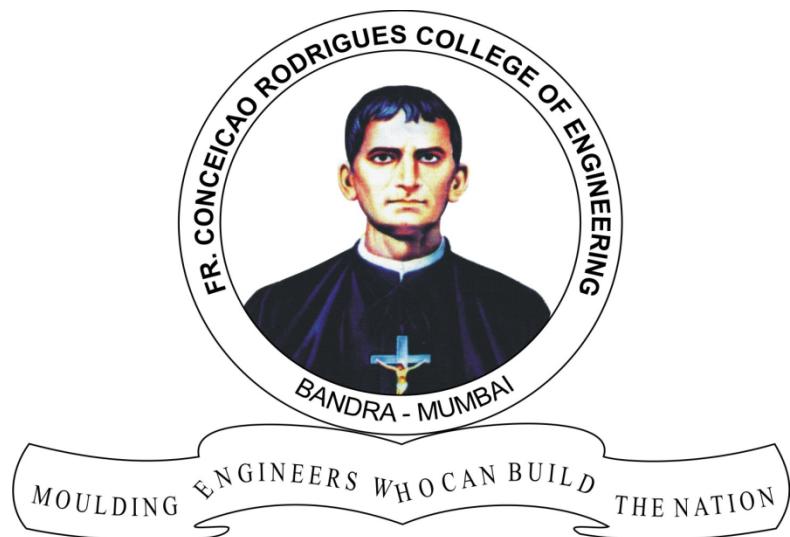


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**Web Technology Project
Real Estate Django Web App**

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Abstract

- Our project “Real Estate Django Web App” is related to online application of estate.
- Real estate management system is an advanced solution for his/her estate problem.
- User shows all the properties of Buyer that are secure & verify & send them to the Builder.
- Real System Buy the property & verify them and the online service is provided by us free of charge.
- Here registration is also free of cost. So user can registration by using Real System then Buy the property & verify them. After a few hours or days our guys put the estate solution. The software is so reliable to user .Our main concept is give best & quick result to user.

1.Introduction

1.1Project purpose

This website is an Online real estate business website through which a user can access its information and manage all the adding, updating, deleting the assets and some of its tasks. The Admin user can change the update the information regarding property selling and buying and cancellation. The system is very useful for the companies who develope apartments, hotels, villa, residential properties and commercial properties. Companies or individual agents can also advertise their property.

1.2 Project scope

The real of world wide web have spread across millions of household, so naturally, Internet has become by far the best platform for real estate marketing today. Now days when everything is online, how is it possible that real estate left web application behind. There are a lot of real estate companies who advertise their property online so idea behind developing this application is that their property can also sell,or buy rental property using this. These application are not widely popular but in future,they have large scope of growth. This website is a online real estate management through which individual agents or buyer can maintain their property document keeping and managing property registration and also access its information and manage all the adding, updating, deleting the as and some of its tasks.The Admin user can inform their agents for regarding to property and update the information regarding property and cancellation of property or changing buyer choice. The system is very useful for the companies or builders that can post and edit their properties and their personal info and admin can monitor records of all of them.The system is also useful which also keeps track of Account details of buyers and Investors and also RES Industry.

1.3 Project Objectives

- The system should have a login. A login box should appear when the system is invoked.
- The Admin should have all the type of authority.
- The Admin should maintain property .Admin identify property type as it is residential or commercial property.
- The Admin user can inform their agents for regarduing to property and update the information regarding property and cancellation of property or changing buyer choice.
- The user should book the property for sell or rent with detail of property.
- The system is very useful for the companies or builders that can post and edit their properties and their personal info and admin can monitor records of all of them.
- The system is also useful which also keeps track of Account details of buyers and Investors and also RES Industry.

1.4 Project Goals

- Planned approach towards working: - The working in the organization will be well planned and organized. The data will be stored properly in data stores, which will help in retrieval of information as well as its storage.
- Accuracy: - The level of accuracy in the proposed system can not be decided. Because here user buy and another user build the home. There is no guarantee.
- Reliability: - The reliability of the proposed system will be high due to the above stated reasons. The reason for the increased reliability of the system is that now there would be proper storage of information

2. Overall description:

Admin's interface: Admin is a person who will handle the entire website. For that person has to give the user name and password to enter the admin page. After entering right password admin person can enter the admin home area. Here user buy different property & sell them to the system. Buyer user property & builder verify each-other & make reliable communication to each other.

