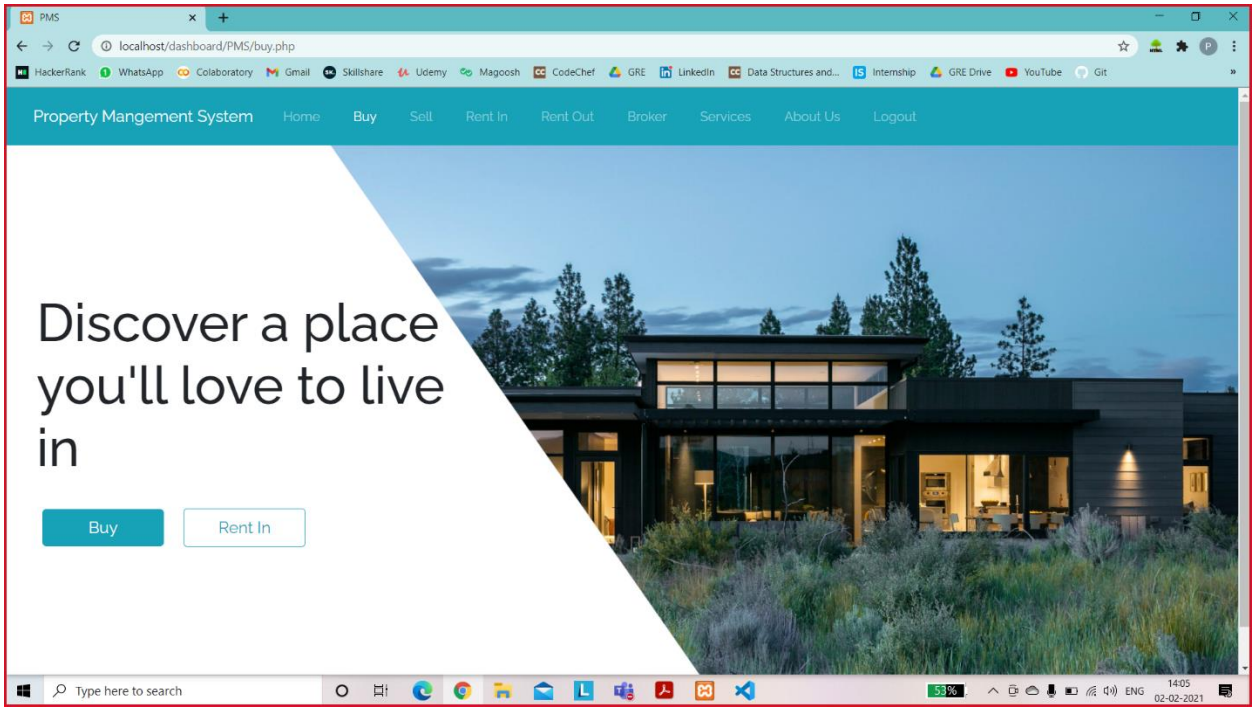
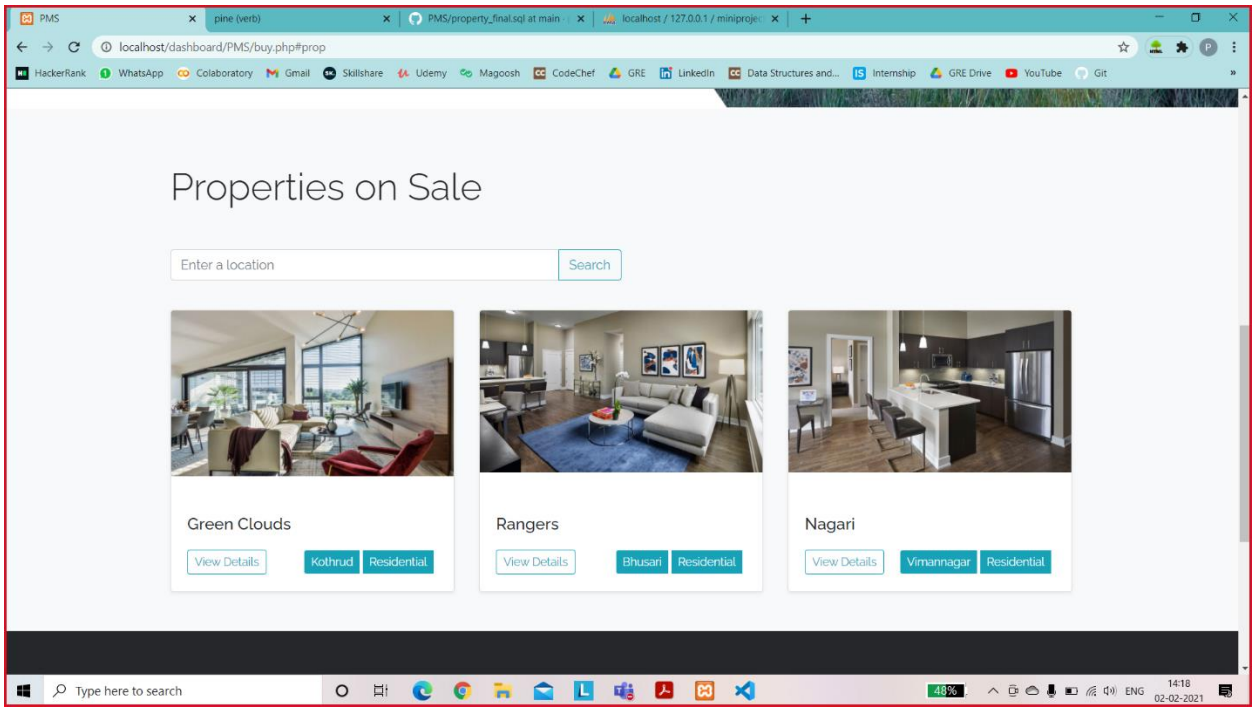
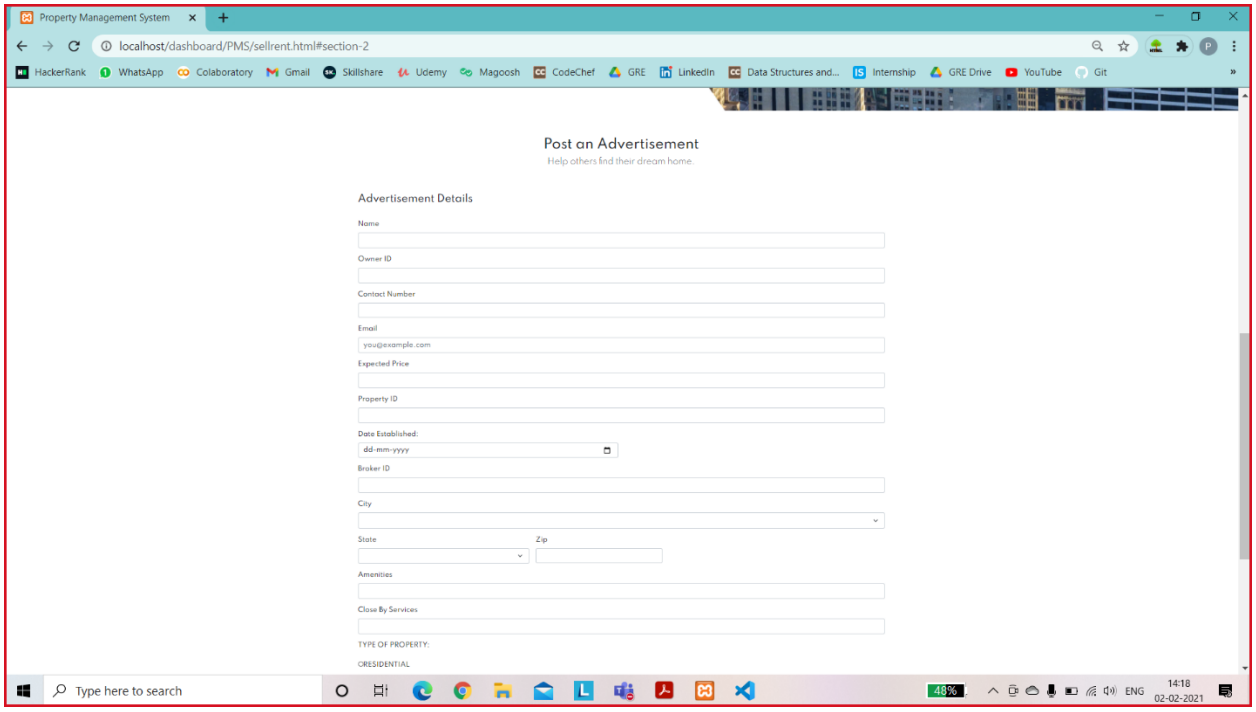
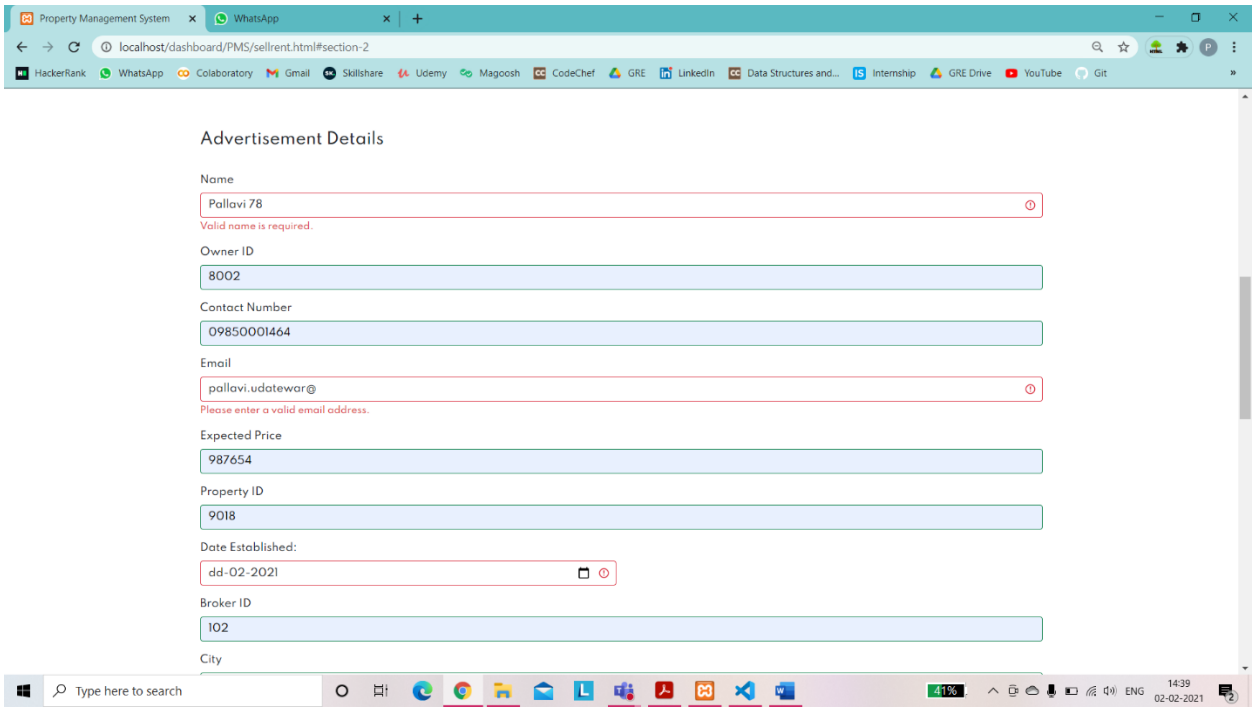
