CMR UNIVERSITY

Private University Established in Karnataka State by Act No. 45 of 2013

SCHOOL OF ENGINEERING AND TECHNOLOGY

MINI PROJECT –I REPORT
ON

" Real Estate Management"

For the requirement of 5th Semester B.Tech. In Information Technology

Submitted By

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Bengaluru, Karnataka-562149

Academic Year - 2020

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SCHOOL OF ENGINEERING AND TECHNOLOGY

Chagalahatti, Bengaluru, Karnataka-562149

Department of Information Technology

CERTIFICATE

Certified that the Mini project-I work entitled "**Real estate Management**" carried out by **C Hariharan(18BBTIT003), Harshavardhan Reddy MD (18BBTIT004), Ikhlaas Rasib(18BBTIT007), Nameeth S (18BBTIT011),** bonafide students of **SCHOOL OF ENGINEERING AND TECHNOLGY**, in partial fulfillment for the award of **BACHELOR OF TECHNOLOGY** in 5th semester Information technology of **CMR UNIVERSITY**, Bengaluru during the year 2020. It is certified that all corrections/suggestions indicated for the Internal Assessment have been incorporated in the report. The project has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of Guide	Signature of HOD	Signature of Dean
……	..……	.....……
Dept. of CSE SoET, CMRU, Bangalore	Dept. of CSE SoET, CMRU, Bangalore	SoET, CMRU, Bangalore

External Viva:

Name of the Examiners:	Signature with Date:
1 …….	……
2 ……	……

DECLARATION

I, **HARSHAVARDHAN REDDY MD** bearing USN **18BBTIT004**, student of Bachelor of Technology, Computer Science and Engineering, CMR University, Bengaluru, hereby declare that the mini project work entitled" **Real Estate Management** "submitted by me, for the award of the Bachelor's degree in Information Technology to CMR University is a record of bonafide work carried out independently by me under the supervision and guidance of Ms. Shivali Shakya Prof, Dept of CSE. CMR University.

I further declare that the work reported in this mini project work has not been submitted and will not be submitted, either in part or in full, for the award of any other degree in this university or any other institute or University.

Place: Bengaluru (HARSHAVARDHAN REDDY MD)

Date: 20.11.2020 (18BBTIT004)

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of this project would be incomplete without the mention of the people who made it possible, without whose constant guidance and encouragement would have made efforts go in vain.

I express my sincere gratitude to my project guide **Ms. Shivali Shakya, Professor,** Department of Computer Science and Engineering, School of Engineering and Technology, without whose constant guidance and support the project would not be successful.

I would like to express my thanks to **Dr. Rubini P, Associate Professor and Head**, Department of Computer Science and Engineering, School of Engineering and Technology, CMR University, Bangalore, for his encouragement that motivated me for the successful completion of Project work.

I express my heartfelt sincere gratitude to **Dr. C. Prabhakar Reddy, Dean,** School of Engineering and Technology, CMR University for his support.

(HARSHAVARDHAN REDDY MD)

TABLE OF CONTENTS

CHAPTER NO.	CONTENTS	PAGE NO.
	LIST OF FIGURES	**v**
	ABSTRACT	**vii**
1	**INTRODUCTION**	**1-6**
	1.1 Overview	1
	1.2 Real estate management system benefits	2
2	**LITERATURE SURVEY**	**3**
3	**SOFTWARE AND HARDWARE REQUIREMENTS**	**4-5**
	3.1 Hardware Requirements	4
	3.2 Software Requirements	4
4	**SYSTEM ANALYSIS**	**6**
5	**SYSTEM DESIGN**	**7-9**
	5.1 Visitors	8
	5.2 Administrator	8
	5.3 Customers	9
6	**IMPLEMENTATION**	**10-11**
7	**SYSTEM TESTING**	**12-15**
	7.1 Introduction	12

	7.2 Strategic Approach to testing	12
	Unit testing	13
8	**RESULT AND SCREENSHOT**	**16-28**
9	**CONCLUSION**	**29**
10	**FUTURE ENHANCEMENTS**	**30**
11	**BIBLIOGRAPHHY**	**31**
12	**REFERENCES**	**32**

LIST OF FIGURES

Fig. No.	Name of the Figure	Page No
5.1	Project Module	7
5.2	Project Module 2	7
7.1	Stategic approach for testing	13
8.1	Home page 1	16
8.2	Home page 2	17
8.3	User register form	17
8.4	Search Property	18
8.5	Sale page	18
8.6	Contact Us	19
8.7	Admin Home page	20
8.8	Admin - Search Property	21
8.9	Admin – News Management	22
8.10	Admin - User Management	22
8.11	Admin - State Management	23
8.12	Admin - City Management	23
8.13	Admin - Area Management	24
8.14	Admin - Category Management	24
8.15	Admin - Feedback form Data	25
8.16	User - Home page	25
8.17	User – Profile	26

8.18 User – Buy 26

8.19 User – Images and Documentation 27

8.20 User – Upload property 28

ABSTRACT

This project is aimed at developing a web based Real Estate: Property This project is aimed at developing an Online Real Estate Agent: Real Estate in India , which is of beneficial to either a real estate agent or a prospective. The Real Estate in India is an Internet based application. This system can be used to store and search the property portfolios.

Real Estate in India is a unique virtual platform that allows any user to post a property related advertisement on the Internet without incurring costly advertisement fees. Userfriendliness, reliable service together with maximum and continuous exposure is the qualities that Real Estate in India stands for. We believe that whether you are searching or selling your property online, a pleasant and hassle free experience is of utmost importance. Being available 24 hours a day, 7 days a week and equipped with a list of essential tools and information. Real Estate in India offers a one-stop Real Estate in India for your ideal property. Searching for a property is made easier with our Real Estate in India engine. In this project we provide one stop Real Estate in India for both residential and commercial properties. It saves your time by narrowing down your search for buyers, tenants or investors. Real Estate in India offers a one-stop Real Estate in India for interested buyers, tenants or investors. We are dedicated to make search fast and easy.

Chapter 1

INTRODUCTION

This project is aimed at developing a web based Real Estate: Property This project is aimed at developing an Online Real Estate Agent: Real Estate in India , which is of beneficial to either a real estate agent or a prospective. The Real Estate in India is an Internet based application. This system can be used to store and search the property portfolios.

Nestnow is a unique virtual platform that allows any user to post a property related advertisement on the Internet without incurring costly advertisement fees. User friendliness, reliable service together with maximum and continuous exposure is the qualities that Real Estate in India stands for. We believe that whether you are searching or selling your property online, a pleasant and hassle free experience is of utmost importance. Being available 24 hours a day, 7 days a week and equipped with a list of essential tools and information. Real Estate in India offers a one-stop Real Estate in India for your ideal property. Searching for a property is made easier with our Real Estate in India engine. In this project we provide one stop Real Estate in India for both residential and commercial properties. It saves your time by narrowing down your search for buyers, tenants or investors. Real Estate in India offers a one-stop Real Estate in India for interested buyers, tenants or investors. We are dedicated to make search fast and easy.

1.1 Overview

NestNow is an Estate Agent and Property Management System is a user friendly contact and property manager for real estate professionals. Save time and sell more by empowering to easily keep track of leads, manage listings, and market to new prospects.

Nest Now Real estate Management is complete end to end solution to cover all aspects of Estate Agent day to day activity and Property buying selling procedure for all customers and even small companies

The basic objective of developing this project is:

- Maintain client details line contact details, required property details, client type like residential and commercial client. Price limit. Preference.
- Maintain property details, registration of property for sale includes property address, property description, price, facilities available. Store property floor plan, property documents.
- System has powerful logical access management in place, each user must be identified by login id and strict password policy is applied to secure the system

1.2 Real Estate Management System Benefits

- Type of property and features searching for.
- Match with properties for sale by city, number of rooms criteria.
- Filter all views for easy record location
- Allow easy entry of Property and Vendor details
- Easy to use and impressive GUI.

Chapter 2

LITERATURE SURVEY

The current Real estate system is a manual operated system, owners and agents need to advertise their properties in local channels and news papers. In the existing system property information can be spread into limited users only. And There is no concept of 24 X 7 mode. The current system is a manual one where in the company maintains all the information in the form of records. There by collecting necessary information with require a manual search in the record(s). Transfer of information between different sections of the enterprise is in the form of documents or letters. Drafting letters and advertisements will take time. Manually approaching the person and confirming the availibity of the person do selection of a person for a advertisement. Due to mismanagement the work is delayed to later date than the due date.

To over come the above cons we have developed Nestnow Real estate Management. The information of the entire firm will be maintained at a centralized data base any changes made by the other departs are known to the higher or lower departments instantly. Provide Interactive interface through which a user can interact with different areas of application easily. Deploy the application on a single system and make is available on all the systems with in the network, there by reducing the maintenance cost of software.

Owner can upload his properties through this system interface very easily. All the property can display in a good format in this system. This system can be accessed by 24 X 7 modes.

The system user interface provides interaction between owners and guests. Property Ads play vital role to manage this system as a website. Different types of advertisements are accepted from the users. Administrator can play major role here.

Chapter 3

HARDWARE AND SOFTWARE

3.1 HARDWARE

- Disk Space (Minimum:5GB Free space)
- RAM-4GB (or above)
- PROCESSOR: Intel Core i3 8th gen(or above)
- Monitor Resolution 640×480(or above)
- Keyboard
- Mouse

3.2 SOFTWARE

- **Operating System** : any full functionally computer system with Windows(7 and above)
- **Web Browser**

  Browser such as Google chrome, Mozilla Firefox, Microsoft Edge with enabled JavaScript for Running java code along with the other module code.

- **Visual Studio Code** : For Development of code

  Visual Studio Code is editor redefined and optimized for building and debugging modern web and cloud applications. It is a free free source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git , this development software was built on an open-source project and has since been ranked as one of the most popular developer environment tools around.

- **Xampp Server:** XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP language.