User's interface: User can visit the home page of real estate in which first the introduction of our site mention first. The registered user can login from the login module. Here guest can register free account to sell and buy property & buyer verify each other & make reliable communication to each other. User can search the property and it can select the type of property and its budget and also find the location of property.

2.1 Product Perspective

The system is developed using the following technologies:

Front End:

- **Django:** Django is an advanced Web framework written in Python that makes use of the model view controller (MVC) architectural pattern. Django was created in a fast-moving newsroom environment, and its key objective is to ease the development of complicated, database-driven websites.
- **HTML:** HTML5 is a software solution stack that defines the properties and behaviors of web page content by implementing a markup based pattern to it.
- **Python:** Python is a high-level programming language designed to be easy to read and simple to implement. It is open source, which means it is free to use, even for commercial applications.
- **CSS3:** Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.
- **JavaScript:** JavaScript often abbreviated as JS, is a high-level, interpreted scripting language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

Back End:

- **Postgres Database:** PostgreSQL is an open source relational database management system (DBMS) developed by a worldwide team of volunteers. PostgreSQL is not controlled by any corporation or other private entity and the source code is available free of charge.

3. Functional Requirements

- Manage listings, realtors, contact inquiries and website users via admin
- Role based users (staff and non-staff)
- Display listings in app with pagination
- Ability to set listings to unpublished
- Search listings by keyword, city, state, bedrooms and price (Homepage & search page)
- List realtors on about page with “seller of the month” (Control via admin)
- Listing page should have fields listed below
- Listing page should have 5 images with lightbox
- Lightbox should scroll through images
- Listing page should have a form to submit inquiry for that property listing
- Form info should go to database and notify realtor(s) with an email
- Frontend register/login to track inquiries
- Both unregistered and registered users can submit form. If registered, can only submit one per listing

4. Non-functional Requirements

Performance Criteria:

Time:

The elapsed time between the submission of order process between the customer and cashier in a canteen should be as minimum as possible.

User-friendly:

It should be users friendly. The user interface should be kept simple and uncluttered. Since different type of people interact with this process, it should be very easy for them to understand.

Extensibility:

It should be able to accommodate the variations like:

1. Different orders should be handled easily
2. An option for cash on delivery, pay through card, etc.

Portability:

It should be portable on any platform and available on websites easily and at a faster speed than others.

Reusability:

All the customer web pages that are being used for customer information should get processed easily so that many customers can interact with us very easily and very fast without any information destroy.

5. Tier Architecture

The various classes as obtained from the business class diagram is categorized as follows

The 3 tier architecture consists of three layers:

Presentation Layer - The website or windows forms application is called the presentation layer. The presentation layer is the most important layer simply because it's the one that everyone sees and uses. Even with a well-structured business and data layer, if the presentation layer is designed poorly, this gives the users a poor view of the system. The presentation layer is the form where we design using the controls like textbox, labels, command buttons etc.

Business Layer - Though a website could talk to the data access layer directly, it usually goes through another layer called the business layer.

This layer is a class which we use to write the function which works as a mediator to transfer the data from Application or presentation layer data layer. In the three-tier architecture, we never let the data access layer to interact with the presentation layer.

This layer is also a class where we declare the variable corresponding to the fields of the database which can be required for the application and make the properties so that we can get or set the data using these properties into the variables. These properties are public so that we can access its values

One of the best reasons for reusing logic is that applications that start off small usually grow in functionality. For instance, a company begins to develop a website, and as they realize their business needs, they later decide to add a smart client application and windows service to supplement the website. The business layer helps move logic to a central layer for maximum reusability."

Business layer have been presented having two roles

- client application
- server component

Data layer - The key component to most applications is the data. The data has to be served to the presentation layer somehow. The data layer is a separate component whose sole purpose is to serve up the data from the database and return it to the caller. This layer is also a we use to get or set the data to the database back and forth. This layer only interacts with the database. We write the database queries or use stored procedures to access the data from the database or to perform any operation to the database.

