1.1   <u>Company Profile:</u>

Softenger India Pvt Ltd is an emerging organization with a vision to tap the untapped mid and low-end market. It has expertise in consulting, technology and end to end solutions for different verticals. We have excellent exposure this market segment and we understand need of 'No Frill' quality solutions. We aim to develop customized IT solutions to match the requirements.

Softenger to equip clients with most futuristic of IT tools for information infrastructure, application and solutions, needed to respond to business dynamics. It believes in ever evolving market scenario.

Vision

To aim to be leading global player with unique products proposition working towards total customer satisfaction through customer oriented service.

Mission

To design and deliver value added solution and support to improve productivity of businesses at an absolutely affordable price.

Quality Policy

We at Softenger synchronize our efforts to build quality into the products and services that we deliver to internal as well as external customers. We aim to nurture an environment that creates sense of ownership for value creation.

Values

Growth at Softenger is driven by the values that we stand by

1. To attract and nurture best of talent.
2. To create boundary free environment by including flexibility.

3. To promote research and development through industry-institution partnership.

4. To provide customer oriented quick response support mechanism for total customer satisfaction.

5. To provide conductive atmosphere to boost the respect for individuals.

1.2 <u>Existing System and Need for System:</u>

<u>Existing System:</u>

Till date searching property was done by the persons himself from the property dealer or through internet sites. There was a limitation for searching property of their choice and it takes much time in searching and purchasing a property. In both the cases the time was very essential. After gaining an in depth knowledge to the various processes and the manner in which they are carried out, it was realized that these were not only tedious and cumbersome but also error prone. These bottlenecks are featured in consideration with the overall aspects of the present functioning system.

__Need for system:__

The project is on property searching which provides a platform through one can efficiently search property of their choice and get details of the property. The project is being developed keeping in mind that how a particular face problem while searching property by going to the property site unknowing the details properly. The web-site will also provide the details to user by messaging. The web-site will also be providing features like online bidding, online forum, etc.

There would be three main modules.

1) Buyer Module.

2) Seller Module.

3) Admin Module.

1.3   Scope of work:

It is online portal for buyer and seller who want to invest in real estate businesses. There are many advance modules where User can find exact location on Map with different techniques and ways. There would be features like login, registration, searching properties, browsing properties, finding location on Map, booking home, payment gateway integration, use of web services, sending mails, managing customers, managing properties and managing payment.

1.4 Operating Environment – Hardware and Software:

Hardware Requirements:

Server:

Processor:

3,500 GHz Dual Core

RAM:

1 GB or above

Hard Disk:

320 GB

Client:

Processor:

2,350 GHz Dual Core

RAM:

1 GB or above

Hard Disk:

160 GB

Software Requirements:

Front End:

Microsoft Visual Studio 2010 in .NET framework 4.0 using C#

Back End:

Microsoft SQL Server 2008

Operating System:

Windows XP, Windows Vista, Windows 7.

Web Browser:

Internet Explorer 7, 8, 9.

Google Chrome, Mozilla Firefox.

1.5 Detail Description of Technology Used:

Microsoft Visual Studio 2010

Microsoft Visual Studio is the main Integrated Development Environment (IDE) from Microsoft. It can be used to develop console and GUI applications along with Windows Forms applications, web sites, web applications, and web services in both native code as well as managed code for all platforms supported by Microsoft Windows, Windows Mobile, .NET Framework, .NET Compact Framework and Microsoft Silver light.

The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a forms designer for building GUI applications, web designer, class designer, and database schema designer. It allows plug-ins to be added that enhance the functionality at almost every level -including adding support for source control systems to adding new toolsets like editors and visual designers for domain specific languages or toolsets for other aspects of the software development lifecycle.

Microsoft SQL Server 2008

The latest version of SQL Server, **SQL Server 2008**, was released (RTM) on August 6, 2008 and aims to make data management self-tuning, self organizing, and self maintaining with the development of *SQL Server Always On* technologies, to provide near-zero downtime. SQL Server 2008 also includes support for structured and semi-structured data, including digital media formats for pictures, audio, video and other multimedia data. In current versions, such multimedia data can be stored as BLOBs (binary large objects), but they are generic bit streams. Intrinsic awareness of multimedia data will allow specialized functions to be performed on them. According to Paul Flessner, senior Vice President, Server Applications, Microsoft Corp., SQL Server 2008 can be a data storage backend for different varieties of data: *XML,* email, time/calendar, file, document, spatial*,* etc as well as perform search, query, analysis, sharing, and synchronization across all data types.

Other new data types include specialized date and time types and a *spatial* data type for location-dependent data. Better support for unstructured and semi structured data is provided using the new *FILESTREAM* data type, which can be used to reference any file stored on the file system. Structured data and metadata about the file is stored in SQL Server database, whereas the unstructured component is stored in the file system. Such files can be accessed both via Win32 file handling APIs as well as via SQL Server using T-SQL; doing the latter accesses the file data as a BLOB. Backing up and restoring the database backs up or restores the referenced files as well. SQL Server 2008 also natively supports hierarchical data, and includes T-SQL constructs to directly deal with them, without using recursive queries.

2.1 <u>**Proposed System:**</u>

Buyer Module

1) Registration:

Buyer does the registration process in which all the details regarding the buyer will be stored in the database. After the process his customer id will be generated and he will become the member of the website due to which he will be able to view or buy properties by using his username and password specified during registration process.

2) Login:

Here the buyer performs the login process by using his unique username and password. Along with the verification of username and password is IP Address and machine identification no. will also be stored in the database which will help in tracking the location of the user.

3) Search:

Buyer will be able to search home according to his requirements or else he can also go for advanced search by specifying all the specifications regarding the requirements of the desired home.

4) Browse Home Categories:

He can also browse for the type of home he wants. For this purpose he can browse in for the type of home and select the one for which the property listing he wants to view e.g. Wooden houses, Skeleton houses, Bamboo Houses.

5) Find Location On Map:

The Buyer can also view the exact location of the house he has browsed by using map .This will be possible by getting the

longitudes and latitudes accordingly from the seller when he is uploading the property.

6) Booking and Payment:

The buyer can also book the home online by sending a mail to seller as well as do the payment. For payment he will be having the option regarding the mode of payment e.g. cash, cheque, credit/debit card, online bank a\c etc. The Buyer will get a receipt mentioning that the payment is received and the House has been sold to the particular buyer after he does the payment.

Seller Module

1) Registration:

Seller does the registration process in which all the details regarding the buyer will be stored in the database. After the process his customer id will be generated and he will become the

member of the website due to which he will be able to view or sell properties by using his username and password specified during registration process.

2) Login:

Here the seller performs the login process by using his unique username and password. Along with the verification of username and password is IP Address and machine identification no. will also be stored in the database which will help in tracking the location of the user.

3) Upload Home Information:

Seller can post his property by uploading it on the website. While uploading home information he will have to specify all the details regarding home uploaded along with the pictures of the surrounding, interiors and the exterior of the particular house

which will be stored in the database. He will have to specify his contact details so that the buyer can contact him as and when required.

4) Search Buyer:

He can search buyers who have been viewing his property and as if who is interested in buying or not.

5) Receive Payment:

If the Buyer decides to buy the home uploaded by the seller, the seller will receive the payment according to the payment mode chosen by the buyer and as decided by the buyer and seller.

Admin Module

1) Login:

Admin performs the login process so that he can access the details of the buyers and sellers of his website and he will be able to enter only if the username, password, machine identification number.

2) Manage Homes:

The Admin can manage the homes posted on the site by either updating the details or deleting the sold out homes. He can also delete any fake homes posted on the site with unrealistic details and images.

3) Manage Buyer and Seller:

Admin have to manage buyers and sellers in following manner:

a) He will look after the registration process and the type of registration i.e. buyer or seller

b) Send email to particular buyer and seller according to requirement as and when any new property is been listed.

4) Manage Payment Information:

Admin will have to look after the transactions being performed while buying and selling of homes. He will have to see whether payment has been completed or is there any dues pending. If there are some dues pending he will be sending a mail to the particular user reminding him to do the payment and clear the dues. He will receive an alert whenever any house is sold and payment is received.

5) Ban Buyer or Seller:

Admin will be able to ban any particular buyer or seller who is:

a) Posting fake homes on the site with unrealistic details and images

b) Using the site for malpractices

6) Public management:

Admin will have to manage the sponsors who want to advertise the banners. He will have to manage the space on the site in order to put the banners of the sponsors as much as possible.

2.2 Objectives of System:

1) Security can be enforced:

Providing complete restrictions over the database the administrator ensures different means to access the database by providing various authentication rules so that security of data is maintained.

2) Sharing of data:

Sharing of data means the existing application can share the data from the database in order to operate certain functions.

3) Redundancy can be reduced:

All redundancies or duplications created during the existence of data should be eliminated. The database is aware about reducing or avoiding such functions that are existed.

4) Inconsistency can be avoided to some extent:

If the redundancy of data is not removed but it is controlled then the DBMS guarantees that the database created is not in consistent state. That means any change made to any two entries than it takes either one of them by applying operations on it automatically.