Chapter 4

SYSTEM ANALYSIS

The current Real estate system is a manual operated system, owners and agents need to advertise their properties in local channels and news papers. In the existing system property information can be spread into limited users only. And There is no concept of 24 X 7 mode. The current system is a manual one where in the company maintains all the information in the form of records. There by collecting necessary information with require a manual search in the record(s). Transfer of information between different sections of the enterprise is in the form of documents or letters. Drafting letters and advertisements will take time. Manually approaching the person and confirming the availability of the person do selection of a person for a advertisement. Due to mismanagement the work is delayed to later date than the due date.

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Real Estate Script the best solution for your real estate. It gives the big opportunity of being reached by thousands of people-all possible Clients-looking for real estate.

No coding knowledge required! It can be managed by a single person with or without technical experience reducing the costs of maintenance.

Chapter 5

SYSTEM DESIGN

"NEST NOW Real Estate" contains Two main modules. The structure of the system is described by the figure as below.

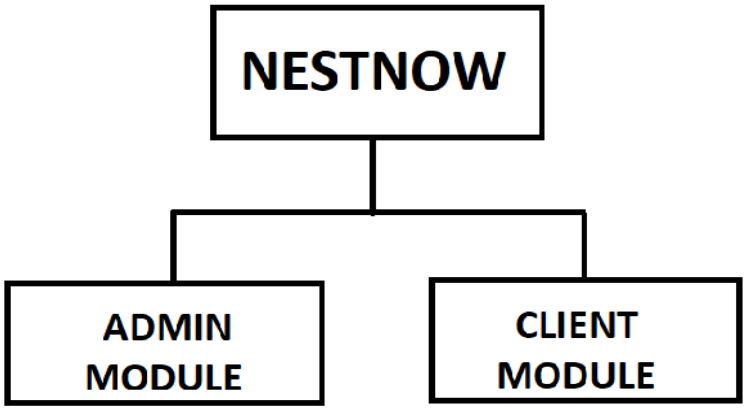

fig: 5.1

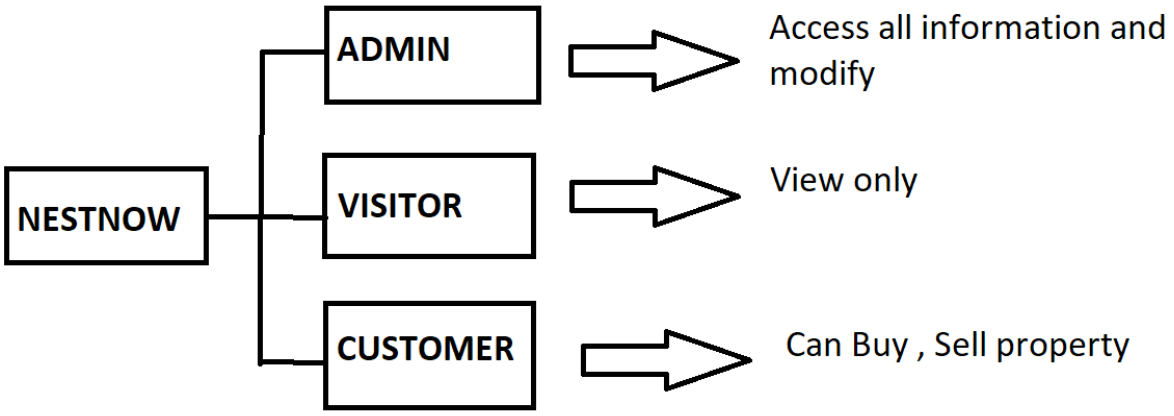

fig: 5.2

5.1 Visitor

Home - It is the default page for the site. All links are available in this page

Property Search - Agent can view the available Properties by selecting Buy option from menu, system display details of Property like, Property name, description, No. of rooms, price, location, types of property, live sqr,totalsqr, photos of property.

Register – New users can enter their details and register to sell his property or buy a listed property

Login – This allows registered users to login into their account using the credentials.

5.2 Administrator

Administrator is the one person who knows all the things about the system. He also monitors the activities that buyers are doing. There are key activities that administrator can do are as under.

Login - Login page for the administrator. All admin users are identified by the user name, password.

Change Password - Admin can change his password from this link.

Members - It show list of members registered in the site.

database control: Take backup of database and restore data

Manage users.

Manage properties

Can suspend the users

Add/delete properties types/facilities, sub facilities.

Can do contacts through email with users.

Logout - By clicking this link admin user logged out from this site all user session reset to default value

5.3 Customers

Home - It is the default page for the site. All links are available in this page

Login - Agent need to login to view his account information and buy the property.

Edit Profile - Agent can edit his profile like personal details, address, contact no, display name.

Change Password - Agent can change his password from this link. Agent must type his old password to change the password with new password.

Property list - Agent can view the available Properties by selecting “Sale” or “Rent” from menu, system display details of Property like, Property name, description, No. of rooms, price, location, types of property, area, photos of property, location by area name.

Logout - By clicking this link user logged out from this site all user session reset to default value.

Chapter 6

IMPLEMENTATION

There are registered people in the system. They are real estate customers. Registered real estate Customers can create/modify property portfolios. Non-registered people can also use the system to search the desired property. Whenever a new real estate Customer registered himself then he can add properties for selling or buy already property that has been in sale.

The main goal behind developing a Real Estate Script which is very helpful to user who want to add and manage his own property and become agent and give information of property to other users.

A Real Estate Script provides all the facilities like add/list property, upload properties' photo and search facilitiesnand many more. The different role and functions are summarized below:

Functions for Admin:

Manage Account

Manage Listing (Property)

Manage Listing Types

Manage Listing Facilities

Manage Listing Images

Manage User

Manage news of client properties

Manage Master Database

Manage The news update and post

Functions for the Customer:

Manage his own Account

Manage Listing

Add his/her own Listing

Upload photo their Listings

Give feedback to other Admin

Chapter 7

SYSTEM TESTING

7.1. INTRODUCTION

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. In fact, testing is the one step in the software engineering process that could be viewed as destructive rather than constructive.

A strategy for software testing integrates software test case design methods into a well-planned series of steps that result in the successful construction of software. Testing is the set of activities that can be planned in advance and conducted systematically. The underlying motivation of program testing is to affirm software quality with methods that can economically and effectively apply to both strategic to both large and small-scale systems.

7.2. STRATEGIC APPROACH TO SOFTWARE TESTING

The software engineering process can be viewed as a spiral. Initially system engineering defines the role of software and leads to software requirement analysis where the information domain, functions, behavior, performance, constraints and validation criteria for software are established. Moving inward along the spiral, we come to design and finally to coding. To develop computer software we spiral in along streamlines that decrease the level of abstraction on each turn.

A strategy for software testing may also be viewed in the context of the spiral. Unit testing begins at the vertex of the spiral and concentrates on each unit of the software as implemented in source code. Testing progress by moving outward along the spiral to integration testing, where the focus is on the design and the construction of the software architecture. Talking another turn on outward on the spiral we encounter validation testing

where requirements established as part of software requirements analysis are validated against the software that has been constructed. Finally we arrive at system testing, where the software and other system elements are tested as a whole.

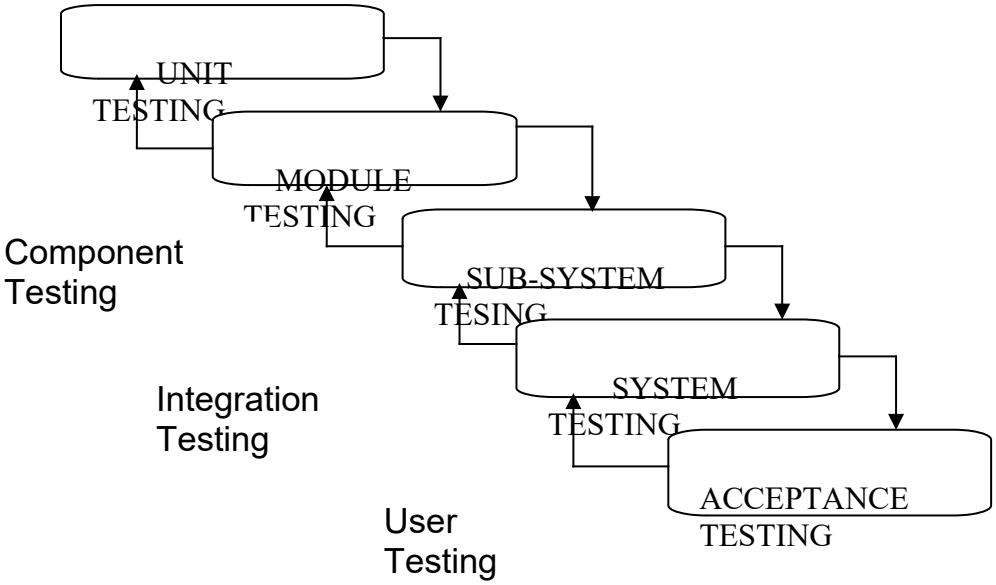

Fig 7.1

7.3. Unit Testing

Unit testing focuses verification effort on the smallest unit of software design, the module. The unit testing we have is white box oriented and some modules the steps are conducted in parallel.

1. WHITE BOX TESTING

This type of testing ensures that

- All independent paths have been exercised at least once
- All logical decisions have been exercised on their true and false sides
- All loops are executed at their boundaries and within their operational bounds

- All internal data structures have been exercised to assure their validity.

To follow the concept of white box testing we have tested each form .we have created independently to verify that Data flow is correct, All conditions are exercised to check their validity, All loops are executed on their boundaries.

2. BASIC PATH TESTING

Established technique of flow graph with Cyclomatic complexity was used to derive test cases for all the functions. The main steps in deriving test cases were:

Use the design of the code and draw correspondent flow graph.

Determine the Cyclomatic complexity of resultant flow graph, using formula:

V(G)=E-N+2 or

V(G)=P+1 or

V(G)=Number Of Regions

Where V(G) is Cyclomatic complexity,

E is the number of edges,

N is the number of flow graph nodes,

P is the number of predicate nodes.

Determine the basis of set of linearly independent paths.

3. CONDITIONAL TESTING

In this part of the testing each of the conditions were tested to both true and false aspects. And all the resulting paths were tested. So that each path that may be generate on particular condition is traced to uncover any possible errors.