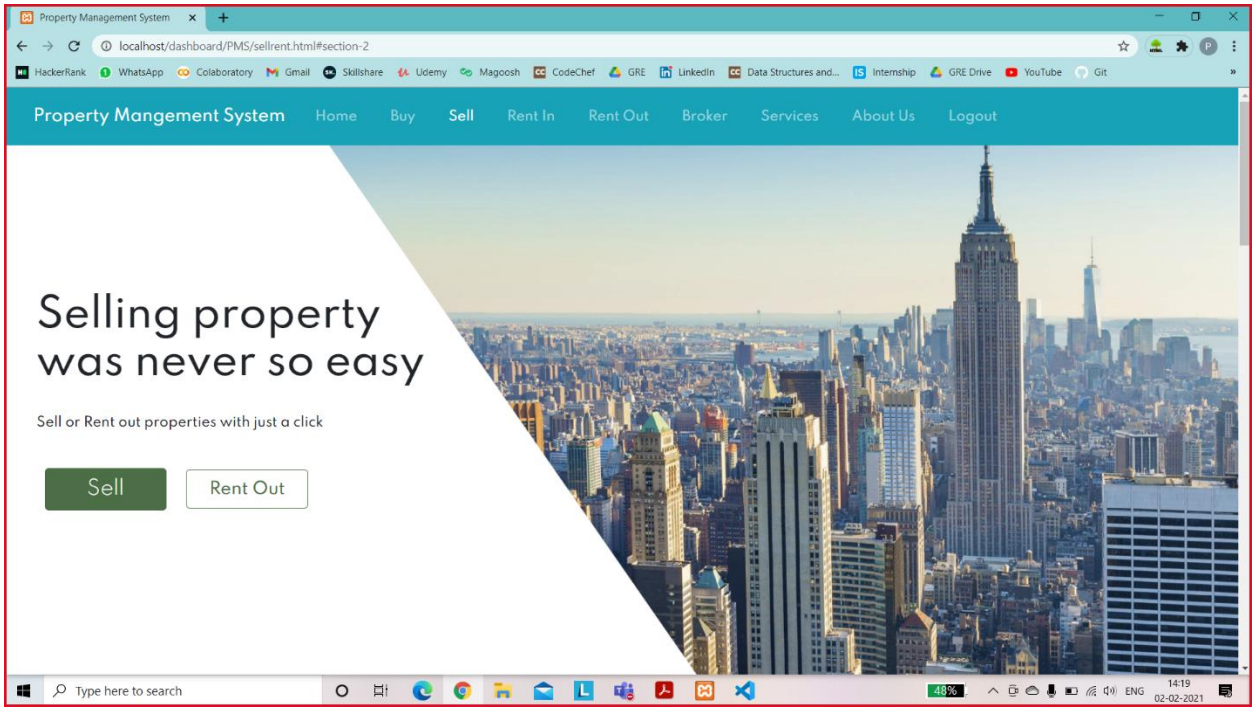
With attention to every detail and care in every corner, generously spaced homes.
PREDICT YOUR HOUSE PRICE NOW
Type here to search