2.3 User Requirements:

System Analysis started soon after determining the system requirements and gaining the depth knowledge of the system. It also considers the purpose regarding the system its inputs and outputs and all other processes involved.
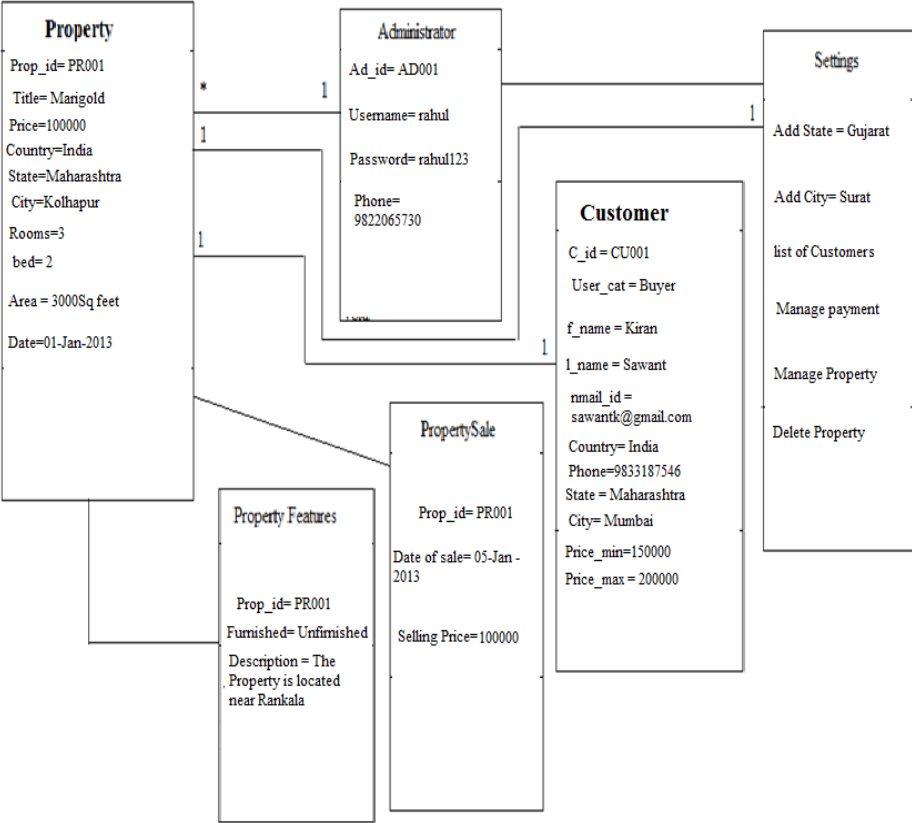
Due to unfamiliarity with the subject an initial stage requires depth analysis to develop the system up to the satisfaction of user and management. To accomplish the result following activities are carried out:

1) Learning the details as well as procedures that are carried out in the system.

2) Studying the details of the system and reviewing documents from other sources.

3) Evaluating the effectiveness of the efficiency of the system and are required as per future demand. Studying the subjects in detail to explore each and every aspects of system.

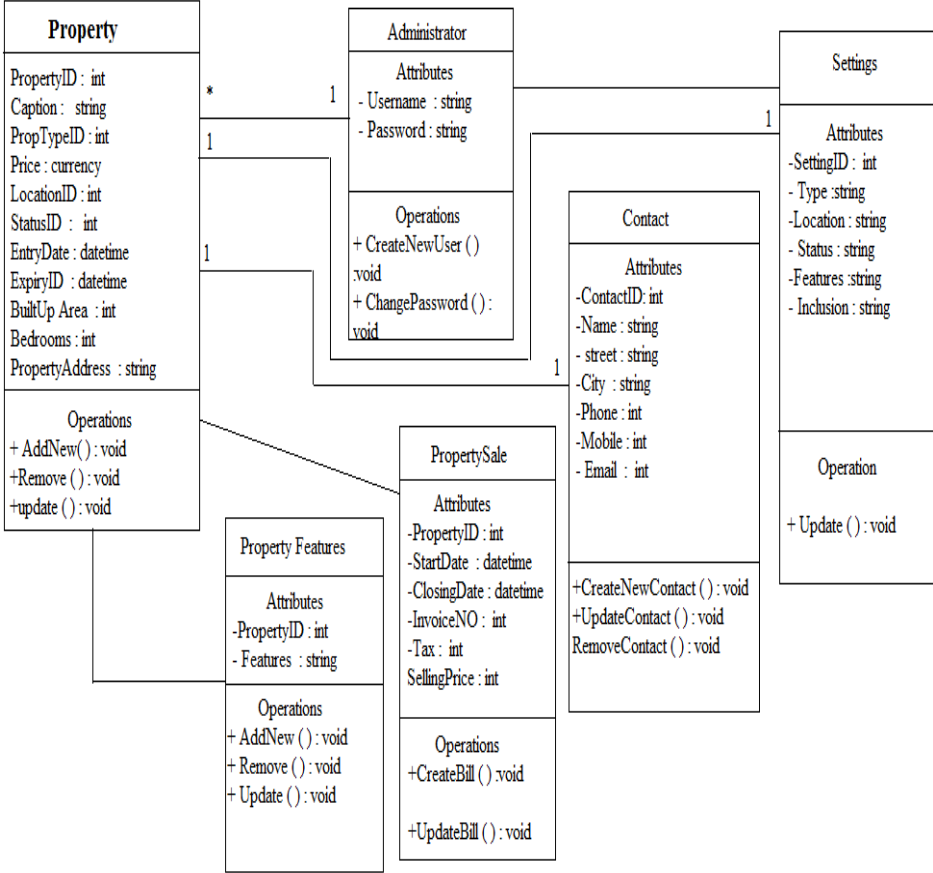4) Detail investigation was also carried out by

i. Studying similar process.

ii. Actual observation over working activities of similar systems.

iii. Studying different documents.

After gathering all such details about the systems of same nature the new features are embedded in the proposed system including both the information system should produce the features such as processing controls and input/output method.
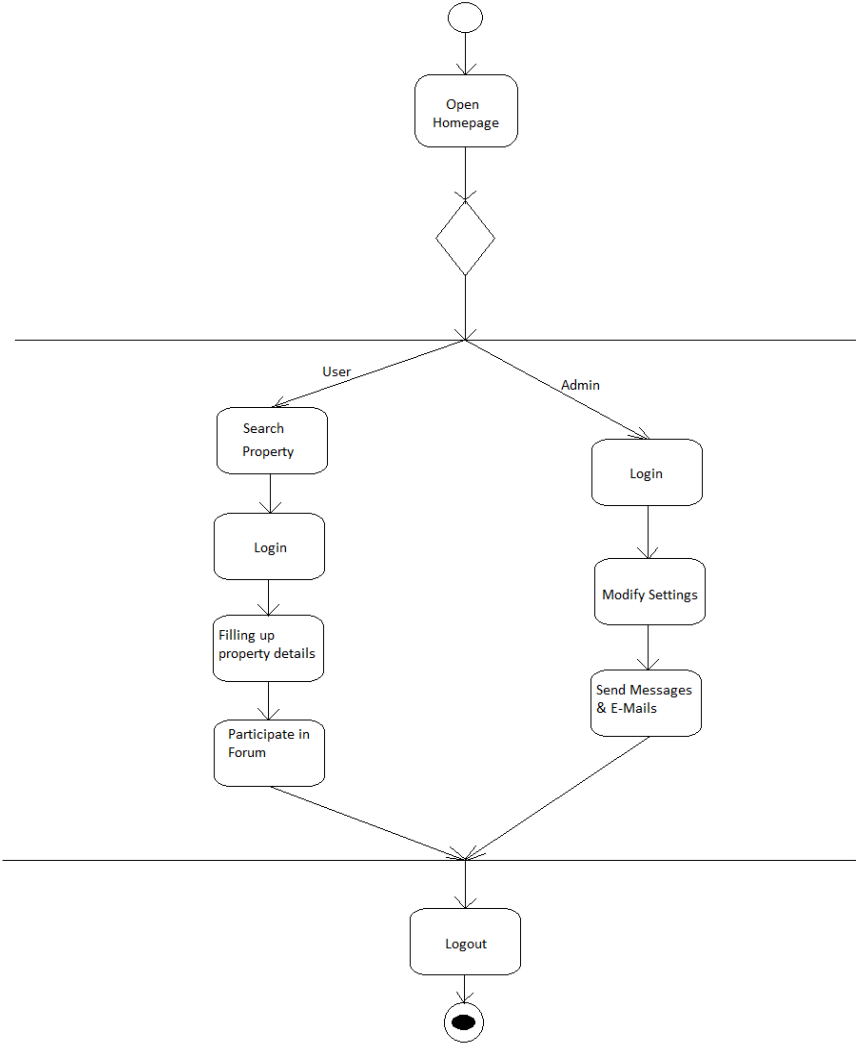
3.1 Object Diagram:

Property

Prop_id= PR001

Title= Marigold

Price=100000

Country=India

State=Maharashtra

City=Kolhapur

Rooms=3

bed= 2

Area = 3000Sq feet

Date=01-Jan-2013

Administrator

Ad_id= AD001

Username= rahul

Password= rahul123

Phone= 9822065730

Settings

Add State = Gujarat

Add City= Surat

list of Customers

Manage payment

Manage Property

Delete Property

Customer

C_id = CU001

User_cat = Buyer

f_name = Kiran

l_name = Sawant

nmail_id = sawantk@gmail.com

Country= India

Phone=9833187546

State = Maharashtra

City= Mumbai

Price_min=150000

Price_max = 200000

Property Features

Prop_id= PR001

Furnished= Unfirnished

Description = The Property is located near Rankala

PropertySale

Prop_id= PR001

Date of sale= 05-Jan -2013

Selling Price=100000

3.2 Class Diagram:

Property

PropertyID : int
Caption : string
PropTypeID : int
Price : currency
LocationID : int
StatusID : int
EntryDate : datetime
ExpiryID : datetime
BuiltUp Area : int
Bedrooms : int
PropertyAddress : string