4. DATA FLOW TESTING

This type of testing selects the path of the program according to the location of definition and use of variables. This kind of testing was used only when some local variable were declared. The *definition-use chain* method was used in this type of testing. These were particularly useful in nested statements.

5. LOOP TESTING

In this type of testing all the loops are tested to all the limits possible. The following exercise was adopted for all loops:

- All the loops were tested at their limits, just above them and just below them.
- All the loops were skipped at least once.
- For nested loops test the inner most loop first and then work outwards.
- For concatenated loops the values of dependent loops were set with the help of connected loop.
- Unstructured loops were resolved into nested loops or concatenated loops and tested as above.

Each unit has been separately tested by the development team itself and all the input have been validated.

Chapter 8

RESULT AND SCREENSHOT

fig 8.1

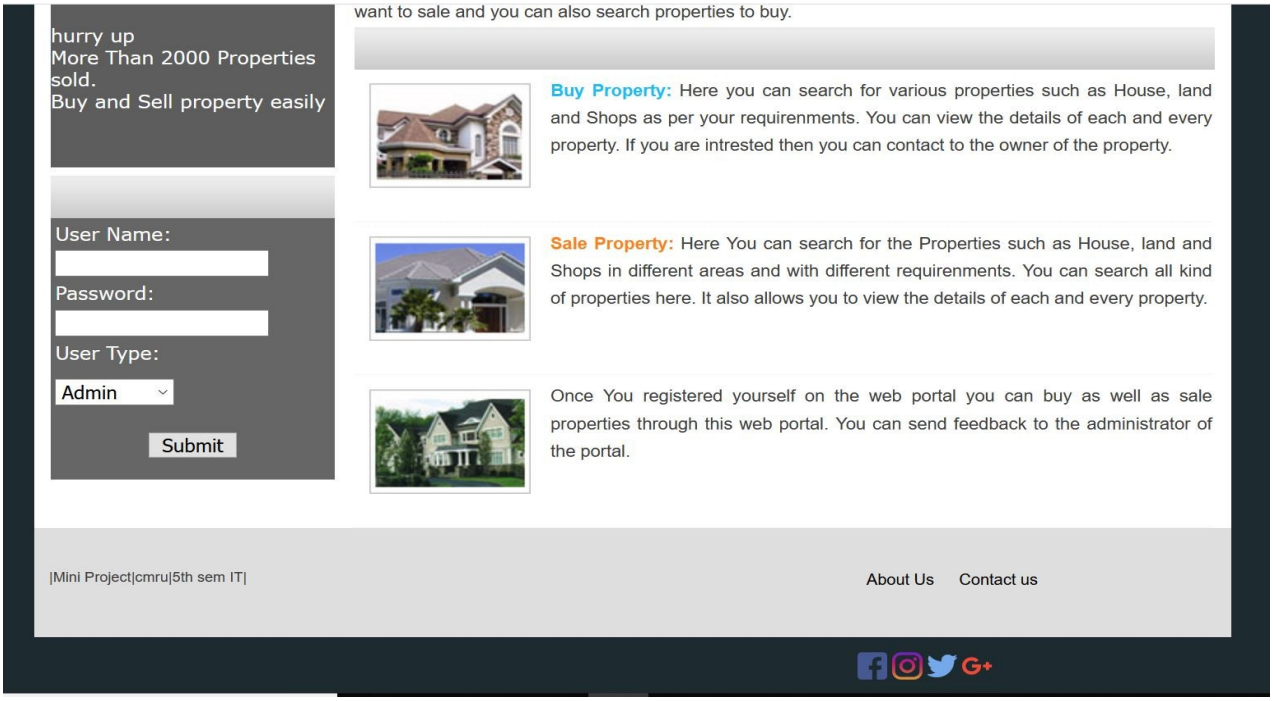
hurry up
More Than 2000 Properties sold.
Buy and Sell property easily
User Name:
Password:
User Type:
Admin
Submit
want to sale and you can also search properties to buy.
Buy Property: Here you can search for various properties such as House, land and Shops as per your requirenments. You can view the details of each and every property. If you are intrested then you can contact to the owner of the property.
Sale Property: Here You can search for the Properties such as House, land and Shops in different areas and with different requirenments. You can search all kind of properties here. It also allows you to view the details of each and every property.
Once You registered yourself on the web portal you can buy as well as sale properties through this web portal. You can send feedback to the administrator of the portal.
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fig 8.2

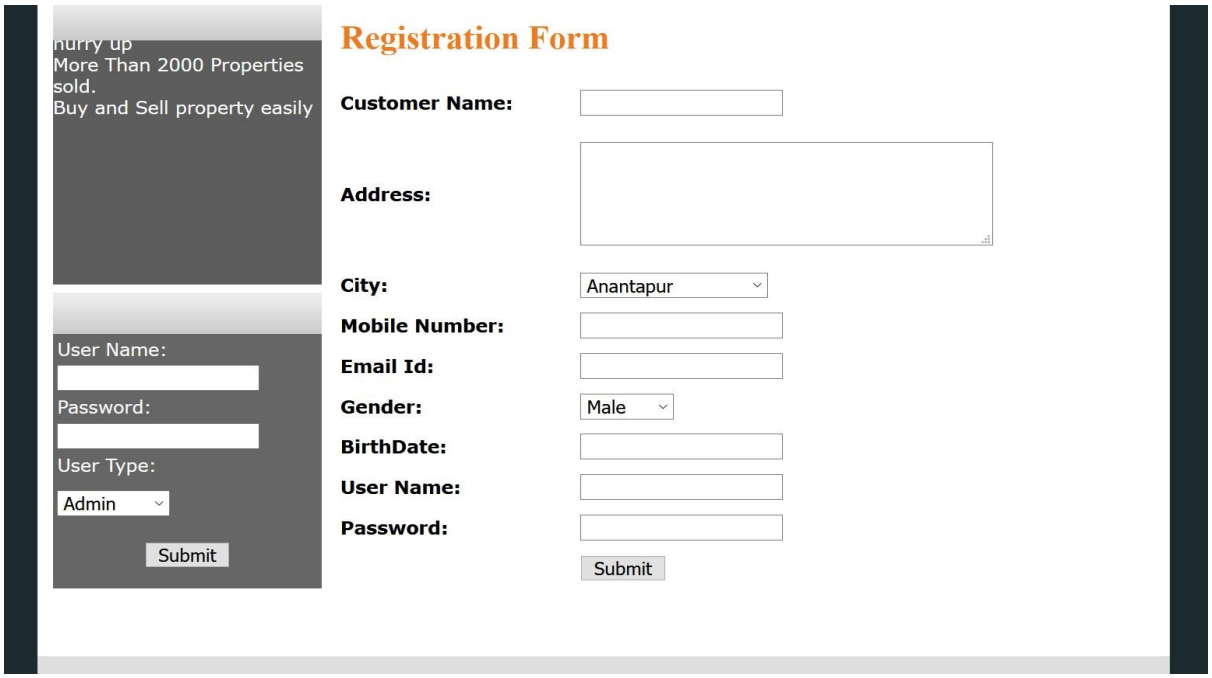
hurry up
More Than 2000 Properties sold.
Buy and Sell property easily
User Name:
Password:
User Type:
Admin
Submit
Registration Form
Customer Name:
Address:
City:
Anantapur
Mobile Number:
Email Id:
Gender:
Male
BirthDate:
User Name:
Password:
Submit

fig 8.3

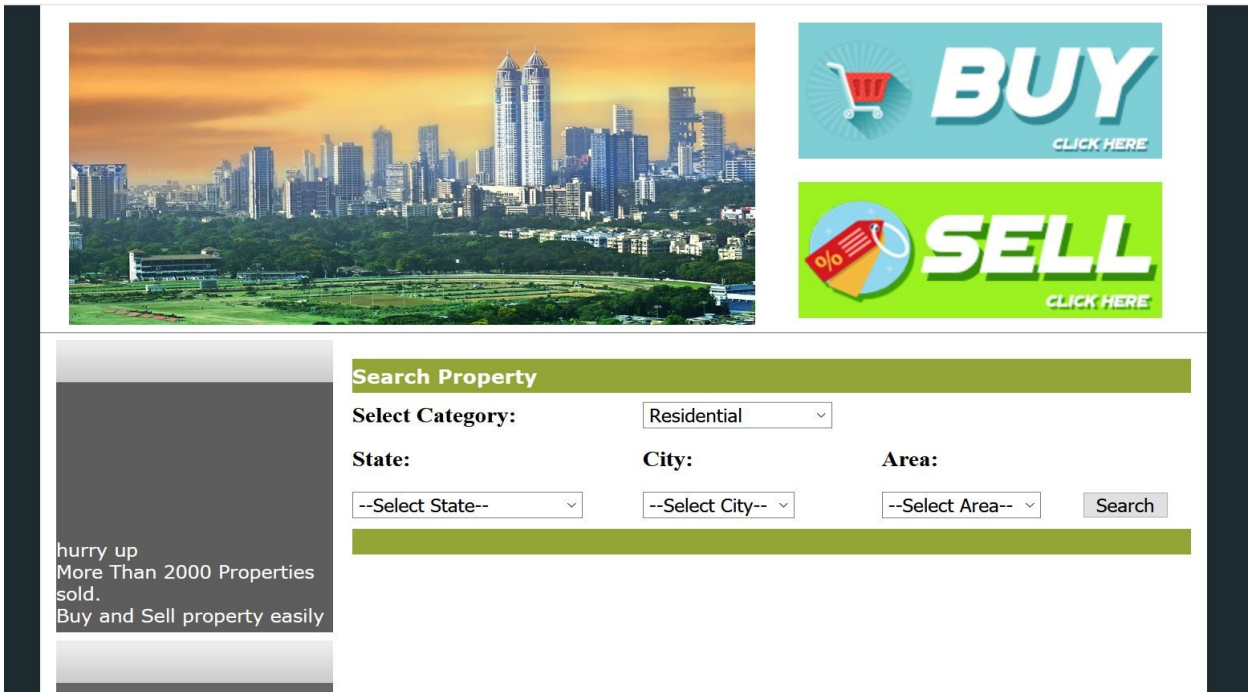
BUY
CLICK HERE
SELL
CLICK HERE
Search Property
Select Category:
Residential
State:
City:
Area:
--Select State--
--Select City--
--Select Area--
Search
hurry up
More Than 2000 Properties sold.
Buy and Sell property easily