Advantages

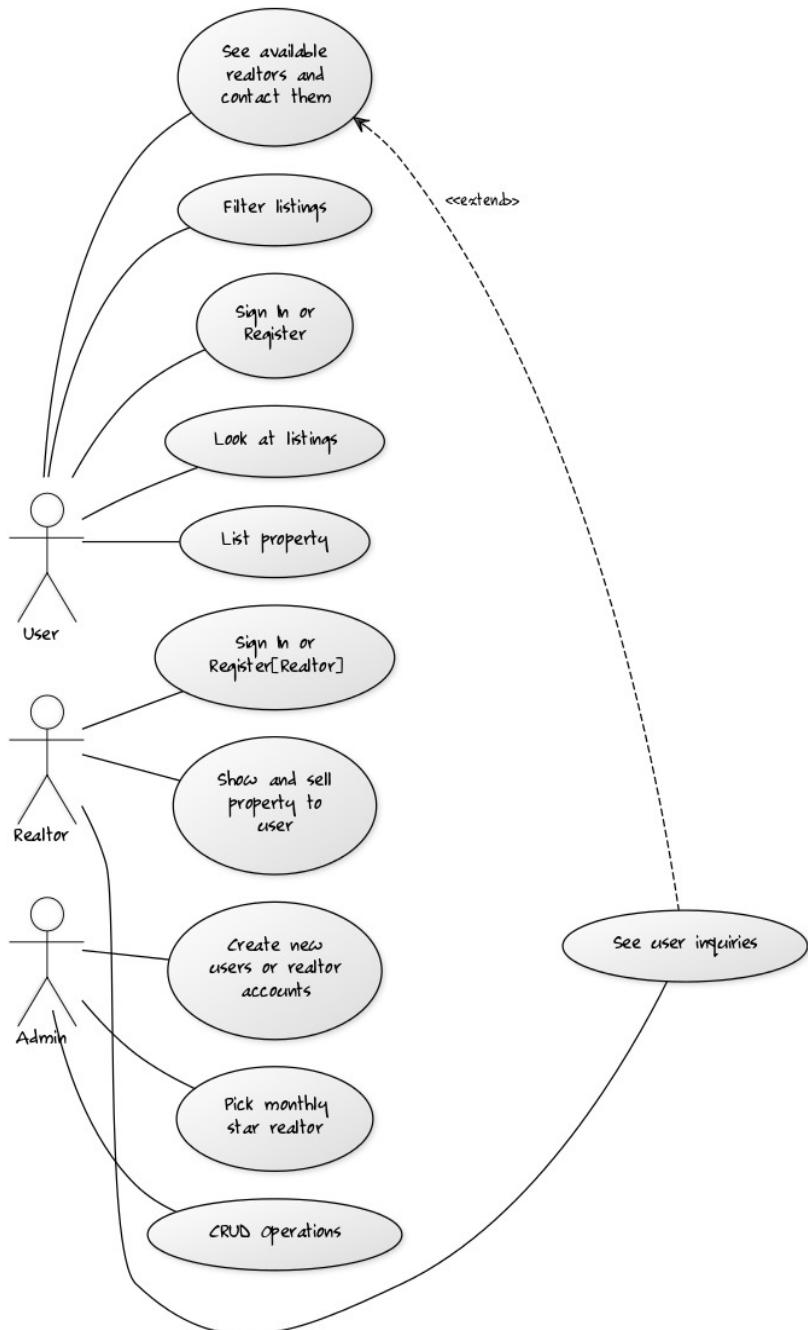
- Client-Server architecture is 2-Tier architecture because the client does not distinguish between Presentation layer and business layer.
- The increasing demands on GUI controls caused difficulty to manage the mixture of source code from GUI and Business Logic.
- Further, Client Server Architecture does not support enough the Change Management. Let suppose that the government increases the Entertainment tax rate from 4% to 8 %, then in the Client-Server case, we have to send an update to each client and they must update synchronously on a specific time otherwise, we may store invalid or wrong information.
- The Client-Server Architecture is also a burden to network traffic and resources. Let us assume that about five hundred clients are working on a data server then we will have five hundred ODBC connections and several ruffian record sets, which must be transported from the server to the clients.
- This categorization of the application makes the function more reusable easily and it becomes too easy to find the functions which have been written previously. If the programmer wants to make a further update in the application then he easily can understand the previously written code and can update easily.