Operations
+ AddNew( ) : void
+Remove ( ) : void
+update ( ) : void

Administrator

Attributes
- Username : string
- Password : string

Operations
+ CreateNewUser ( ) :void
+ ChangePassword ( ) : void

Settings

Attributes
-SettingID : int
- Type :string
-Location : string
- Status : string
-Features :string
- Inclusion : string

Operation
+ Update ( ) : void

Contact

Attributes
-ContactID: int
-Name : string
- street : string
-City : string
-Phone : int
-Mobile : int
- Email : int

+CreateNewContact ( ) : void
+UpdateContact ( ) : void
RemoveContact ( ) : void

Property Features

Attributes
-PropertyID : int
- Features : string

Operations
+ AddNew ( ) : void
+ Remove ( ) : void
+ Update ( ) : void

PropertySale

Attributes
-PropertyID : int
-StartDate : datetime
-ClosingDate : datetime
-InvoiceNO : int
-Tax : int
SellingPrice : int
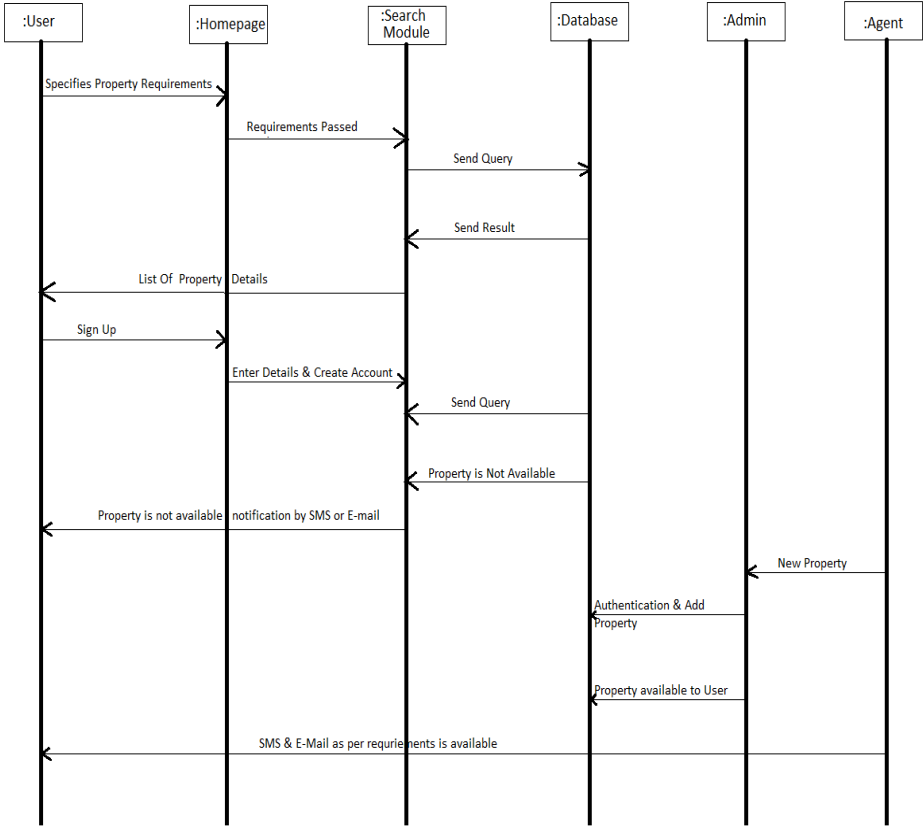
Operations
+CreateBill ( ) :void
+UpdateBill ( ) : void