fig 8.4

BUY
CLICK HERE
SELL
CLICK HERE
Sale Property
. Here You can Sale Your Property.
. In Order to Sale any of Your Property, First You have to Register on this Web Portal.
. Once You Registered on the Portal, You will receive UserName and Password.
. Once You Login into the System, You can upload the details of your property.
Click Here to Register
hurry up
More Than 2000 Properties sold.
Buy and Sell property easily

fig 8.5

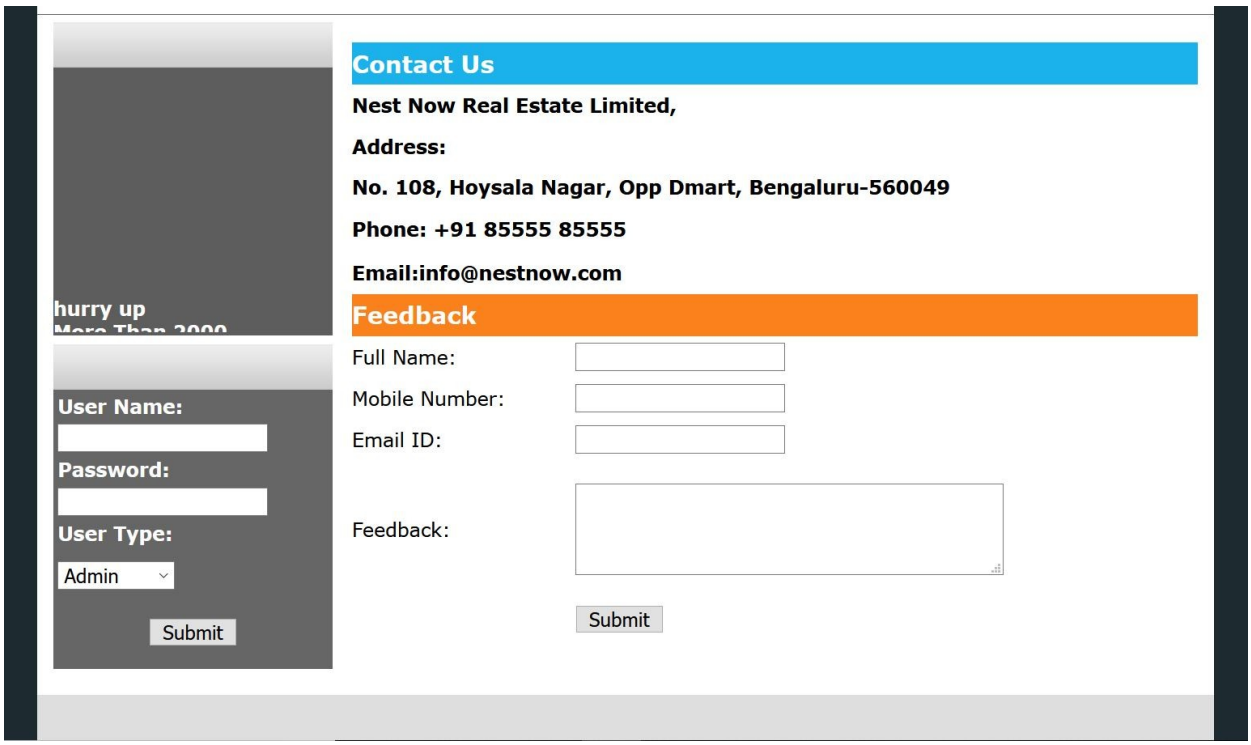
hurry up
User Name:
Password:
User Type:
Admin
Submit
Contact Us
Nest Now Real Estate Limited,
Address:
No. 108, Hoysala Nagar, Opp Dmart, Bengaluru-560049
Phone: +91 85555 85555
Email:info@nestnow.com
Feedback
Full Name:
Mobile Number:
Email ID:
Feedback:
Submit

fig 8.6

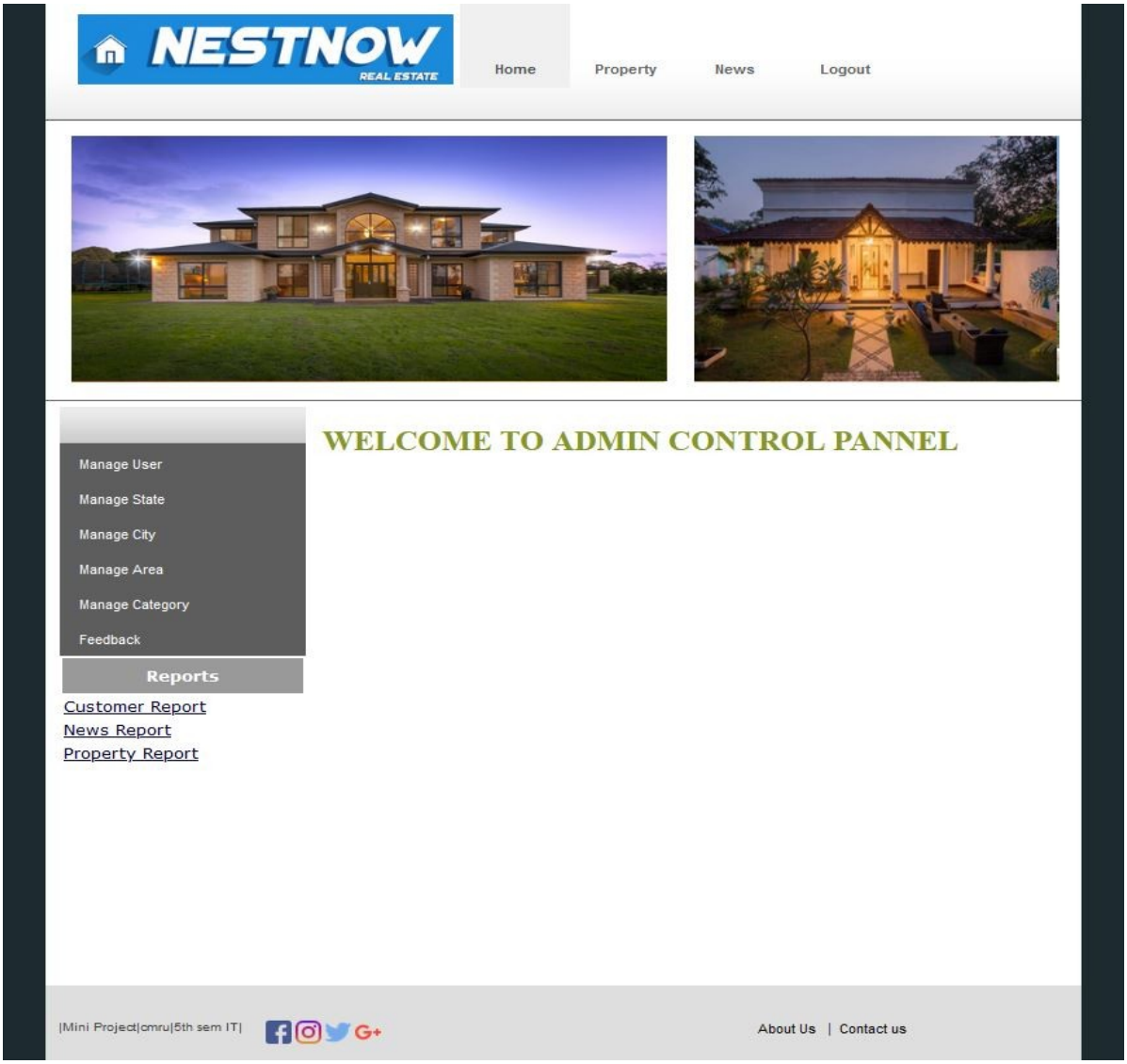
NESTNOW
REAL ESTATE
Home
Property
News
Logout
WELCOME TO ADMIN CONTROL PANNEL
Manage User
Manage State
Manage City
Manage Area
Manage Category
Feedback
Reports
Customer Report
News Report
Property Report
|Mini Project|cmru|5th sem IT|
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fig 8.7