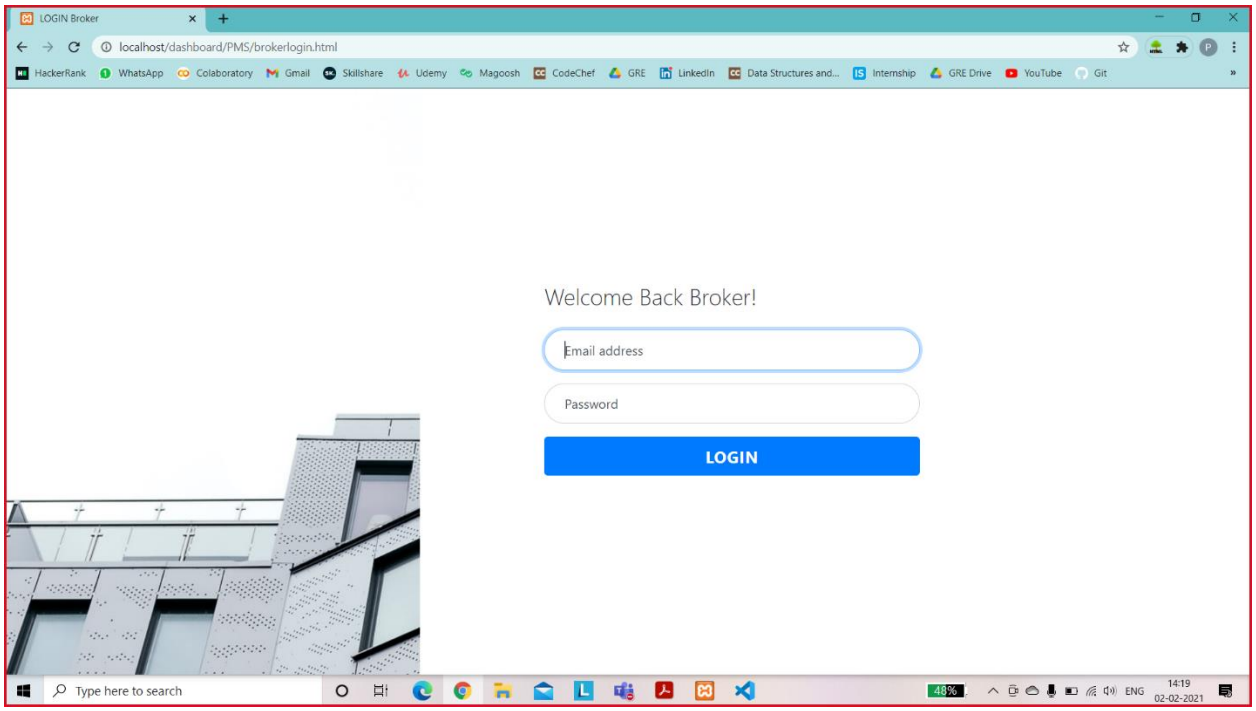

PMS
localhost/dashboard/PMS/buy.php
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Discover a place you'll love to live in
Buy
Rent In
Type here to search

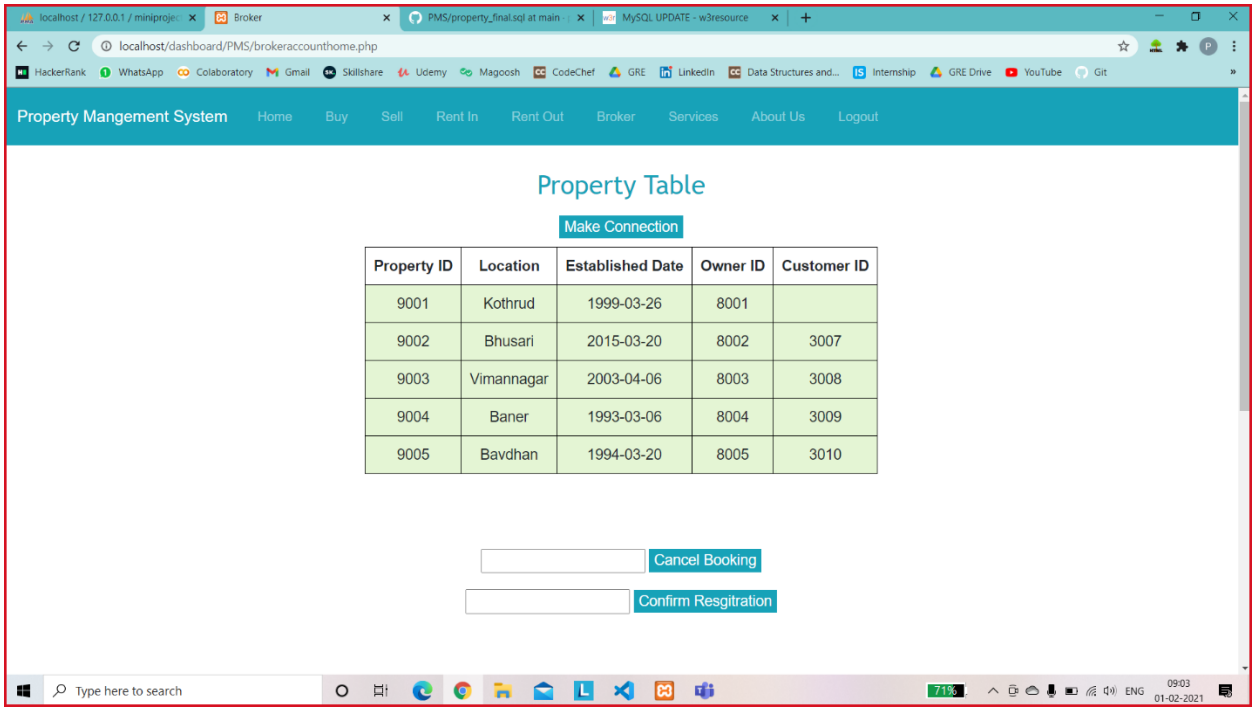

PMS
localhost/dashboard/PMS/buy.php#prop
Properties on Sale
Enter a location
Search
Green Clouds
View Details
Kothrud
Residential
Rangers
View Details
Bhusari
Residential
Nagari
View Details
Vimannagar
Residential
Type here to search