3.3 Use Case Diagram:

3.4 Activity Diagram:

3.5 Sequence Diagram:
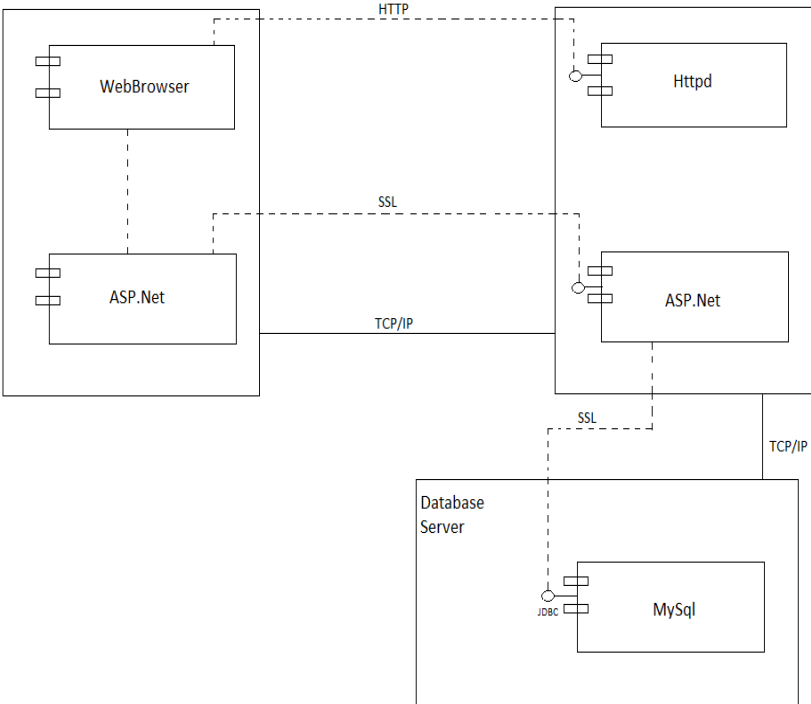

| :User | :Homepage | :Search Module | :Database | :Admin | :Agent |

Specifies Property Requirements

Requirements Passed

Send Query

Send Result

List Of Property Details

Sign Up

Enter Details & Create Account

Send Query

Property is Not Available

Property is not available notification by SMS or E-mail

New Property

Authentication & Add Property

Property available to User

SMS & E-Mail as per requrie nents is available

3.6 Entity-Relationship Diagram:

3.7 Module Hierarchy Diagram :
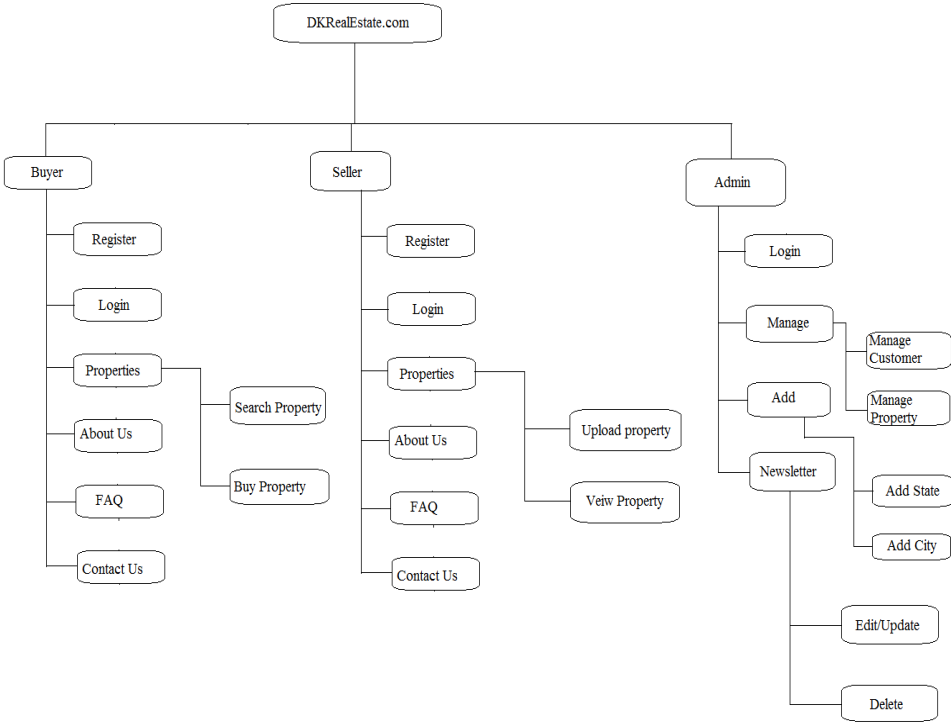
3.8 Component Diagram:

3.9 Deployment Diagram:
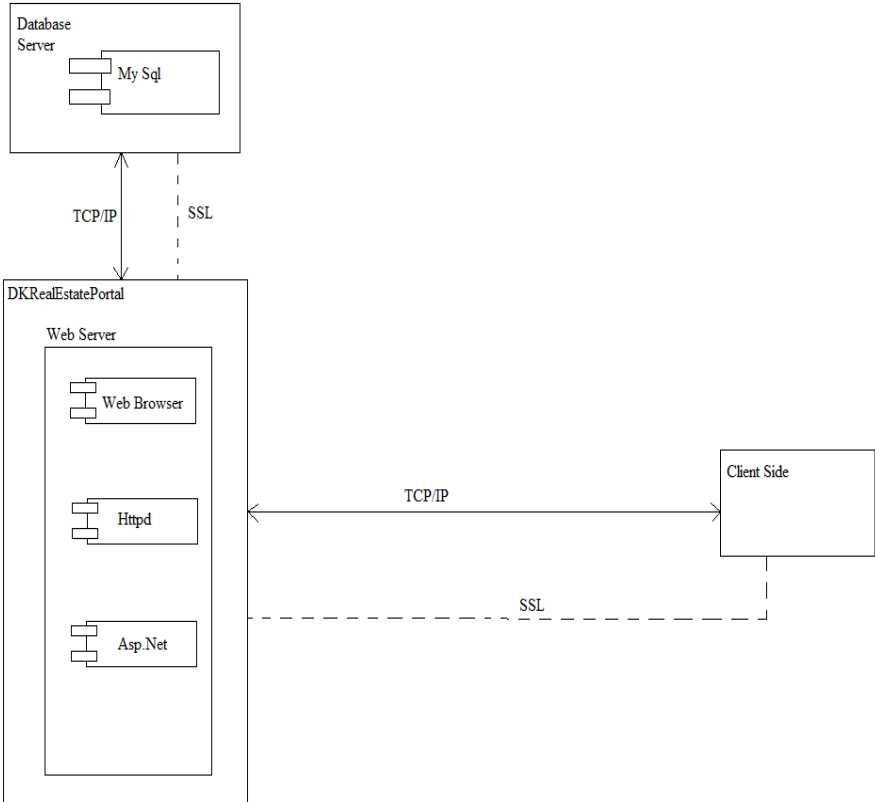
3.10 Module Specification:

Buyer Module

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contact details so that the buyer can contact him as and when required.

4) Search Buyer:

He can search buyers who have been viewing his property and as if who is interested in buying or not.

5) Receive Payment:

If the Buyer decides to buy the home uploaded by the seller, the seller will receive the payment according to the payment mode chosen by the buyer and as decided by the buyer and seller.

6) Send and Receive Mail:

He will be able to send mail to buyer as well as to the admin. He can send mail to the buyer in order to know whether he is

interested in buying his property or not or else in order to decide the payment strategies. He can send mail to admin in order to perform any updating or to ban any particular buyer from viewing his property. He will receive mail confirming the receipt of payment as well as the alert regarding the information that his house has been sold.

Admin Module

1) Login:

Admin performs the login process so that he can access the details of the buyers and sellers of his website and he will be able to enter only if the username, password, machine identification number.

2) Manage Homes:

The Admin can manage the homes posted on the site by either updating the details or deleting the sold out homes. He can

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5) Ban Buyer or Seller:

Admin will be able to ban any particular buyer or seller who is:

a) Posting fake homes on the site with unrealistic details and images

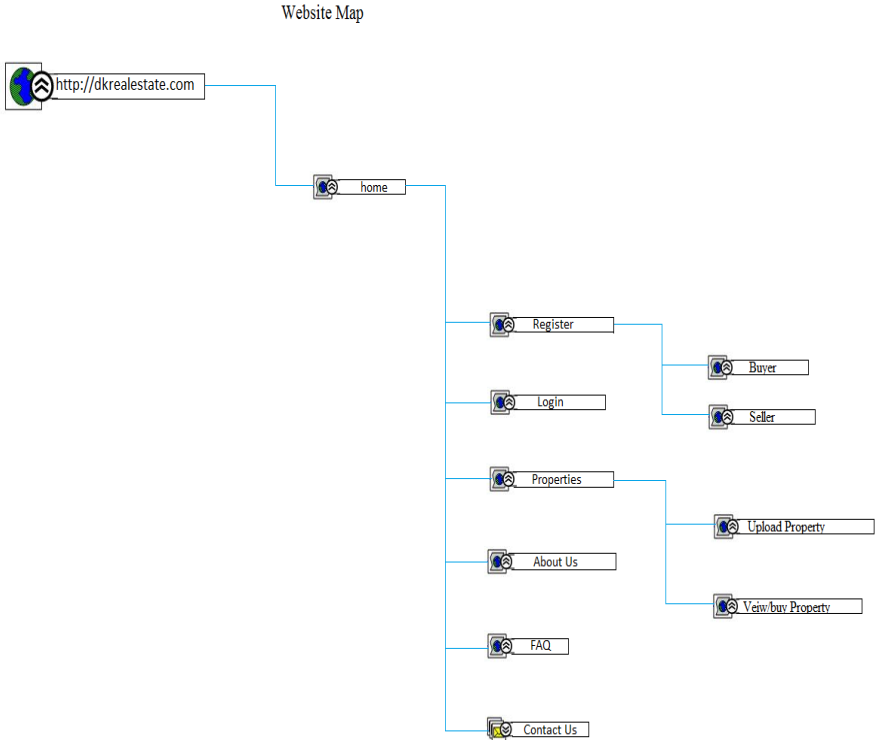b) Using the site for malpractices

6) Public management:

Admin will have to manage the sponsors who want to advertise the banners. He will have to manage the space on the site in order to put the banners of the sponsors as much as possible.

3.11 Web Site Map Diagram:
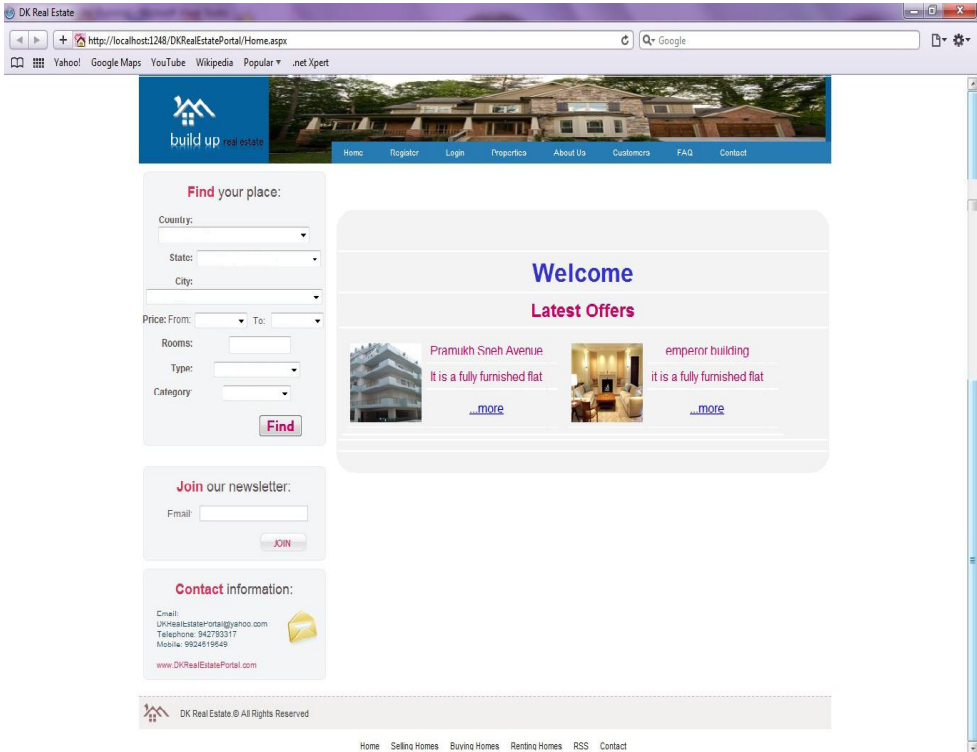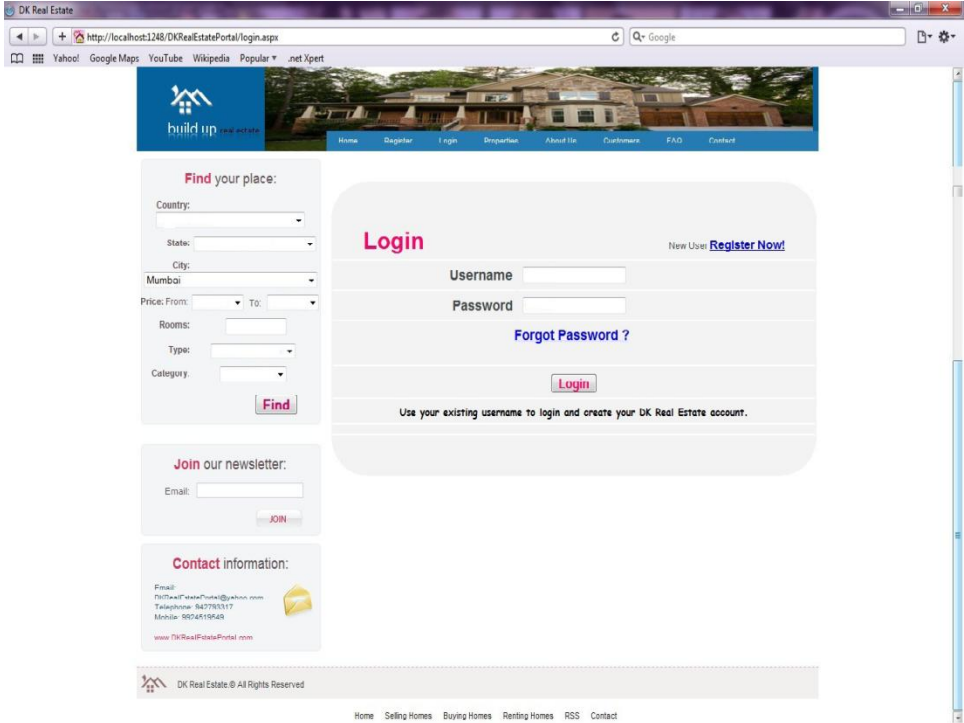
Web Map Diagram (Administrator)