Disadvantages

- Increase complexity/effort.
- More difficult to build 3 tier architecture rather than a 2 tier.
- Points of communication are doubled.
- Maintenance tools are currently inadequate for maintaining server libraries.

4. Design

1.1 User Case Diagram



Schemas

LISTING

- id: INT
- realtor: INT (FOREIGN KEY [realtor])
- title: STR
- address: STR
- city: STR
- state: STR
- zipcode: STR
- description: TEXT
- price: INT
- bedrooms: INT
- bathrooms: INT
- garage: INT [0]
- sqft: INT
- lot_size: FLOAT
- is_published: BOOL [true]
- list_date: DATE

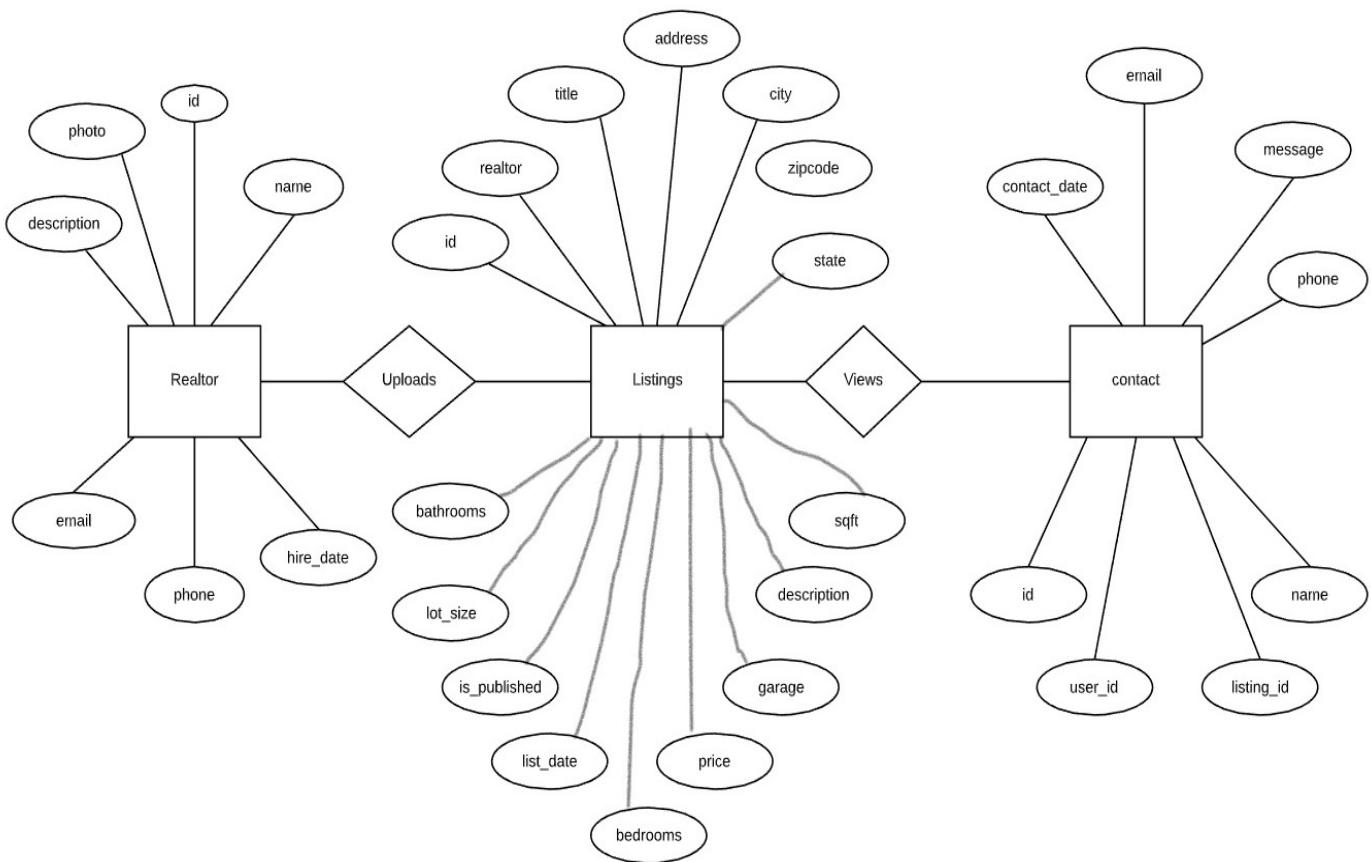
REALTOR

- id: INT
- name: STR
- photo: STR
- description: TEXT
- email: STR
- phone: STR
- is_mvp: BOOL [0]
- hire_date: DATE

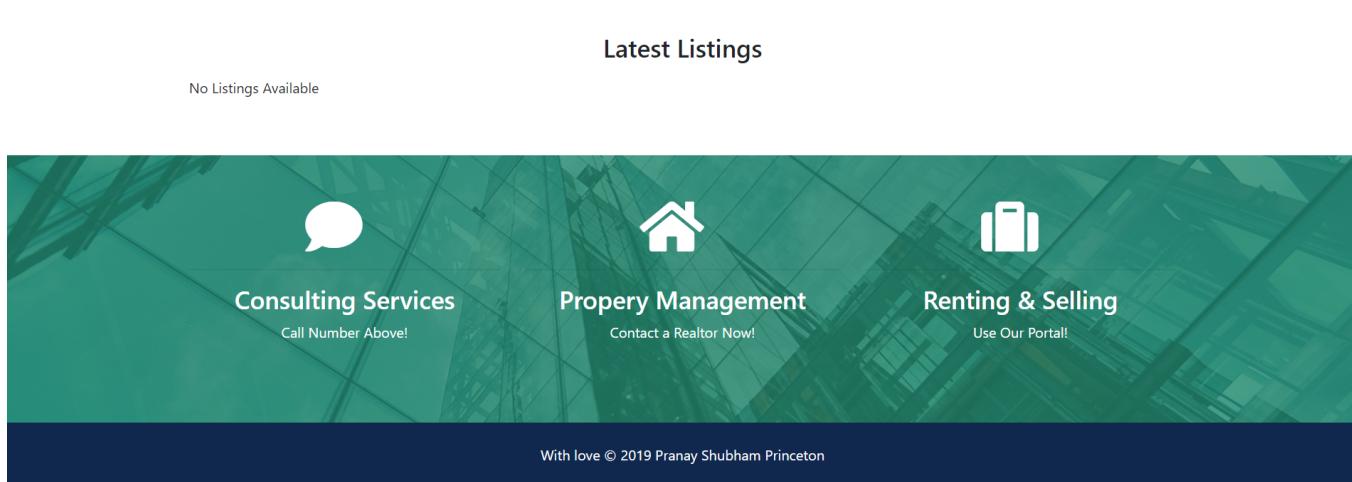
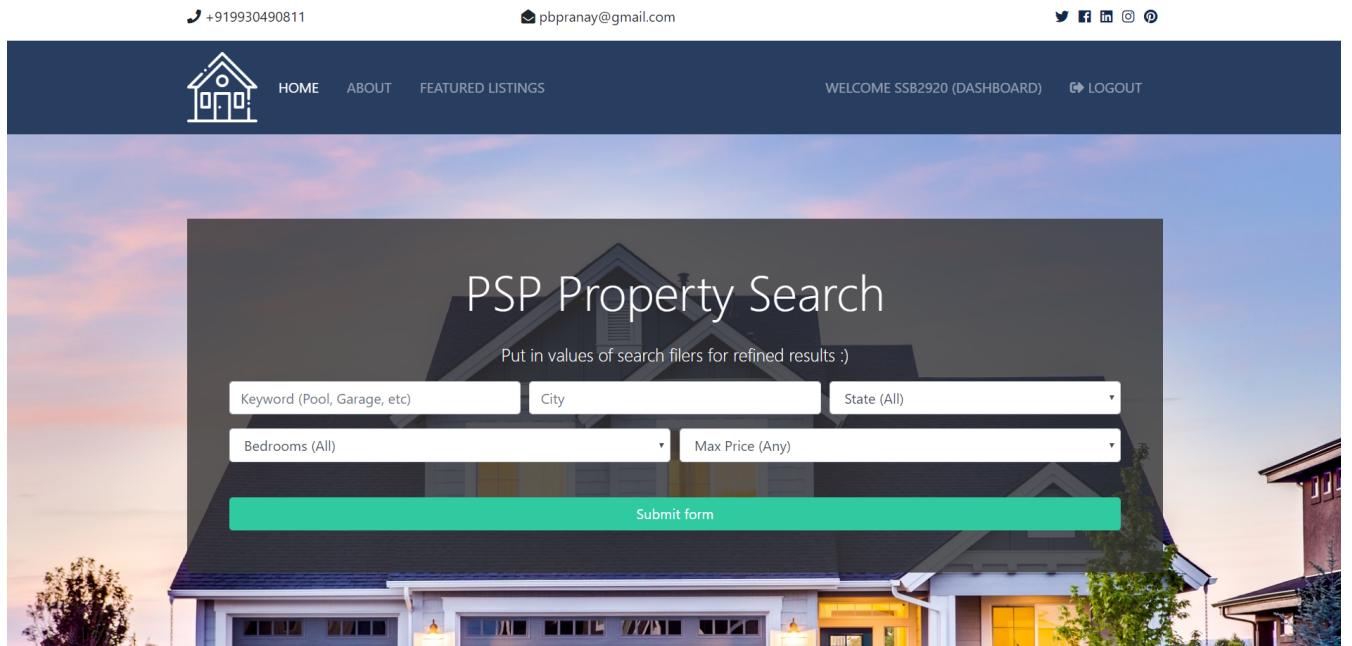
USER

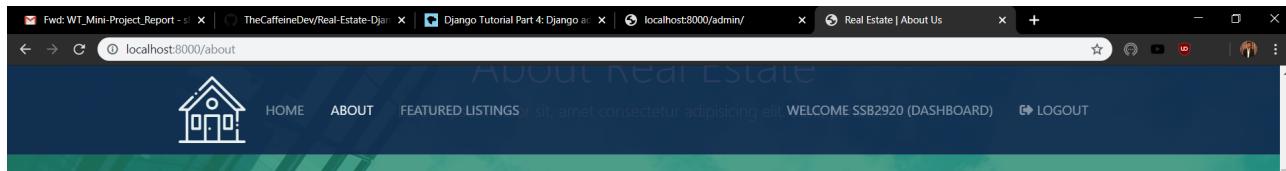
- id: INT
- user_id: INT
- listing: INT
- listing_id: INT
- name: STR
- email: STR
- phone: STR
- message: TEXT
- contact_date: DATE

1.2 E-R Diagram



1.3 Application User Interface



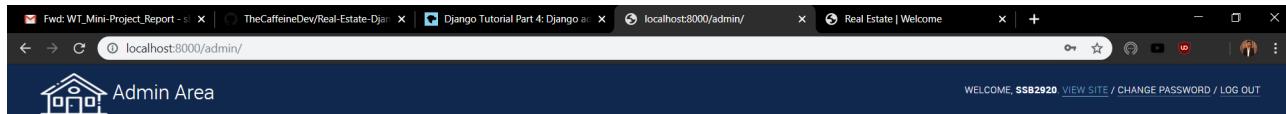


Home / About

We Search For The Perfect Home



A home is a cherished memory that lasts forever, it is where the walls embrace memories, the ceilings shelter love and laughter, where the quiet corners offer a much-needed pause and life itself becomes a reason to celebrate. So to make this journey joyful, we begin by partnering with our customers from the start and being there when it matters the most - right from online search to brokers to home loans to paperwork to finally finding that perfect home.



Site administration

AUTHENTICATION AND AUTHORIZATION

Groups	+ Add	Change
Users	+ Add	Change

CONTACTS

Contacts	+ Add	Change
----------	-----------------------	------------------------

LISTINGS

Listings	+ Add	Change
----------	-----------------------	------------------------

REALTORS

Realtors	+ Add	Change
----------	-----------------------	------------------------

Recent actions

My actions

None available



Conclusion

The project is to bring the real estate industry online and enabling real estate industry participants to benefit from the Internet. Site acts as an interface between Individuals, brokers and realtors. Here the user can advertise his property for buying or for selling.