Property Management System
localhost/dashboard/PMS/sellrent.html#section-2
Post an Advertisement
Help others find their dream home.
Advertisement Details
Name
Owner ID
Contact Number
Email
you@example.com
Expected Price
Property ID
Date Established:
dd-mm-yyyy
Broker ID
City
State
Zip
Amenities
Close By Services
TYPE OF PROPERTY:
RESIDENTIAL
Type here to search


Property Management System
WhatsApp
localhost/dashboard/PMS/sellrent.html#section-2
Advertisement Details
Name
Pallavi 78
Valid name is required.
Owner ID
8002
Contact Number
09850001464
Email
pallavi.udatewar@
Please enter a valid email address.
Expected Price
987654
Property ID
9018
Date Established:
dd-02-2021
Broker ID
102
City
Type here to search
41%
ENG
14:39
02-02-2021


Property Management System
localhost/dashboard/PMS/sellrent.html#section-2
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Selling property was never so easy
Sell or Rent out properties with just a click
Sell
Rent Out
Type here to search
48%
ENG
14:19
02-02-2021


LOGIN Broker
localhost/dashboard/PMS/brokerlogin.html
Welcome Back Broker!
Email address
Password
LOGIN
Type here to search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Broker
PMS/property_final.sql at main -
MySQL UPDATE - w3resource
localhost/dashboard/PMS/brokeraccounthome.php
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Property Table
Make Connection
Property ID
Location
Established Date
Owner ID
Customer ID
9001
Kothrud
1999-03-26
8001
9002
Bhusari
2015-03-20
8002
3007
9003
Vimannagar
2003-04-06
8003
3008
9004
Baner
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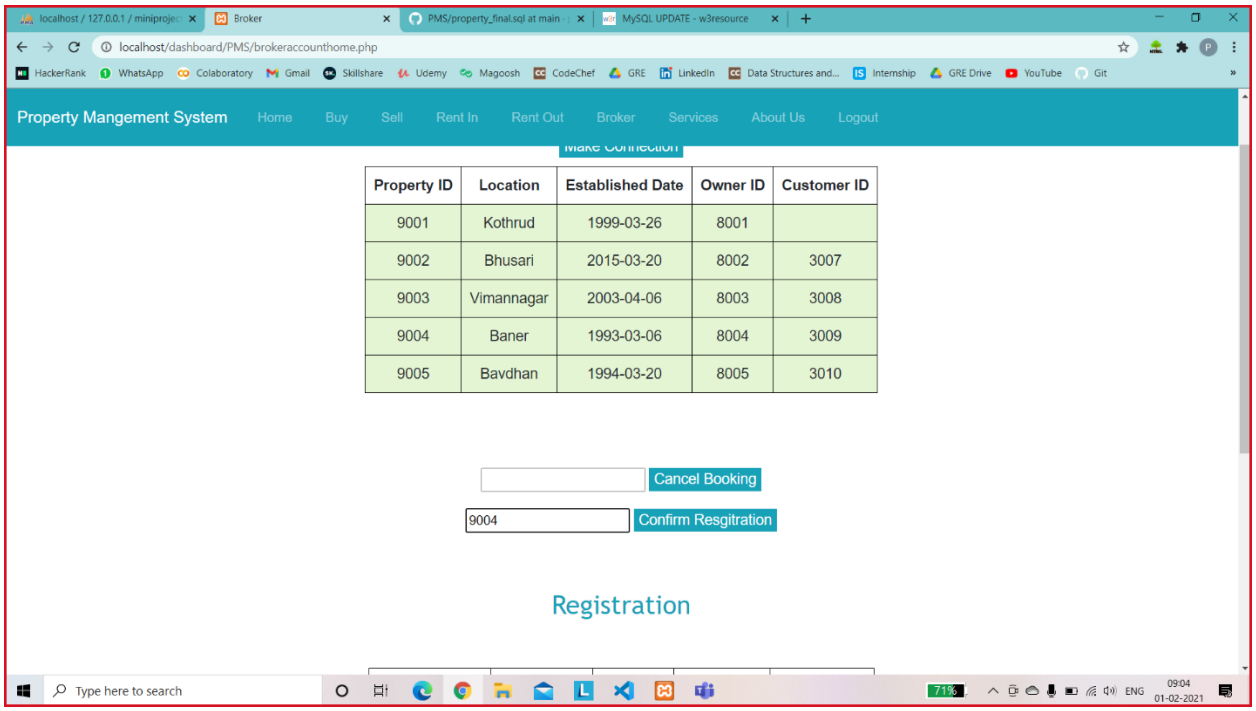
8004
3009
9005
Bavdhan
1994-03-20
8005
3010
Cancel Booking
Confirm Resgitration
Type here to search


Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Property ID
Location
Established Date
Owner ID
Customer ID
9001
Kothrud
1999-03-26
8001
9002
Bhusari
2015-03-20
8002
3007
9003
Vimannagar
2003-04-06
8003
3008
9004
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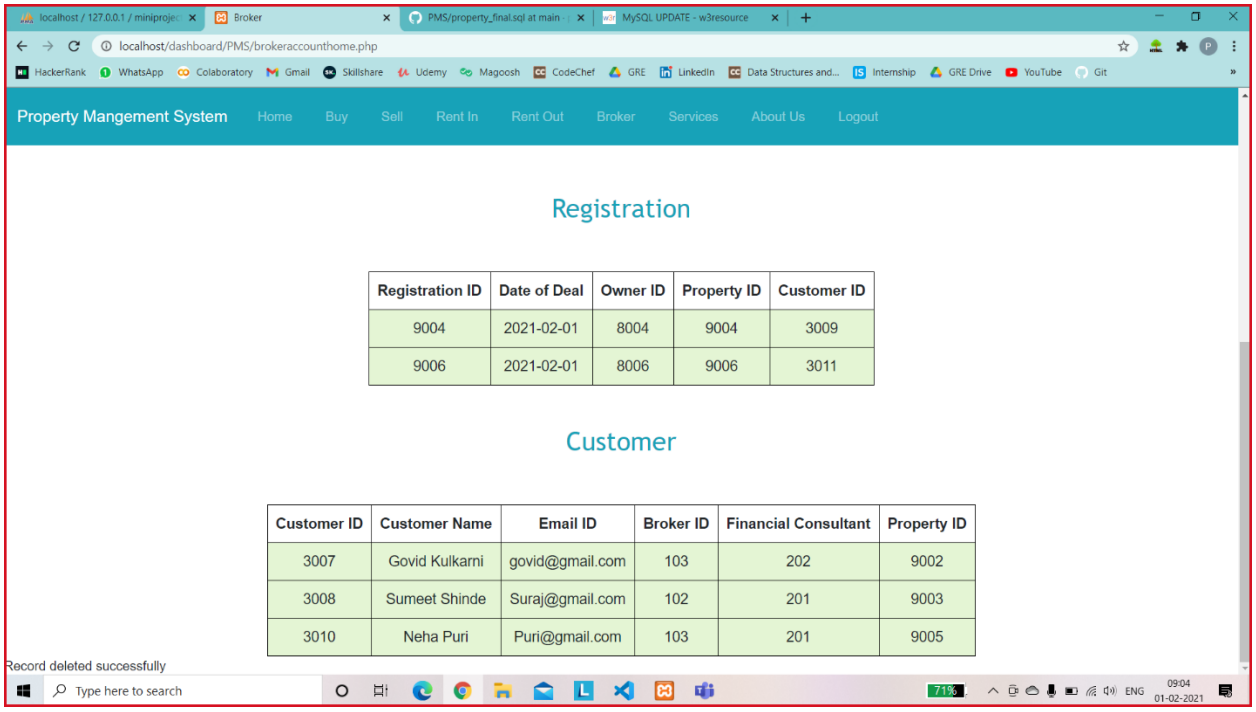