Website Map (Adminsitrator)
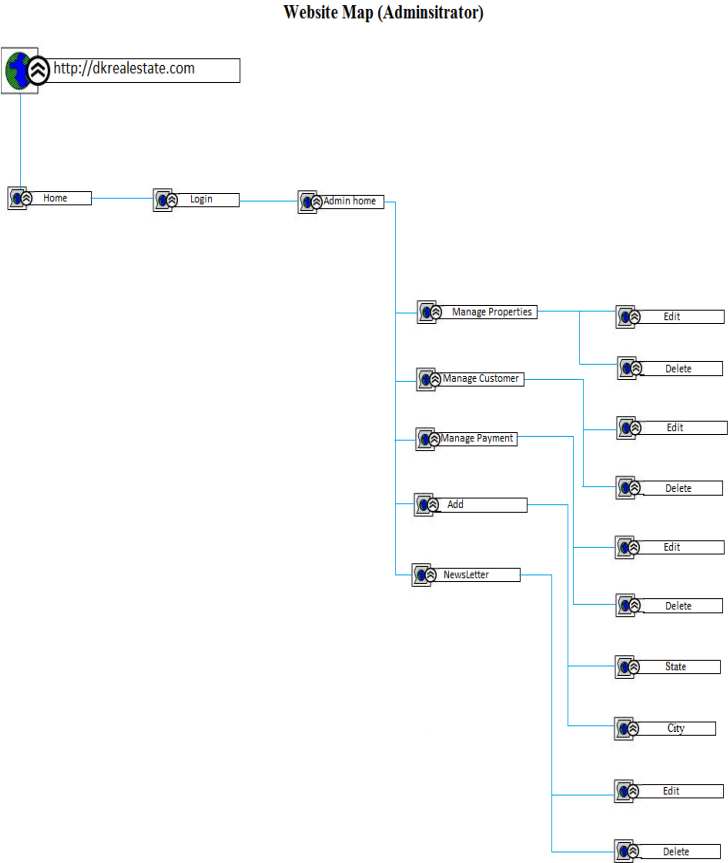
Web Site Map Diagram (Users)

Website Map

3.12 User Interface Design without data

Welcome Screen

Login Form:

Login Form (Forgot Password)
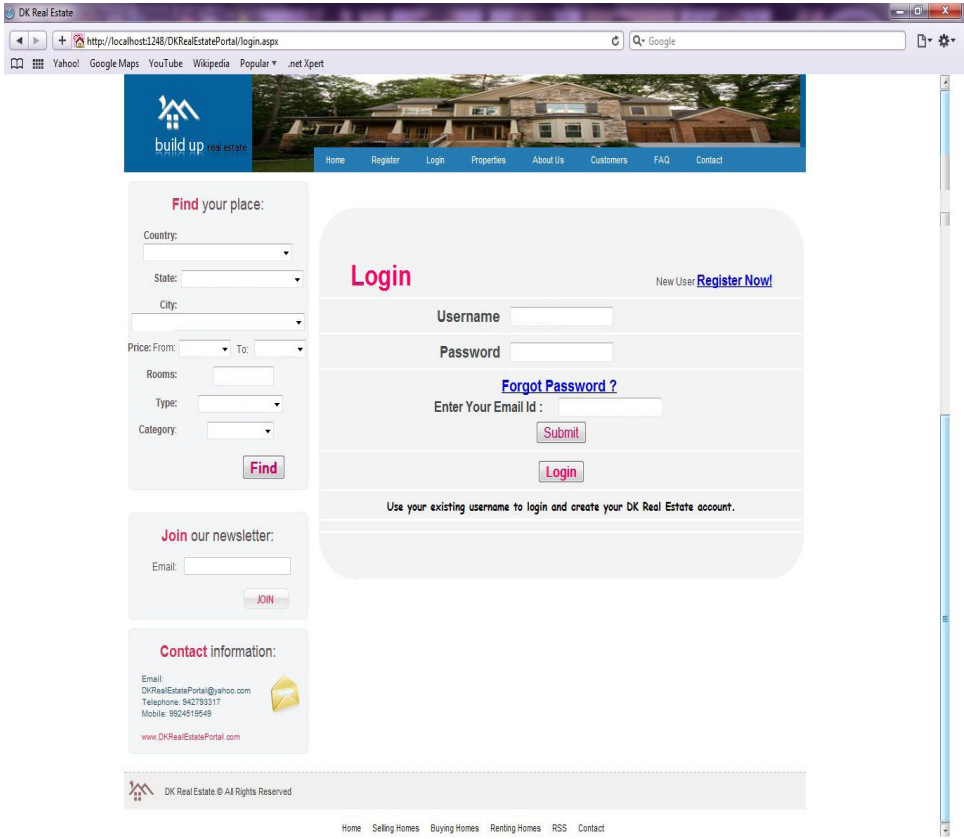
About Us

Add State:
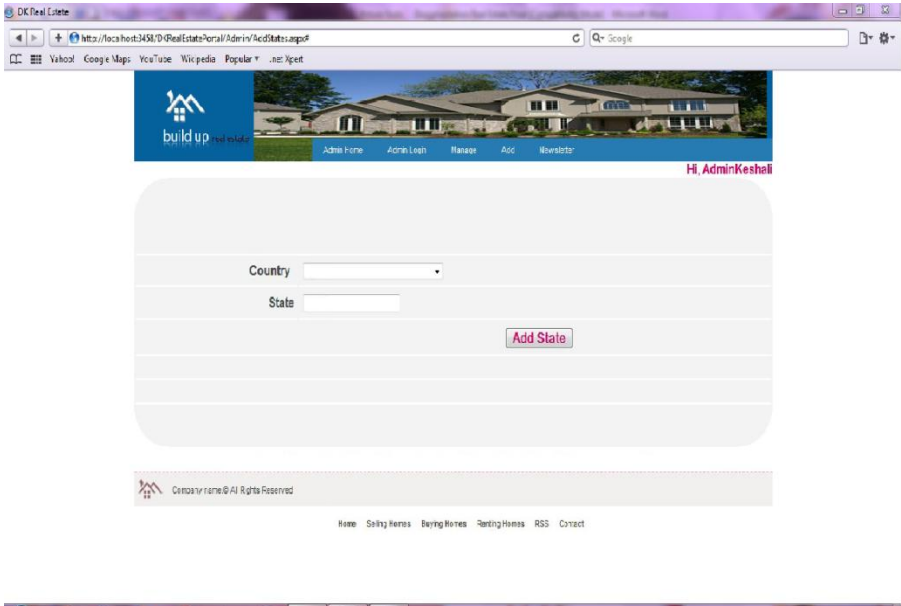
Contact Us
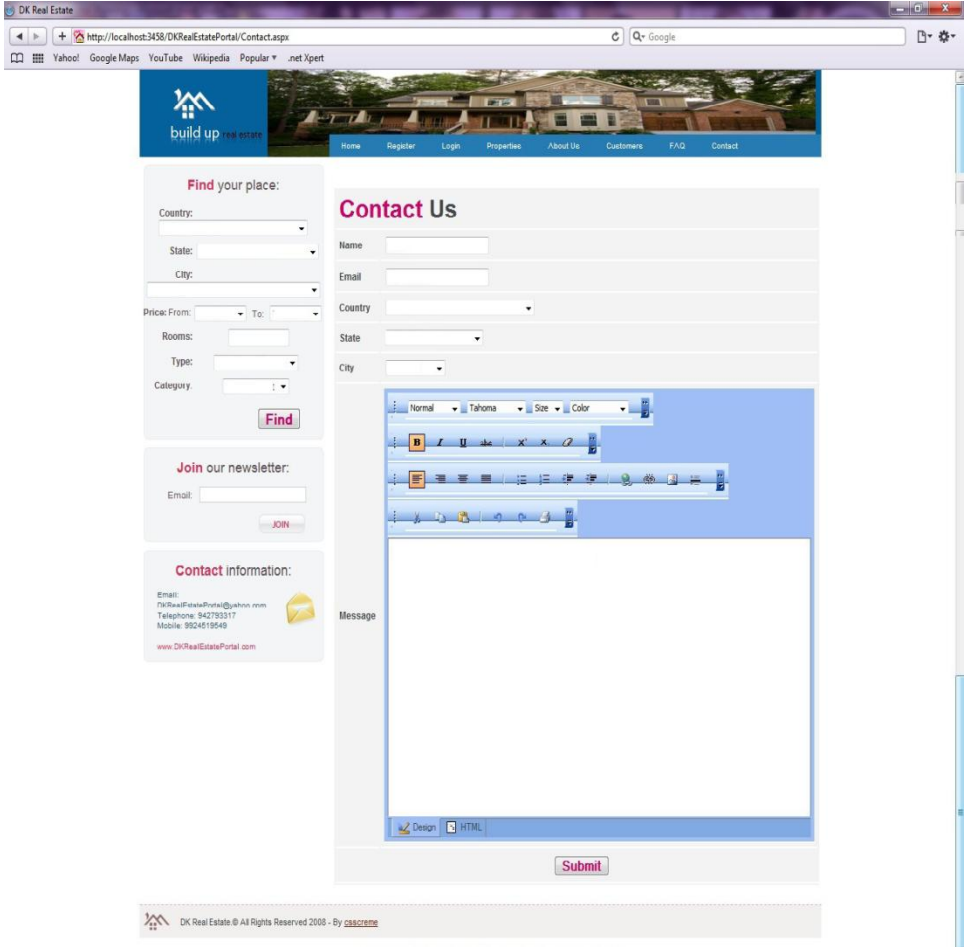
Find Property:
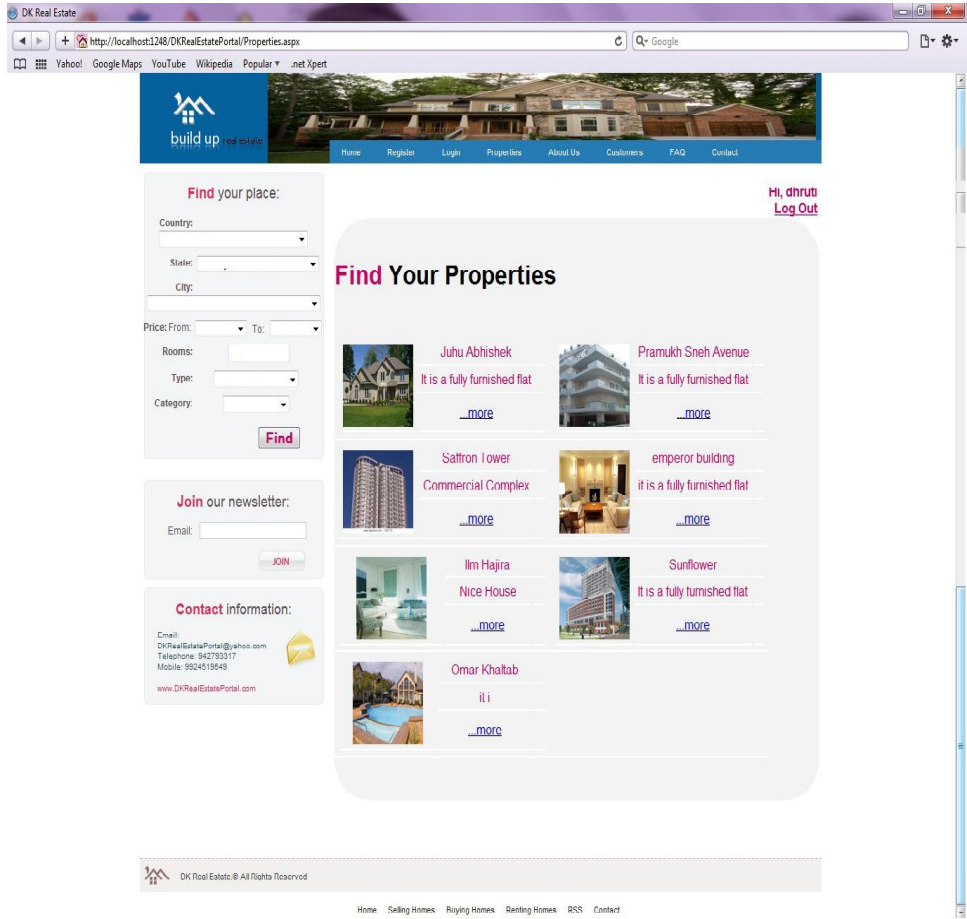
Property Description:
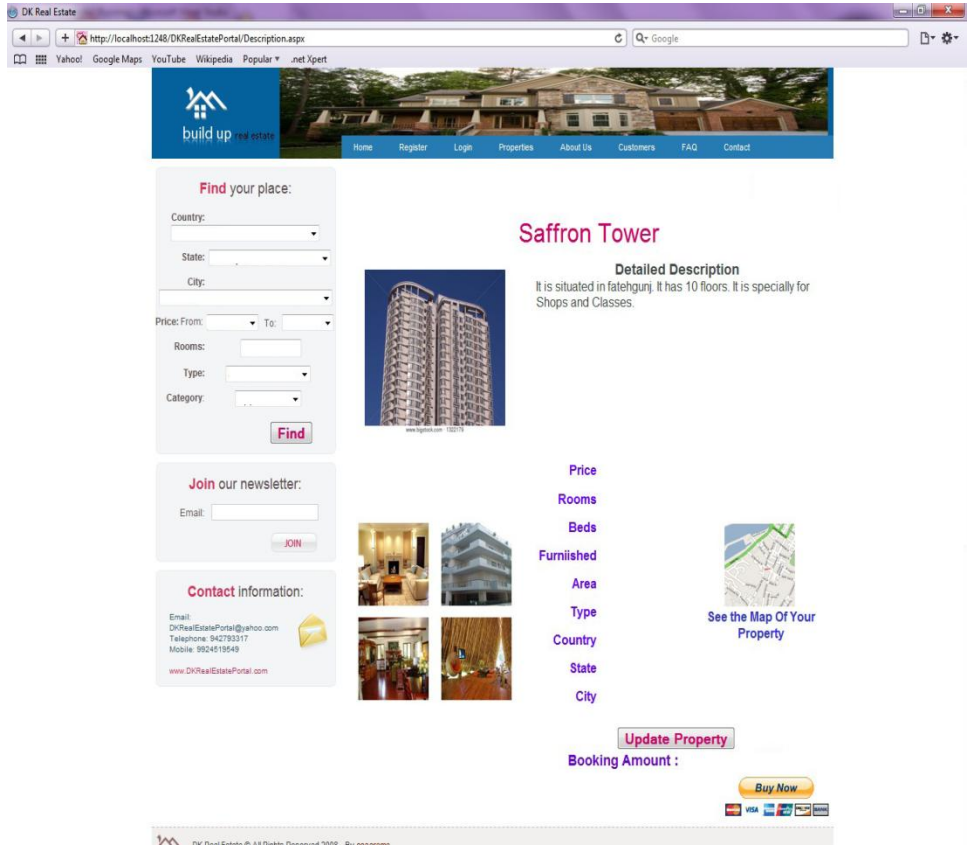
3.13 Table specifications: Table Design Specification

Table Name: Customer

Field Name	Data Type	Field Size	Constraint
c_id	Varchar	20	Primary Key
User_cat	Varchar	20	Not Null
User_type	Varchar	10	Not Null
F_name	Varchar	15	Not Null
L_name	Varchar	15	Not Null
Nmail_id	Varchar	30	Not Null
Username	Varchar	15	Not Null
Password	Varchar	15	Not Null
Country	Varchar	20	Not Null
State	Varchar	20	Not Null
City	Varchar	20	Not Null
Phone_no	Integer	10	Not Null
Mobile	Double	10	Not Null
Price_min	Integer	20	Not Null
Price_max	Integer	20	Not Null
Country_code	Integer	15	Not Null
City-code	Integer	15	Not Null

Table Name: Properties

Field Name	Data Type	Field Size	Constraint
Prop_id	Varchar	15	Primary key
c_id	Integer	15	Foreign key
Cat_id	Integer	20	Foreign key
Title	Varchar	20	Not Null
Price	Integer	18	Not Null
Country	Varchar	15	Not Null
State	Varchar	20	Not Null
City	Varchar	15	Not Null
City	Varchar	15	Not Null
Rooms	Varchar	10	Not Null
Beds	Varchar	5	Not Null
Furnished	Varchar	2	Not Null
Longitude	Decimal	18	Not Null
Latitude	Decimal	18	Not Null
Area	Integer	20	Not Null
Type	Varchar	20	Not Null
Image	Varchar	100	Not Null

Table Name: Admin

Field Name	Data Type	Field Size	Constraint
Ad_id	Varchar	20	Primary Key
Username	Varchar	20	Not Null
Password	Varchar	20	Not Null
Phone	Integer	15	Not Null
Email_id	Varchar	30	Not Null

Table Name: Home_Categories

Field Name	Data Type	Field Size	Constraint
Cat_id	Varchar	20	Primary Key
Cat_name	Varchar	20	Not Null

Table Name: Payment

Field Name	Data Type	Field Size	Constraint
P_id	Varchar	20	Primary Key
Prop_id	Integer	20	Foreign Key
C_id	Integer	20	Foreign Key
Price	Integer	18	Not Null
Buy_date	Date	-	Not Null
Buy_time	Time	-	Not Null
Payment_status	Varchar	20	Not Null

Table Name: Countries

Field Name	Data Type	Field Size	Constraint
Country_id	Varchar	20	Primary Key
Country_name	Varchar	20	Not Null

Table Name: States

Field Name	Data Type	Field Size	Constraint
State_id	Varchar	10	Primary key
State_name	Varchar	20	Not Null

Table Name:Cities

Field Name	Data Type	Field Size	Constraint
City_id	Varchar	2	Primary Key
City_Name	Varchar	15	Not Null

Table Name:Email

Field Name	Data Type	Field Size	Constraint
Em_id	Varchar	30	Primary Key
Sender	Varchar	15	Not Null
Receiver	Varchar	15	Not Null
Subject	Varchar	15	Not Null
Body	Varchar	100	Not Null
Em_date	Datetime	-	Not Null