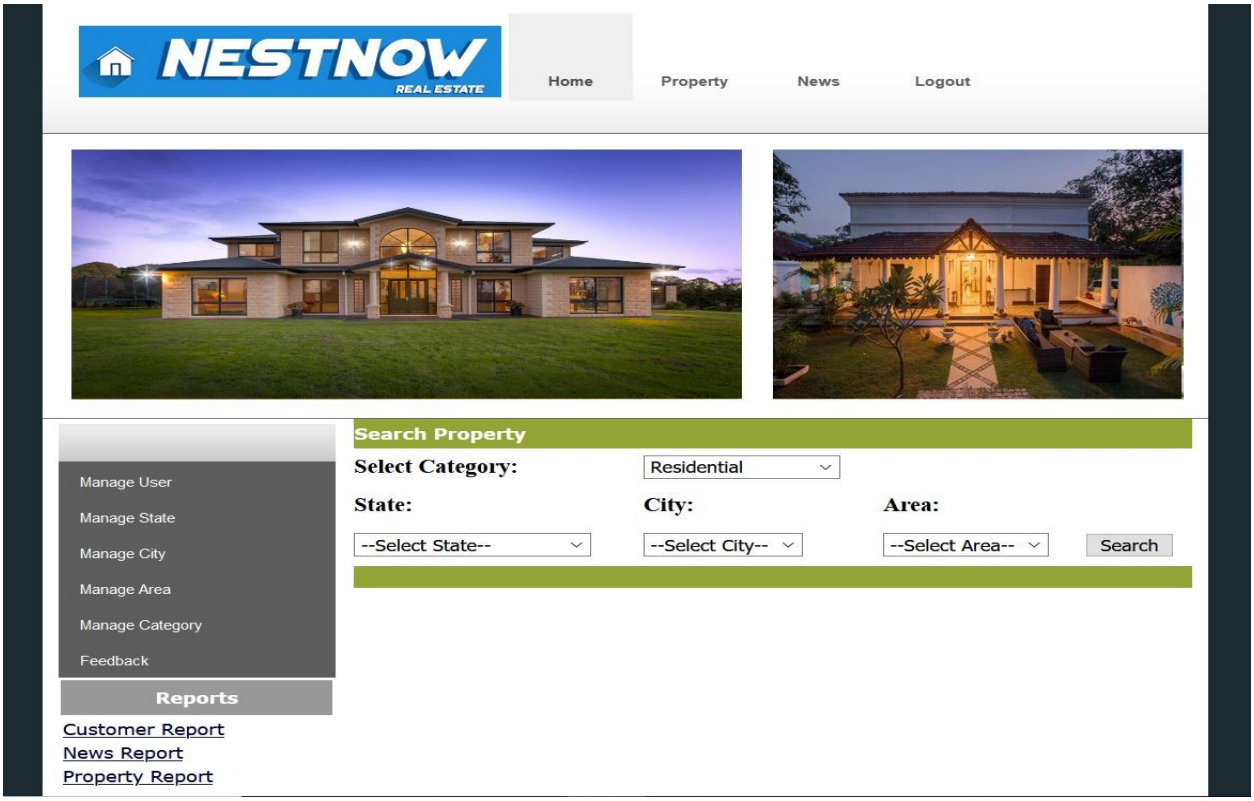

NESTNOW
REAL ESTATE
Home
Property
News
Logout
Search Property
Select Category:
Residential
State:
City:
Area:
--Select State--
--Select City--
--Select Area--
Search
Manage User
Manage State
Manage City
Manage Area
Manage Category
Feedback
Reports
Customer Report
News Report
Property Report