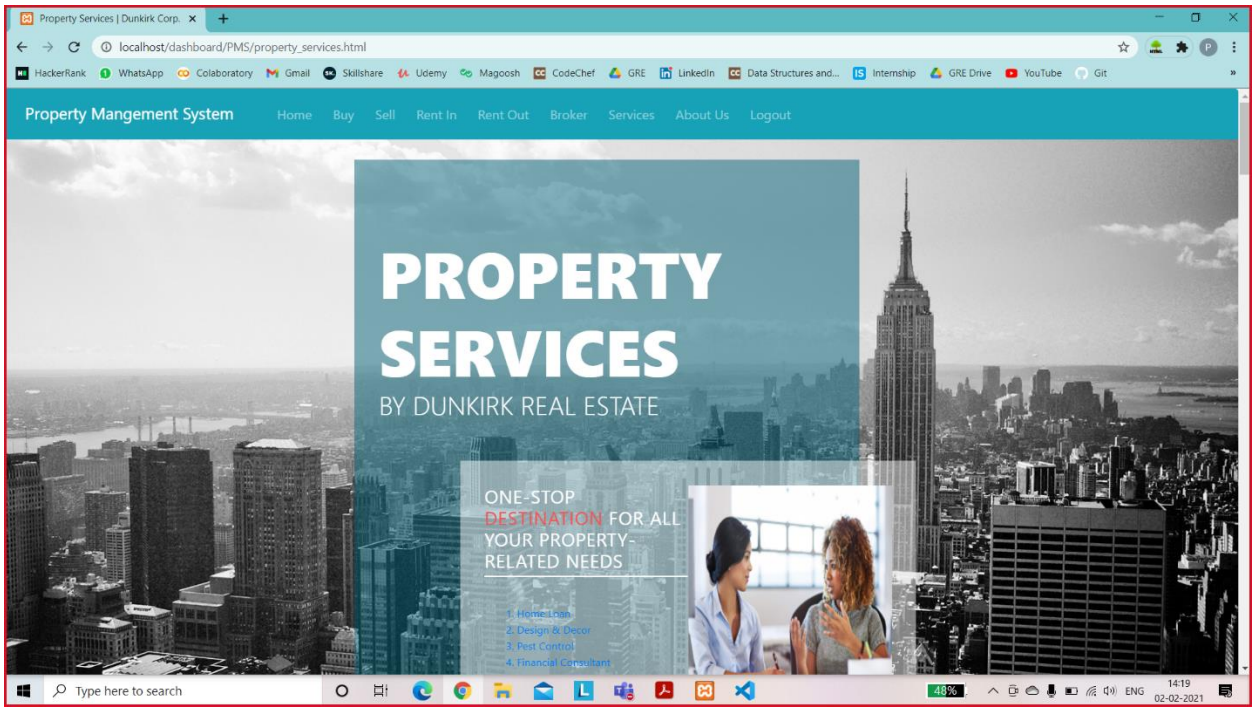
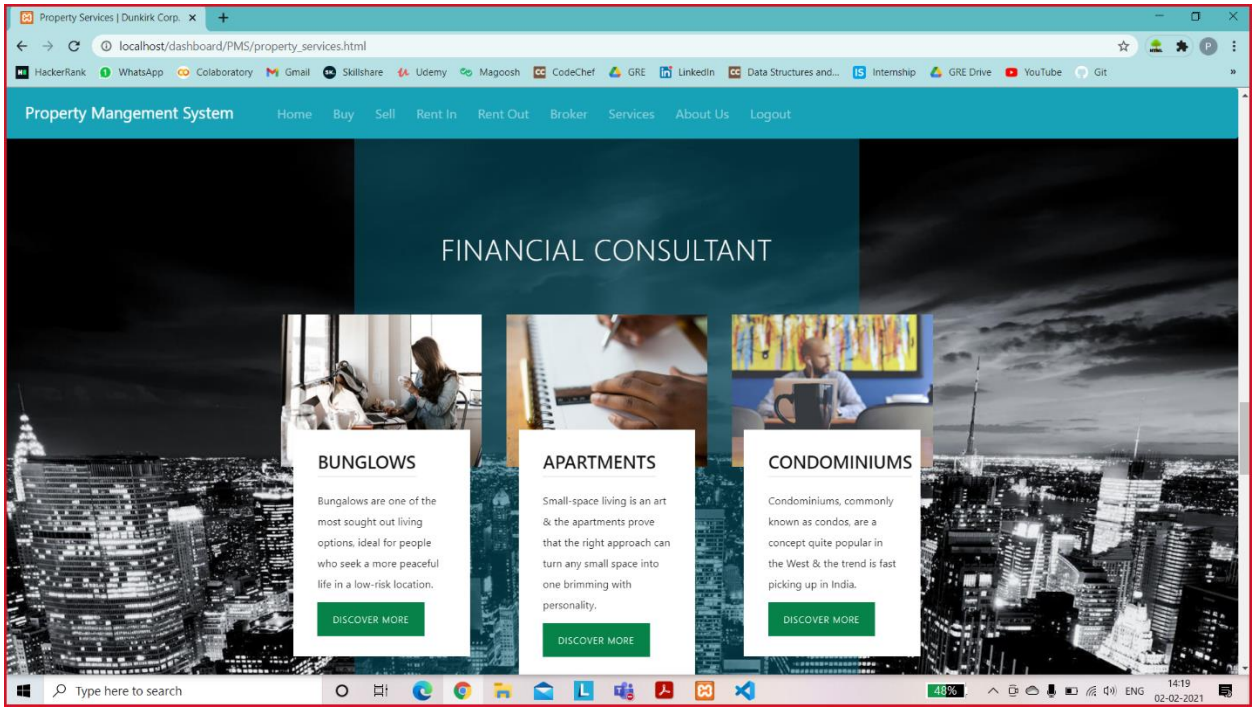
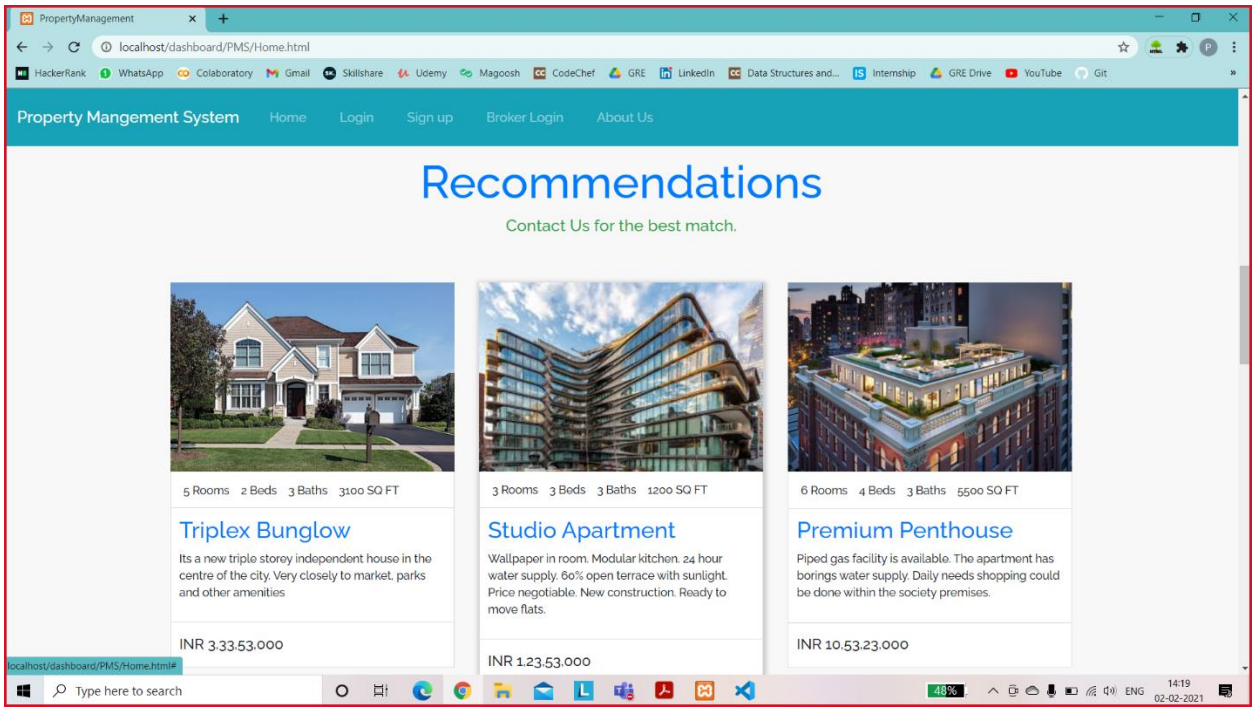
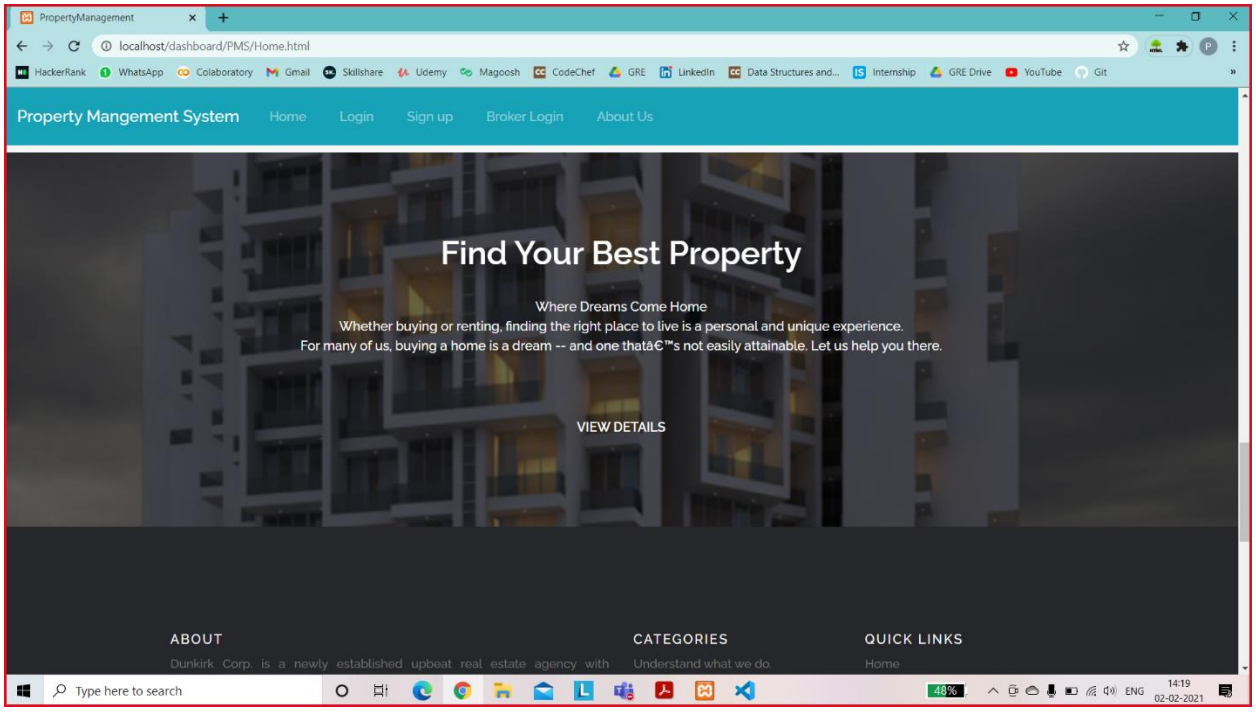
Bavdhan
1994-03-20
8005
3010
Cancel Booking
9004
Confirm Resgitration
Registration

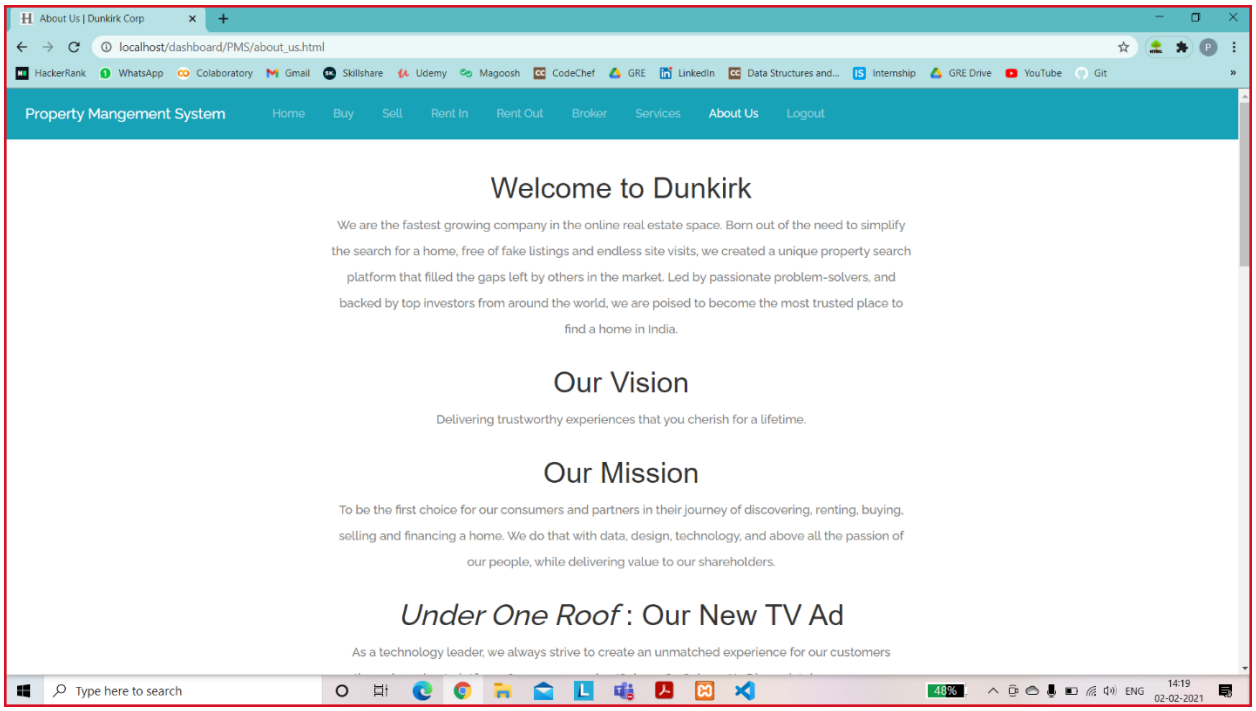

Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Registration
Registration ID
Date of Deal
Owner ID
Property ID
Customer ID
9004
2021-02-01
8004
9004
3009
9006
2021-02-01
8006
9006
3011
Customer
Customer ID
Customer Name
Email ID
Broker ID
Financial Consultant
Property ID
3007
Govid Kulkarni
govid@gmail.com
103
202
9002
3008
Sumeet Shinde
Suraj@gmail.com
102
201
9003
3010
Neha Puri
Puri@gmail.com
103
201
9005
Record deleted successfully

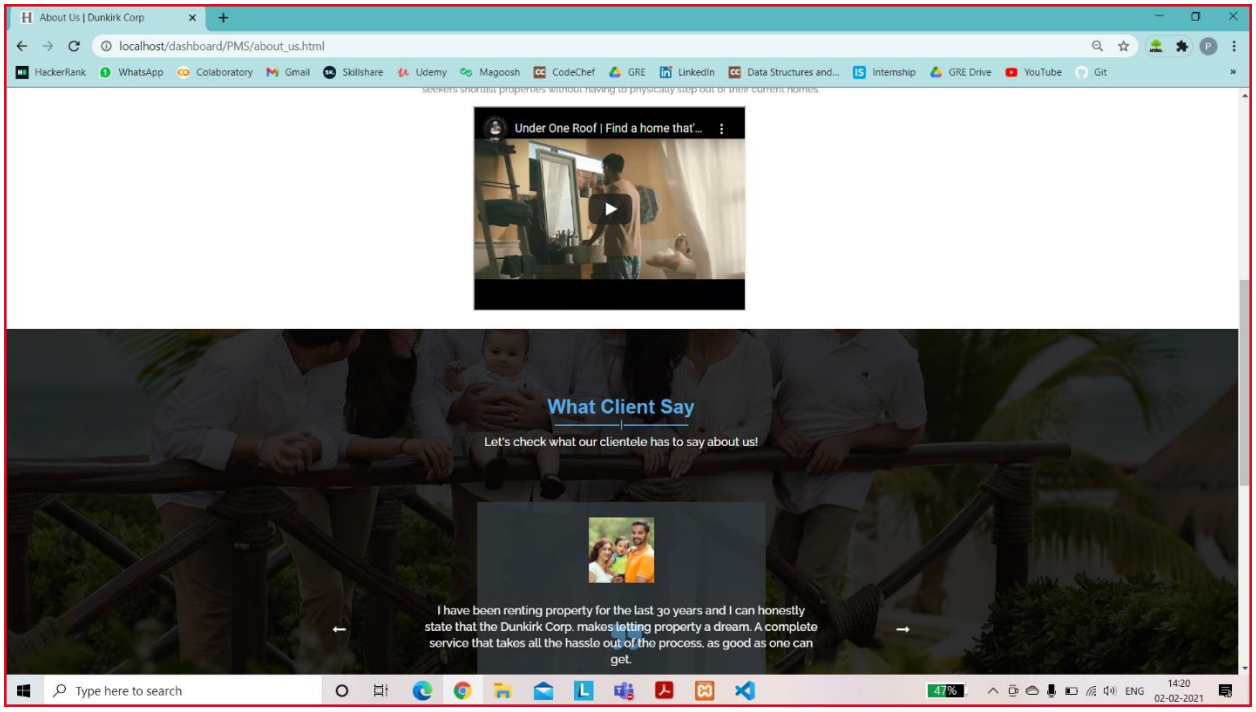

Property Services | Dunkirk Corp.
localhost/dashboard/PMS/property_services.html
Property Mangement System
Home Buy Sell Rent In Rent Out Broker Services About Us Logout
PROPERTY SERVICES
BY DUNKIRK REAL ESTATE
ONE-STOP DESTINATION FOR ALL YOUR PROPERTY-RELATED NEEDS
1. Home Loan
2. Design & Decor
3. Pest Control
4. Financial Consultant
Type here to search

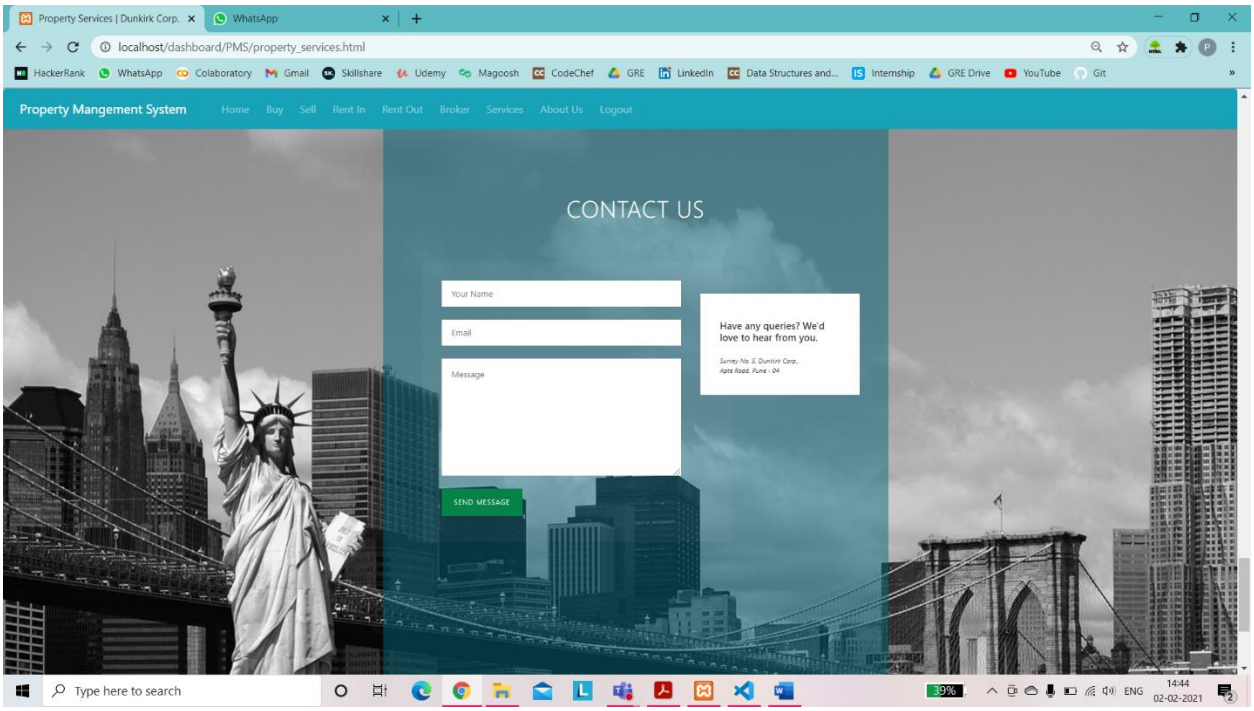

Property Services | Dunkirk Corp.
localhost/dashboard/PMS/property_services.html
Property Mangement System
Home Buy Sell Rent In Rent Out Broker Services About Us Logout
FINANCIAL CONSULTANT
BUNGLOWS
Bungalows are one of the most sought out living options, ideal for people who seek a more peaceful life in a low-risk location.
DISCOVER MORE
APARTMENTS
Small-space living is an art & the apartments prove that the right approach can turn any small space into one brimming with personality.
DISCOVER MORE
CONDOMINIUMS
Condominiums, commonly known as condos, are a concept quite popular in the West & the trend is fast picking up in India.
DISCOVER MORE
Type here to search


PropertyManagement
localhost/dashboard/PMS/Home.html
Property Mangement System
Home
Login
Sign up
Broker Login
About Us
Recommendations
Contact Us for the best match.
5 Rooms 2 Beds 3 Baths 3100 SQ FT
Triplex Bunglow
Its a new triple storey independent house in the centre of the city. Very closely to market, parks and other amenities
INR 3.33.53.000
3 Rooms 3 Beds 3 Baths 1200 SQ FT
Studio Apartment
Wallpaper in room. Modular kitchen. 24 hour water supply. 60% open terrace with sunlight. Price negotiable. New construction. Ready to move flats.
INR 1.23.53.000
6 Rooms 4 Beds 3 Baths 5500 SQ FT
Premium Penthouse
Piped gas facility is available. The apartment has borings water supply. Daily needs shopping could be done within the society premises.
INR 10.53.23.000
Type here to search


PropertyManagement
localhost/dashboard/PMS/Home.html
Property Mangement System
Home
Login
Sign up
Broker Login
About Us
Find Your Best Property
Where Dreams Come Home
Whether buying or renting, finding the right place to live is a personal and unique experience.
For many of us, buying a home is a dream -- and one thatâ€™s not easily attainable. Let us help you there.
VIEW DETAILS
ABOUT
CATEGORIES
QUICK LINKS
Type here to search


About Us | Dunkirk Corp
localhost/dashboard/PMS/about_us.html
Property Mangement System
Home
Buy
Sell
Rent In
Rent Out
Broker
Services
About Us
Logout
Welcome to Dunkirk
We are the fastest growing company in the online real estate space. Born out of the need to simplify the search for a home, free of fake listings and endless site visits, we created a unique property search platform that filled the gaps left by others in the market. Led by passionate problem-solvers, and backed by top investors from around the world, we are poised to become the most trusted place to find a home in India.
Our Vision
Delivering trustworthy experiences that you cherish for a lifetime.
Our Mission
To be the first choice for our consumers and partners in their journey of discovering, renting, buying, selling and financing a home. We do that with data, design, technology, and above all the passion of our people, while delivering value to our shareholders.
Under One Roof : Our New TV Ad
As a technology leader, we always strive to create an unmatched experience for our customers
Type here to search


About Us | Dunkirk Corp
localhost/dashboard/PMS/about_us.html
Under One Roof | Find a home that'...
What Client Say
Let's check what our clientele has to say about us!
I have been renting property for the last 30 years and I can honestly state that the Dunkirk Corp. makes letting property a dream. A complete service that takes all the hassle out of the process. as good as one can get.
Type here to search



VII. PHP Session Handling Details

A session is a way to store information (in variables) to be used across multiple pages. A session is started with the session_start() function. Session variables are set with the PHP global variable: $_SESSION.

If you're running on your own server, or in an environment where nobody can snoop on your files/memory on the server, session data are secure. They're stored on the server and just an identification cookie sent to the client.

Our project uses session variables for accessing the customer id, owner id and broker id once the user is logged in. The session is started once the user logs in successfully to the website. We then pass these variables back to the database when:

- The Customer wants to buy or rent a flat, here the customer id taken from the session variable is passed to the database.
- The Owner wants to sell or rent out a flat, here the owner id taken from the session variable is passed to the database.

VIII. Conclusions

Thus, we have implemented HTML, CSS, Javascript and PHP to create a property management system that helps people buy and sell their properties at a convenient price. We have successfully used MySQL at the backend and linked to the front end. All the forms on our website have proper form validation to prevent the user from entering incorrect values to our database. We have successfully performed insert, update, delete and search operations. In addition to this we have used Bootstrap and Flask and Pickle packages in Python to perform cost prediction based on the location, carpet area, type of estate, number of rooms, established date, amenities and near-by services.

IX. Bibliography in IEEE format

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3) https://getbootstrap.com/docs/5.0/getting-started/introduction/
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