Table Name: Booked Property

Field Name	Data Type	Field Size	Constraint
Bk_id	Varchar	30	Primary Key
C_id	Varchar	30	Foreign Key
Prop_id	Varchar	15	Foreign Key
P_id	Varchar	15	Foreign Key
Bk_date	Datetime	-	Not Null

Data Dictionary:

Field Name	Data Type	Table Name	Constraints	Description
Ad_id	Integer	Admin	Primary Key	Unique Id for Admin type
Area	Integer	Properties	Not Null	Stores the area of the property in sq. feet
Beds	Varchar	Properties	Not Null	Stores the no of beds rooms of the property
Body	Varchar	Email	Not Null	Stores the body of the Email
Buy_date	Date	Payment	Not Null	Stores the date when the property was sold
Buy_time	Time	Payment	Not Null	Stores the time when the property was sold
C_id	Integer	Customer	Primary Key	Unique Id for User type
C_id	Integer	Customer	Foreign Key	Unique Id for User type
C_id	Integer	Customer	Foreign Key	Unique Id for Customer Type
Cat_id	Integer	Home_categories	Foreign Key	Unique Id for Category type
Cat_id	Integer	Home_categories	Primary Key	Unique Id for Home categories
Cat_name	Varchar	Home_categories	Not Null	Stores the name of the Category
City	Varchar	Customer	Not Null	Stores the city

				of the user
City	Varchar	Properties	Not Null	Stores the city in which property is located
City_code	Integer	Customer	Not Null	Stores the city code
City_id	Integer	Cities	Primary Key	Unique Id for city
City_name	Varchar	Cities	Not Null	Stores the name of city
Country	Varchar	Customer	Not Null	Stores the country of the user
Country	Varchar	Properties	Not Null	Stores the country in which property is located
Country_co de	Integer	Customer	Not Null	Stores the country code
Country_id	Integer	Countries	Primary	Unique Id forCountry ID
Country_na me	Varchar	Countries	Not Null	Stores the name of the country
Em_date	Datetime	Email	Not Null	Stores the date and time of Email when it was sent
Em_id	Integer	Email	Primary Key	Unique Id for Email Id
Email_id	Varchar	Admin	Not Null	Stores the Email Id of the Admin
F_name	Varchar	Customer	Not Null	Stores the first name of the user
Furnished	Varchar	Properties	Not Null	Stores the if property is

				furnished or not
Image	Varchar	Properties	Not Null	Stores the outer image of the property
L_name	Varchar	Customer	Not Null	Stores the last name of the user
Latitude	Decimal	Properties	Not Null	Stores the Latitude of the property
Longitude	Decimal	Properties	Not Null	Stores the Longitude of the property
Mobile	Double	Customer	Not Null	Stores the mobile no. of the user
Nmail_id	Varchar	Customer	Not Null	Stores the email id of the user
P_id	Integer	Payment	Primary Key	Unique Id for Payment type
Password	varchar	Customer	Not Null	Stores the password of the user
Password	Varchar	Admin	Not Null	Stores the Password of the Admin
Payment_status	Varchar	Payment	Not Null	Stores the payment status of the property
Phone	Integer	Admin	Not Null	Stores the phone number of the Admin
Phone_no	integer	Customer	Not Null	Stores the phone no. of the user
Price	Integer	Properties	Not Null	Stores the price of the property
Price	Integer	Payment	Not Null	Stores the price

				of the property sold
Price_max	Integer	Customer	Not Null	Stores the maximum price range of the required property
Price_min	Integer	Customer	Not Null	Stores the minimum price range of the required property
Prop_id	Integer	Properties	Primary Key	Unique Id for Property type
Prop_id	Integer	Properties	Foreign Key	Unique Id for Property type
Receiver	Varchar	Email	Not Null	Stores the name of the Receiver
Rooms	Varchar	Properties	Not Null	Stores the no of rooms of the property
Sender	Varchar	Email	Not Null	Stores the name of the Sender
State	Varchar	Customer	Not Null	Stores the state of the user
State	Varchar	Properties	Not Null	Stores the state in which property is located
State_id	Integer	States	Primary Key	Unique Id for State
State_name	Varchar	States	Not Null	Stores the name of state
Subject	Varchar	Email	Not Null	Stores the subject of Email
Title	Varchar	Properties	Not Null	Stores the title of the property
Type	Varchar	Properties	Not Null	Stores the type

				of the property
User_cat	Varchar	Customer	Not Null	Stores the category of the user
User_type	Varchar	Customer	Not Null	Stores the type of user
Username	Varchar	Customer	Not Null	Stores the username of the user
Username	Varchar	Admin	Not Null	Stores the username of the Admin

3.14 <u>Test Procedures and Implementation:</u>

Testing Of System

Testing of a system is done for proper execution as it acts as a most important phase in project development. It is been said that 40% of project development time should be spent on testing of system. When a system is developed it is hoped that the performance given should be excellent.

The main objectives of system testing are:

- To ensure that during operation the system will perform as per specification.

- To make sure that the system meets user's requirements during the operation.

- To verify that the controls incorporated in the system

function as intended.

- To see that when correct inputs are fed to the system the outputs are correct.

- To make sure that during operation, incorrect input,

processing and outputs will be detected**.**

- Program tests are basically designed to test the logic of a program. The most common errors occurs in a program is listed during the boundary points. This type of testing is complicated but practically it allows you to test a program by selecting different paths.

- The purpose of string test is to ensure that the data entered is correctly transferred from one process to another.

Testing Strategies

Black box testing should make use of randomly generated inputs (only a test range should be specified by the tester), to eliminate any guess work by the tester as to the methods of the function.

- Data outside of the specified input range should be tested to check the robustness of the program.

- Boundary cases should be tested (top and bottom of specified range) to make sure the highest and lowest allowable inputs produce proper output.

- The number zero should be tested when numerical data is to be input.

- Stress testing should be performed (try to overload the program with inputs to see where it reaches its maximum capacity), especially with real time systems.

- Test monitoring tools should be used whenever possible to track which tests have already been performed and the outputs of these tests to avoid repetition and to aid in the software maintenance.

- Other functional testing techniques include: transaction testing, syntax testing, domain testing, logic testing, and state testing.

- Finite state machine models can be used as a guide to design functional tests.

Software Testing Techniques

- **Black Box Technique**

It takes an external perspective of the test object to derive test cases. These tests can be functional or non-functional, though usually functional. The test designer selects valid and invalid input and determines the correct output. There is no knowledge of the test object's internal structure. Black Box Testing is testing without knowledge of the internal workings of the item being tested.

For example, when black box testing is applied to software engineering, the tester would only know the "legal" inputs and what the expected outputs should be, but not how the program actually arrives at those outputs. It is because of this that black box testing can be considered testing with respect to the specifications, no other knowledge of the program is necessary. For this reason, the tester and the programmer can be independent of one another, avoiding programmer bias toward his own work. Due to the nature of black box testing, the test planning can begin as soon as the specifications

are written. This method of test design is applicable to all levels of software testing: unit, integration, functional testing, system and acceptance.

- **White Box Technique**

The opposite of black box testing would be glass box testing, where test data are derived from direct examination of the code to be tested. For glass box testing, the test cases cannot be determined until the code has actually been written. Both of these testing techniques have advantages and disadvantages, but when combined, they help to ensure thorough testing of the product. Software testing approaches that examine the program structure and derive test data from the program logic. Structural testing is sometimes referred to as clear-box testing since white boxes are considered opaque and do not really permit visibility into the code.

- **Unit Testing**

Unit testing is the process of test verification on the smallest unit of software design-software module. It is used to uncover errors within the boundary of the module.

- **Integrating Techniques**

The Integration Testing is associated with Unit testing. Here the modules of unit testing are put together and checked weather they work properly, when they are integrated, or not. It contains different strategies for same. They are as follows. We performed Integrating Testing by merging all the Modules and Testing as whole Application. We used one Test Case for flow of whole Application, and remove the Errors.

- **Validation Testing**

In integration testing, the software is assembled as a package. Validation Testing is completely associated with requirement

satisfaction of customers. This testing checks weather all functional requirements of customer are satisfied or not. According to this test, the project is tested and found to be satisfactory for functional characteristics, behavioral characteristics and performance requirement. It is also found to have good documentation up to

the last stage. So, the performance characteristics conform to specification and are accepted.

Test Cases

Test case for: Login Form

Id	Description	Test Values	Expected Result	Actual Result	Pass/Fail
L1	User id	User id = ""	Error message pop up	Error Message	Pass
L2	User id	User id = 001	Error message pop up	Error Message	Pass
L3	User id	User id = 1001	Main screen will appears	Main Page	Pass
L4	Password	Password = ""	Error message pop up	Error Message	Pass
L5	Password	Password = @#$	Error message pop up	Error Message	Pass
L6	Password	Password length less than 6 or greater than 10	Error message pop up	Error Message	Pass
L7	Password	Password = ctr2004	Main Screen will appears	Main Page	Pass

Description: This test case is used to check out the validity of User

Name and Password.

Test Case for: Upload Property

Id	Description	Test Values	Expected Result	Actual Result	Pass/Fail
U01	Title	Enter Null Value	Error Message popup	Error Message	Pass
U02	Price	Enter Alphabet	Error Message popup	Error Message	Pass
U03	Type	Enter Null Value	Error Message Popup	Error Message	Pass
U04	Area	Enter Alphabet	Error Message popup	Error Message	Pass
U05	Rooms	Enter character	Error Message Popup	Error Message	Pass
U06	Beds	Enter Character	Error Message Popup	Error Message	Pass
U07	Longitude	Enter Alphabets	Error Message Popup	Error Message	Pass
U08	Latitude	Enter Alphabets	Error Message Popup	Error Message	Pass

U09	Description	Enter Null Values	Error Message Popup	Error Message	Pass

Description: This test case is used to check out the validity of details are entered in proper field.