fig 8.8

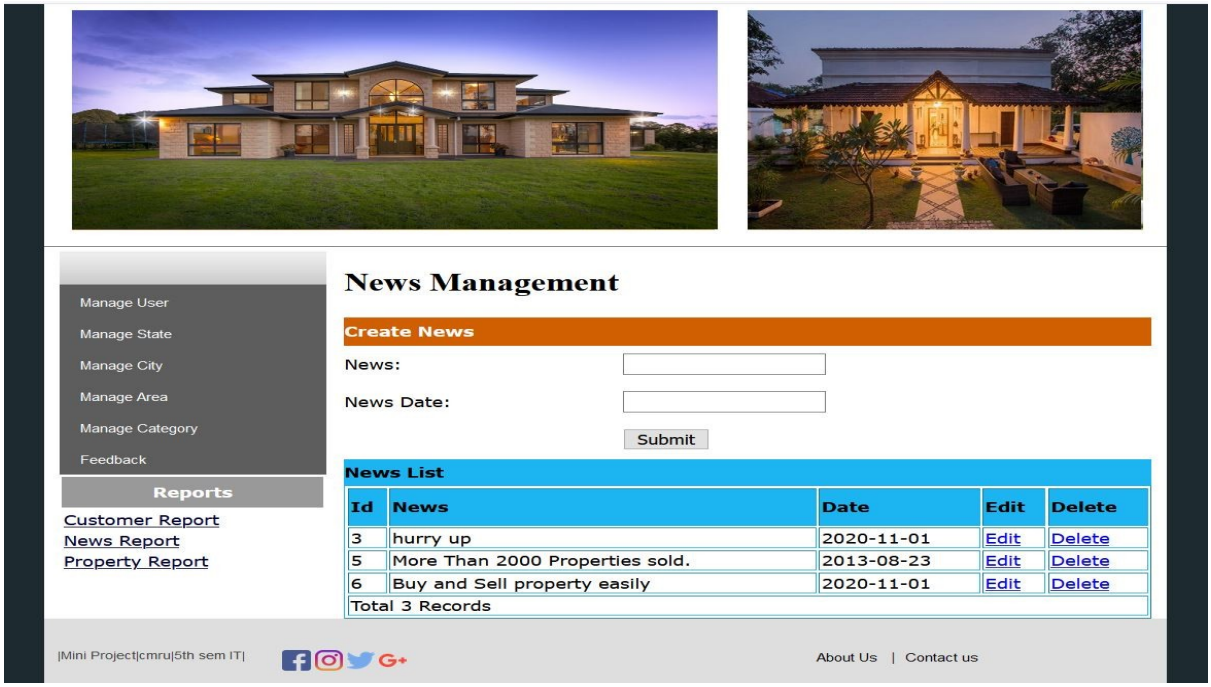


fig 8.9

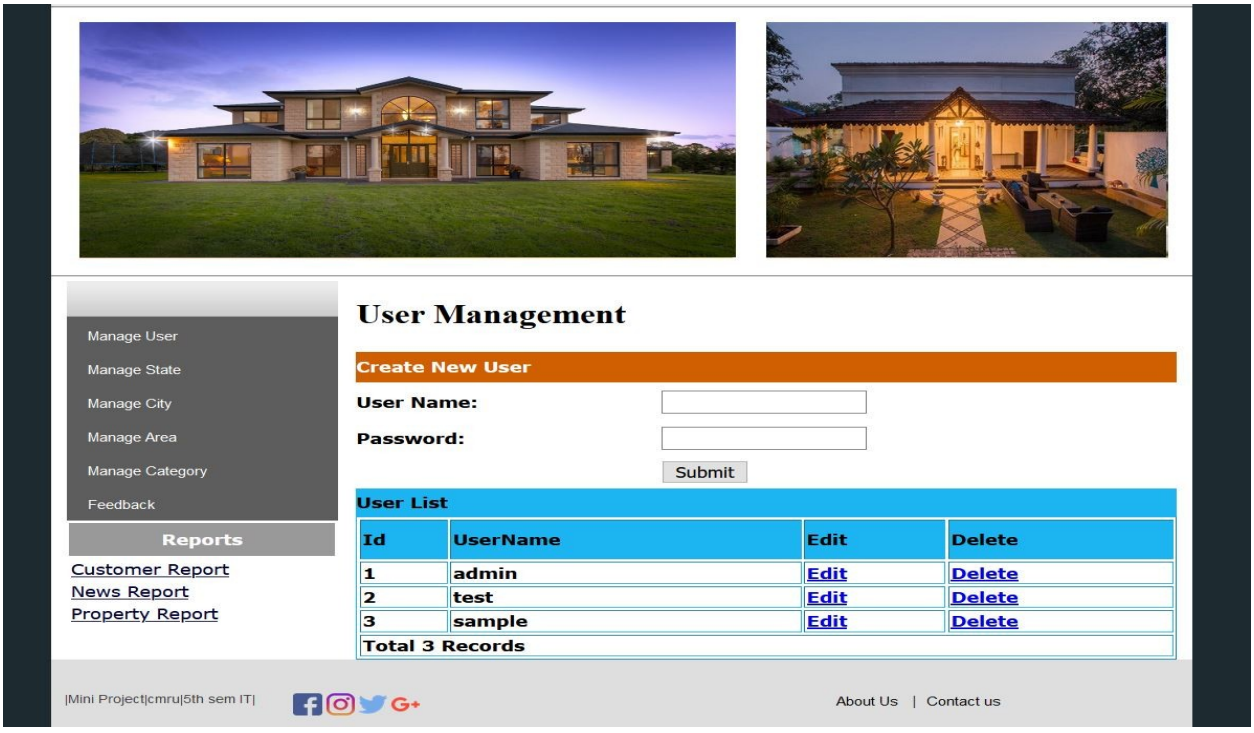


fig 8.10

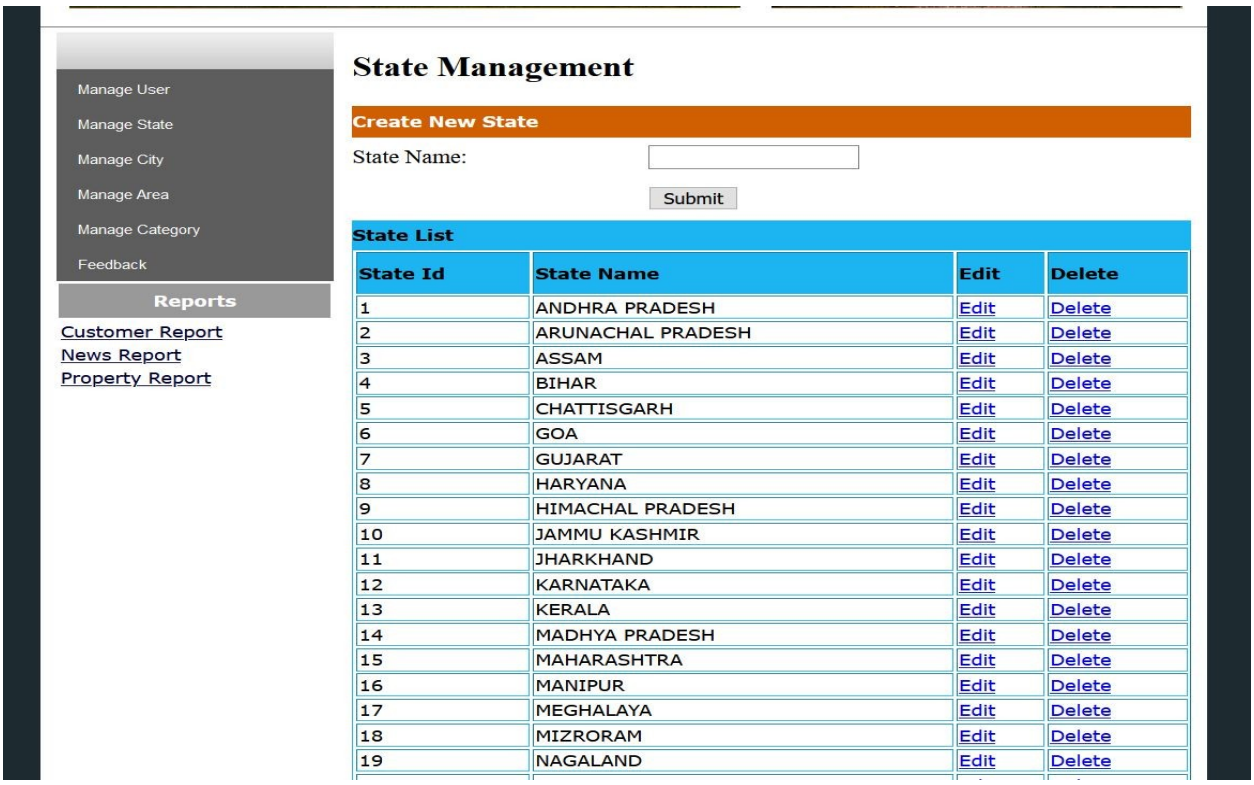


fig 8.11

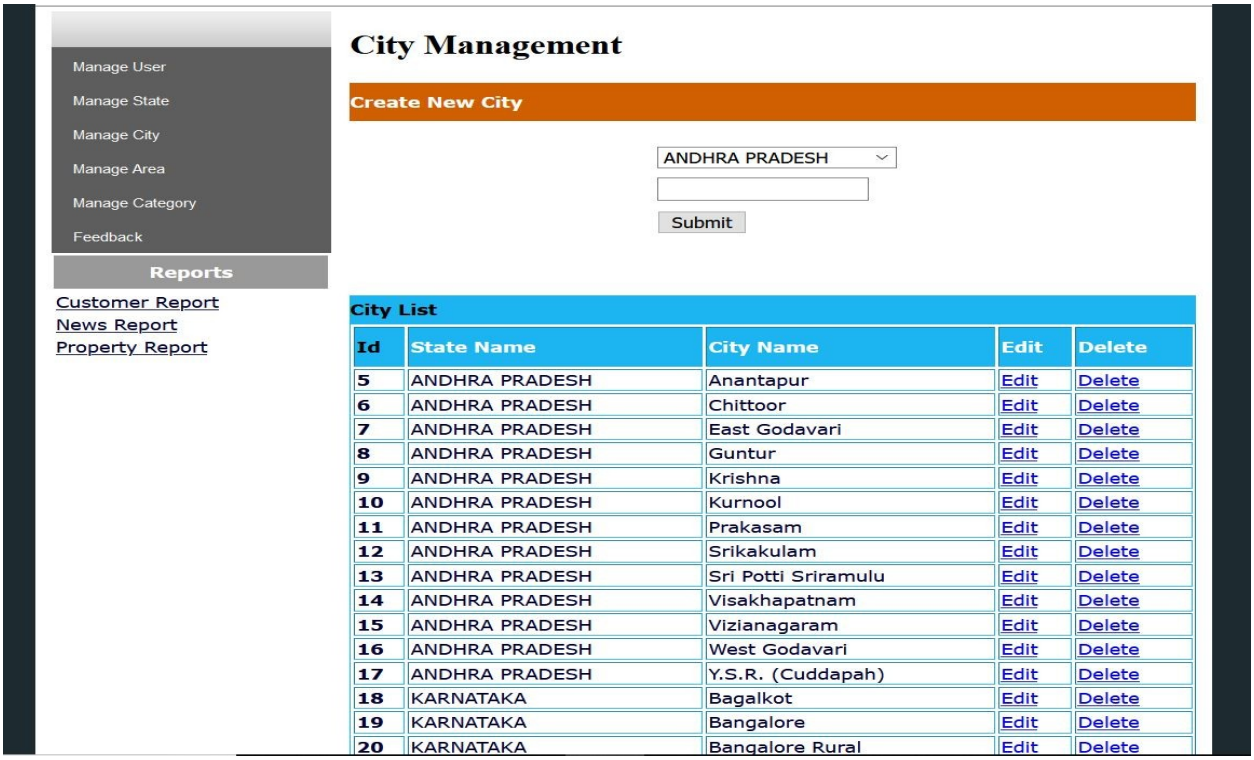


fig 8.12

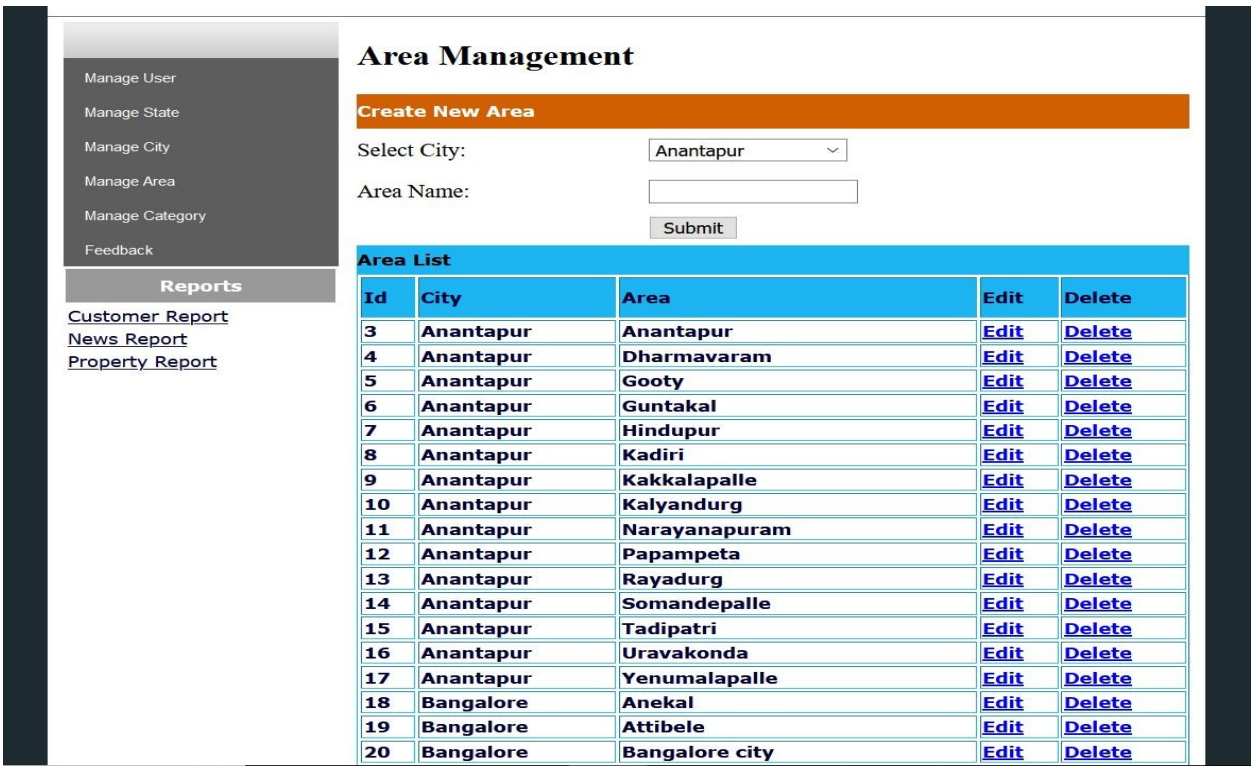
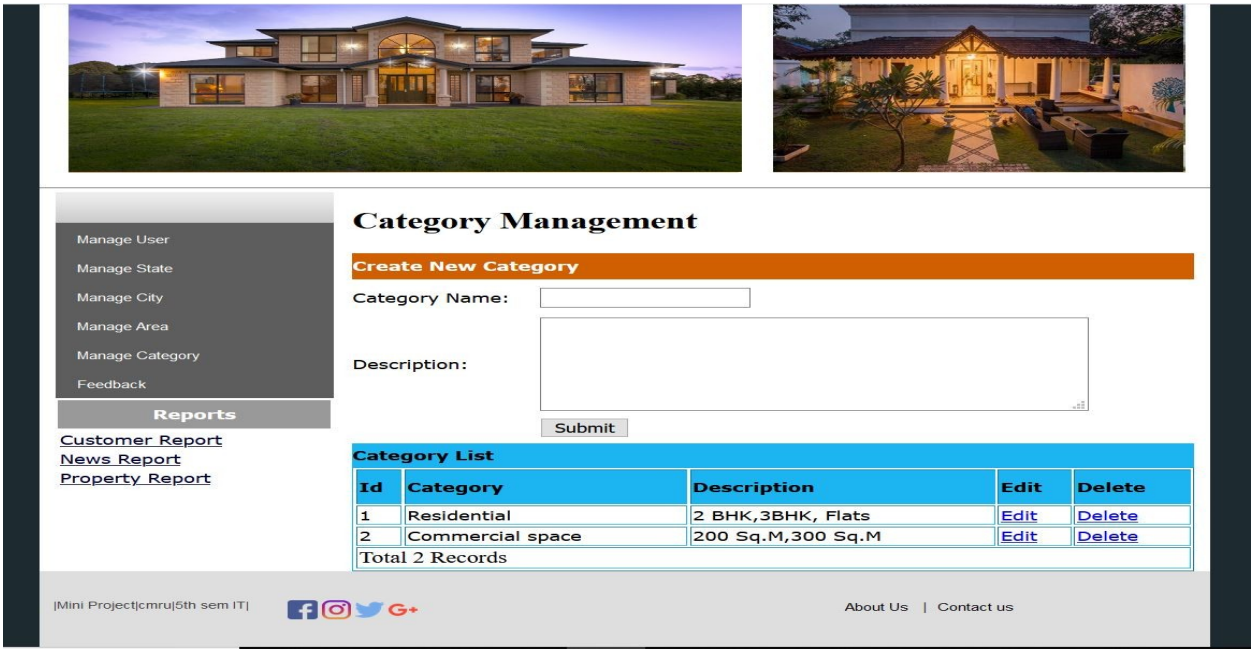


fig 8.13



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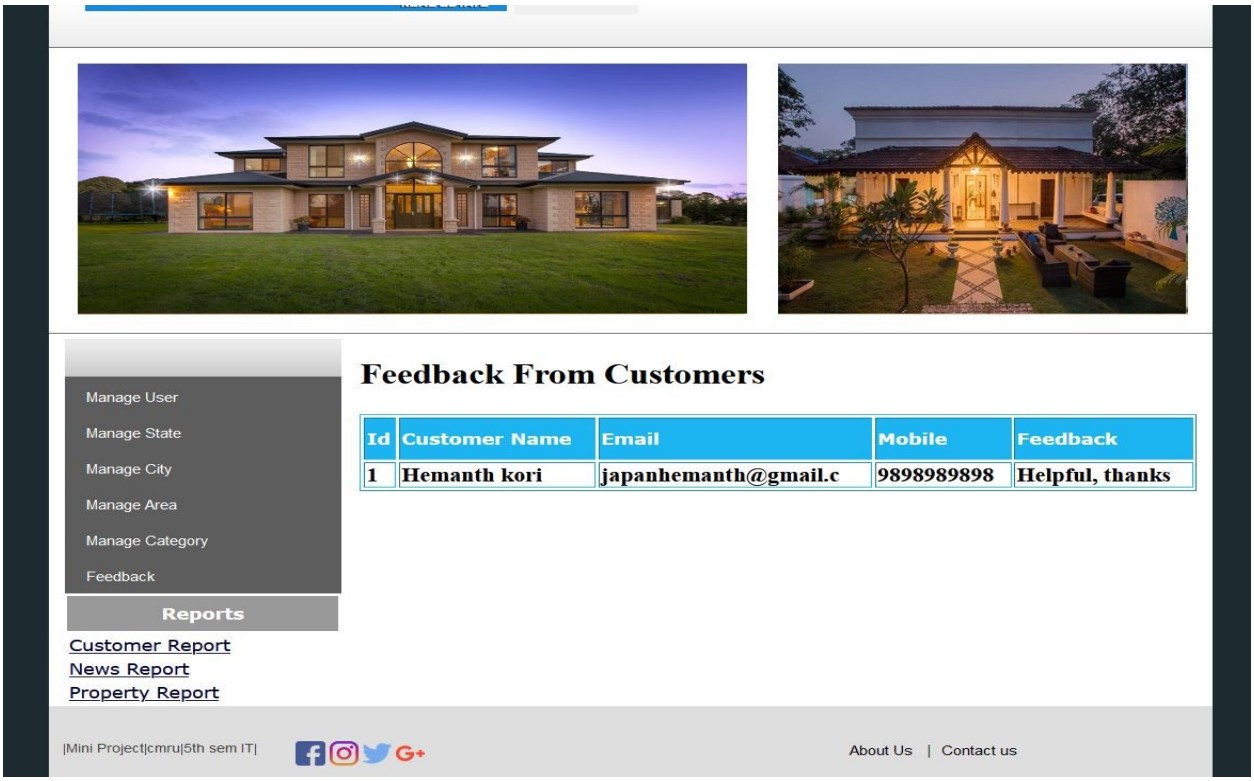

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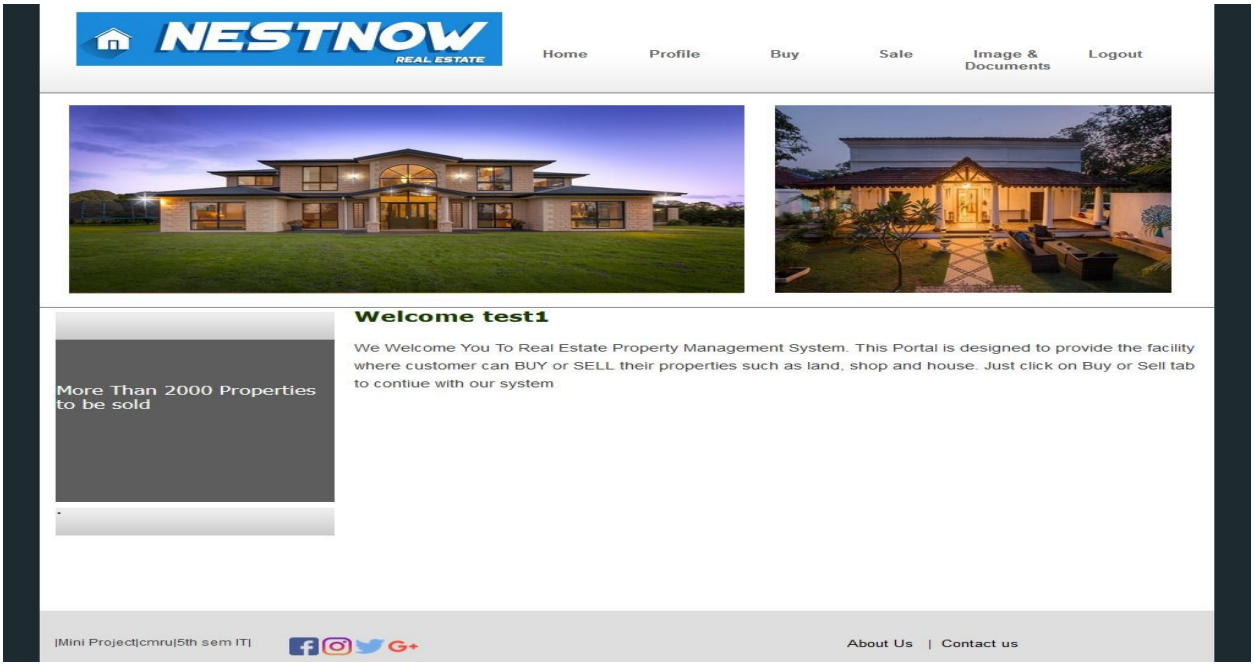

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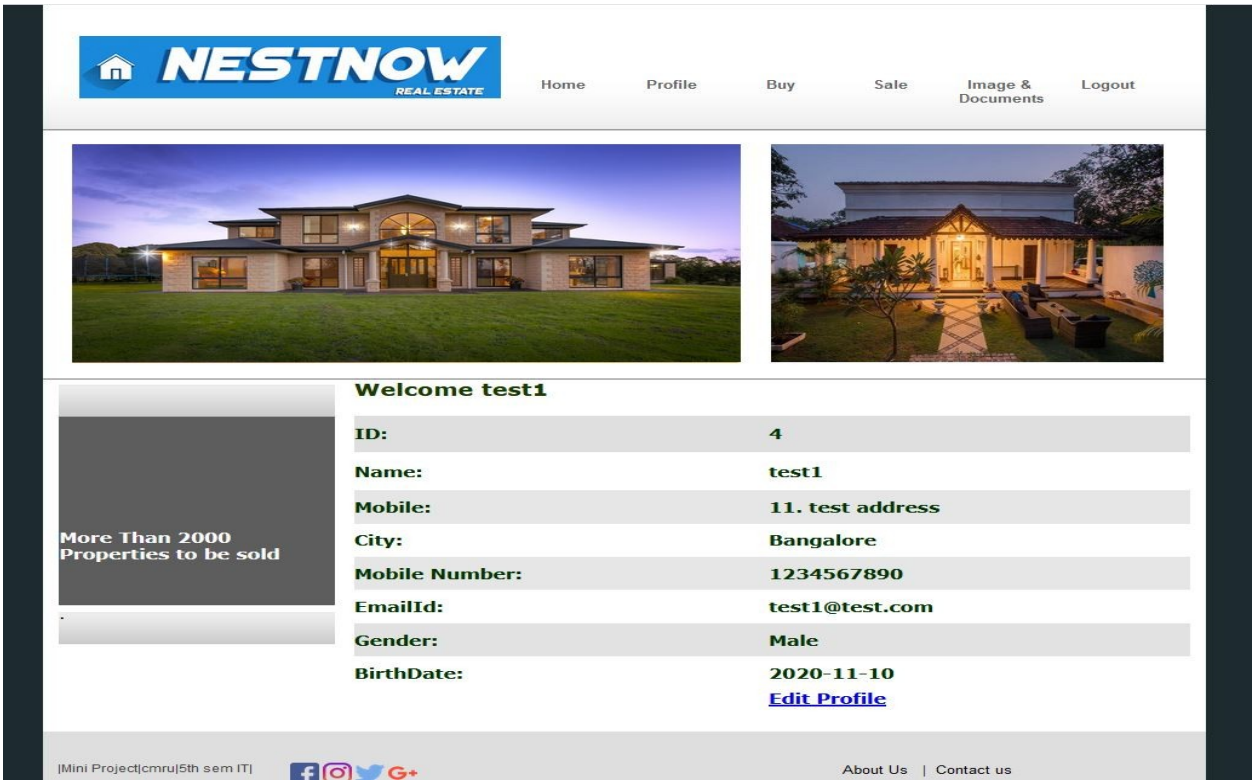

fig 8.17

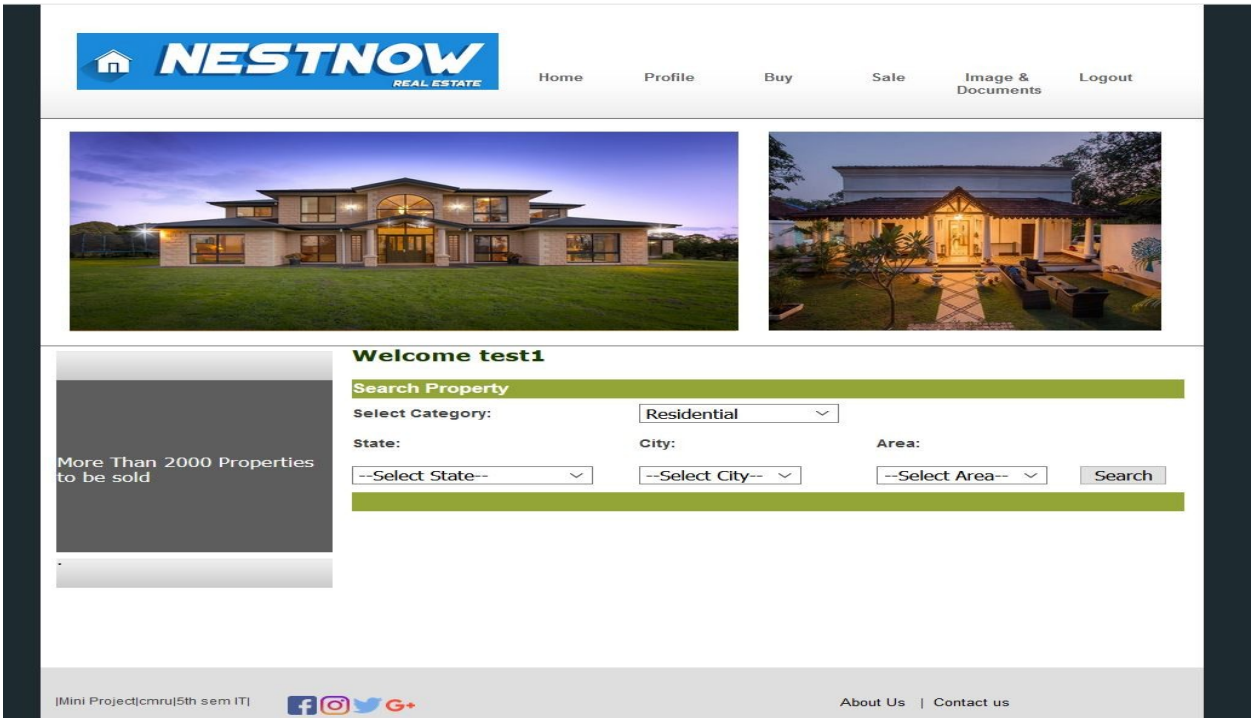

fig 8.18

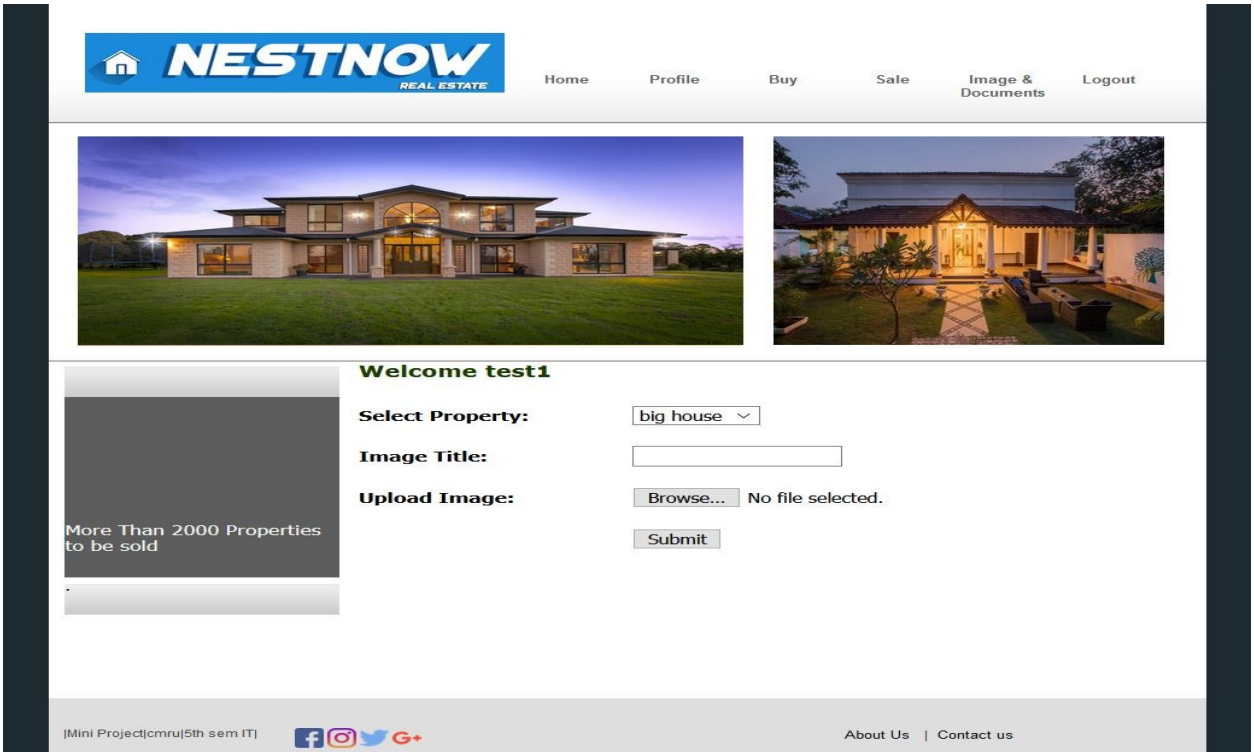
NESTNOW
REAL ESTATE
Home
Profile
Buy
Sale
Image & Documents
Logout
Welcome test1
Select Property:
big house
Image Title:
Upload Image:
Browse...
No file selected.
Submit
More Than 2000 Properties to be sold
|Mini Project|cmru|5th sem IT|
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fig 8.19

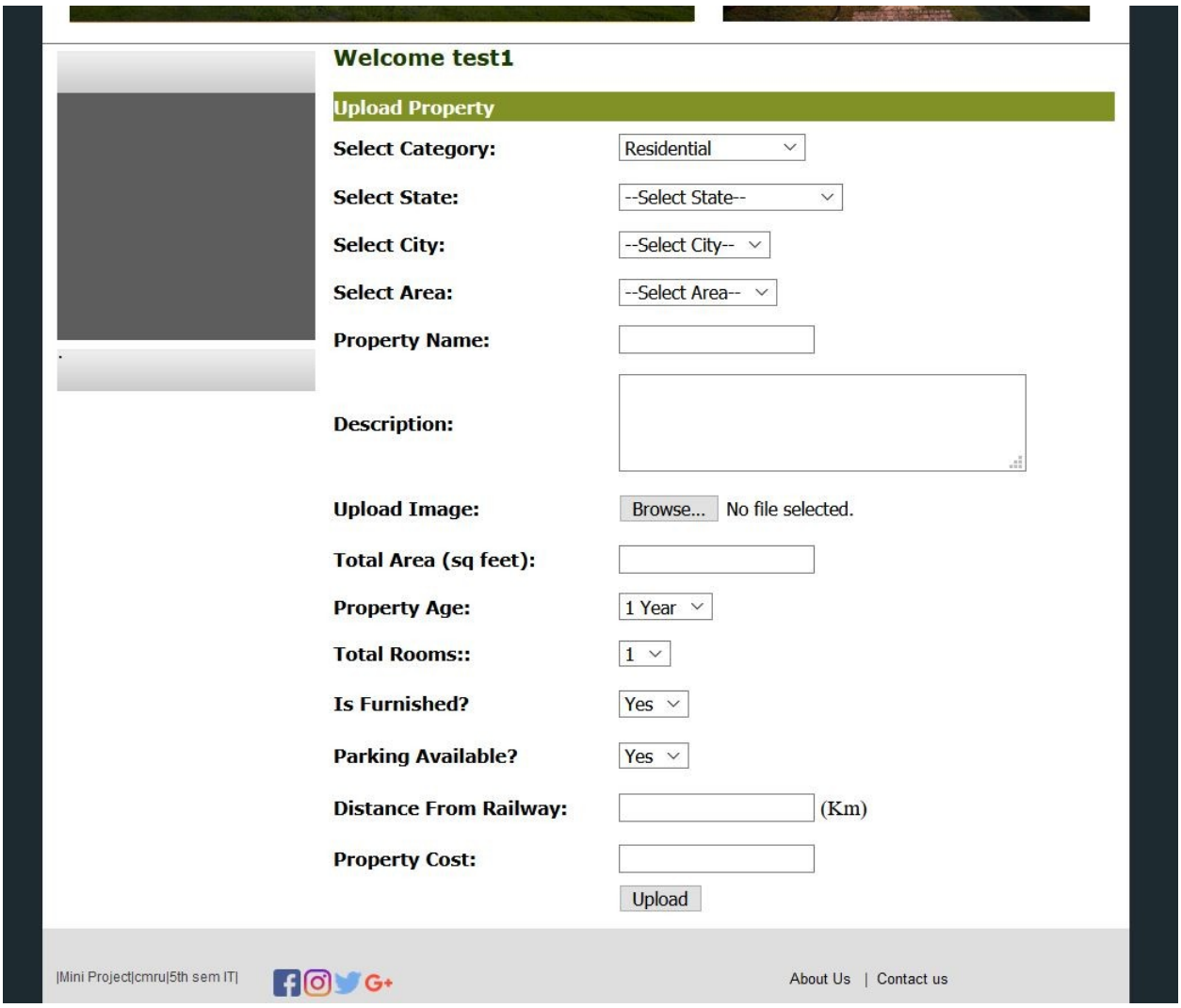
Welcome test1
Upload Property
Select Category:
Residential
Select State:
--Select State--
Select City:
--Select City--
Select Area:
--Select Area--
Property Name:
Description:
Upload Image:
Browse...
No file selected.
Total Area (sq feet):
Property Age:
1 Year
Total Rooms::
1
Is Furnished?
Yes
Parking Available?
Yes
Distance From Railway:
(Km)
Property Cost:
Upload
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fig 8.20

Chapter 9

CONCLUSION

We have developed a real estate system that serve the real estate customers and give them a a transparent prices of properties sold by other customers. It gives them a historical information about the property listed that may solve one of big problems of real estates. The system focuses on main operation like sale and buy operation of real estate.

Chapter 10

FUTURE ENHANCEMENTS

- Improving the user interface and user experience
- Using Angular for improve UX
- Making the website more Dynamic
- Adding auction on properties module.
- Developing the financial system module for hassle free payments for buyers
- Adding a multimedia (pictures, views) for each property.

Chapter 11

BIBLIOGRAPHY

- **FOR XAMPP INSTALLATION**

  https://www.apachefriends.org/download.html

- **BROWSERS**

  Google Chrome: **https://www.chrome.google.com**

  MozillaFirefox: **https://www.mozilla.org/en-US/firefox/new/**

- **FOR SQL**

  www.msdn.microsoft.com

Chapter 12

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5] https://www.quora.com/

6] https://github.com/explore