Test Case for: Contact Us

Id	Description	Test Values	Expected Result	Actual Result	Pass/Fail
CA001	Name	Enter Numeric Values	Error Message popup	Error Message	Pass
CA002	Email	Enter Null Values	Error Message popup	Error Message	Pass
CA003	Country	Enter Numeric Values	Error Message popup	Error Message	Pass
CA004	State	Enter Numeric Values	Error Message popup	Error Message	Pass
CA005	City	Enter Numeric Values	Error Message popup	Error Message	Pass

Description: This test case is used to check out the details are entered in all fields.

Test Case For: Adding State/city

Id	Description	Test Values	Expected Result	Actual Result	Pass/Fail
AS01	Select Country	Enter Null Values	Error Message popup	Error Message	Pass
AS002	Add State	Enter Numeric Values	Error Message popup	Error Message	Pass

Description: This test case is used to check out the validity of details are entered in proper field.

4.1 <u>User Manual:</u>

User Manual acts as a guide to any user of the system. It can be describes everything about the system from user's point of view. It also helps the user to operate system easily and efficiently.

1.   How to login?

The login screen is displayed by the system where the user has to login by entering the correct credentials.

If the credentials are given by the user are correct then the respective screen with navigation menu is displayed by the system.

2.   How to use Menu?

The menu is provided to operate various screens & reports depending upon operations to be performed. The user can select particular menu by using mouse by navigating the items & clicking

it. This will invoke the item & display the respective screens. User can navigate through the pages by clicking items of menu.

3.   How to use Screens?

In the menu, various textboxes and buttons are provided to enter the data into the system. The screen contains various data grid views to display the data on the screen.

4.   How to use Reports?

The user can see the different analytical information from report details and transaction data. The necessary data values must be provided for the reports.

4.2 Operations Manual/Menu Explanation:

Welcome page will have following menu:

- Home

The Home menu will navigate the user to the welcome page itself.

- Register

The Register menu. On clicking this menu a webpage will be opened where form displaying the registration form. Then the user has to enter the details asked in the registration form properly and at last enter the graphical image code generated with care and then click on submit. After registration is submitted click on home menu and click on login button.

- Login

The Login menu opens a new web page. Enter the proper credentials then the respective homepage is displayed.

- Properties

In this menu, the list of various properties and in this the users can get more information of the property displayed.

- About Us

In this menu, the real estate profile is displayed.

- FAQ

In this menu, the frequently asked questions by the users and answered so that the user can freely navigate through the website.

- Contact Us

In this menu, in case of their specific requirements and more queries the users can contact to admin by providing their details and those queries are answered by the admin.

Admin login Homepage displays the following menu:

- Admin Home

This menu used to navigate the admin from any page back to Homepage.

- Admin Login

In this menu different admin can login for performing the admin function.

- Manage

In this menu the admin can edit or delete properties and also authenticate the property. Edit or delete customer and also manage payment also and make the payment transaction.

- Add

In this menu, the admin can add state and city as his business is increasing.

- Newsletter

In this menu, admin can edit and delete the newsletter and also update the status of newsletter.

4.3 Program Specifications / Flow Charts:

The system is developed has been developed in .NET and use HTML as front end and MYSQL as backend. Following are the program specification used in the development process explained with the help of flowcharts.

User Authentication (Login)

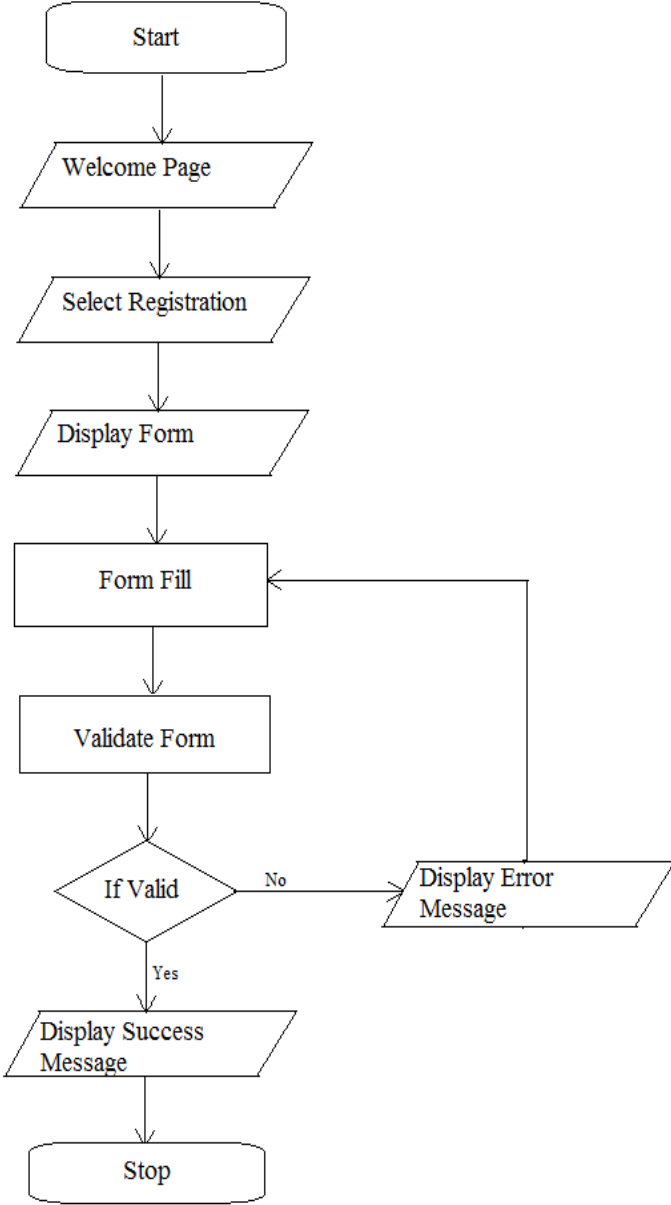| Module Program Name Purpose Event		Authentication and Authorization Login to the System Check Authentication of User Click on "Sign-in" Button
Input	**Constraint**	**Description**
Login Details (Email And Password)	The required field should not be null and input data should be valid	Login details gets checked against database
Output	The login Detail gets checked against database to check the authentication of user & user gets notification message of success full login	

Flowchart:
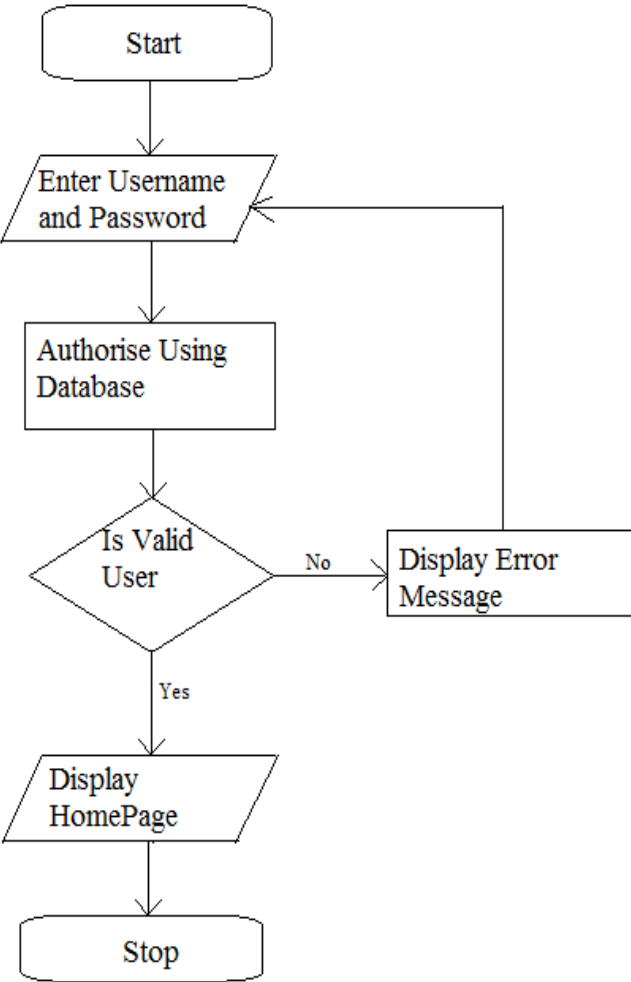
User Registration:

Module Program Name Purpose Event		Query Processing Add Customer Details Add Customer Details in Database Click on "submit" Button
Input	**Constraint**	**Description**
Customer Details	The required field should not be null and input data should be valid	Customer details gets stored in to database
Output	The Customer Details are added to User master table & user gets notification message of success Registration	

Flowchart:

Upload Property:

Module Program Name Purpose Event		Query Processing Add Property Details Add Property Details in Database Click on "submit" Button
Input	**Constraint**	**Description**
Property Details	The required field should not be null and input data should be valid	Property details gets stored in to database
Output	The Property Details are added to Properties Table and then the property can be viewed by customers	

Flowchart: