

Real-Estate Management System

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Abstract: As resultant of this vast market real estate management system has evolved to ease the property transaction and help the users to have a unified experience. It has three user roles: Users, Register Officers, and Admin. Services: Users register and login (after admin approval), upload info of land or flat, view and filter properties, apply for properties, transact payments and follow up on bought or owned properties. Register Officers register, login (subject to admin approval), approve requests for registration and view registration transactions. The Admin manage the system Register Officers and Users approvals and track platform activities in general. It is also equipped with a chatbot based help desk for support makes communication and for users quite easy and supportive.

Keywords: Real Estate Management, Property Transactions, User Roles, Chatbot Support, Admin Approval System.

I. INTRODUCTION

As of today, the real estate/realtor industry is one of the greatest economic promoters for growing nations, and to maintain regular dealings of properties, there should be an orderly and effective management. Traditional property transactions with paperwork, slow and clunky approvals process, and lack of good communication can go on for ages, taking a long time for the government, buyers and the sellers. Moreover, existing real estate systems are not end-to-end and role-based, which makes it difficult to process applications of property registrations, agreements/approvals, and transactions. The demand for fast, simple real estate services is high, which calls for a system that makes not only properties easy to manage but also provide easy interaction between parties that are involved.

This project proposes a web-based Real Estate Management System which offers a useful method of property listing, approval and transaction by an organized approach and an efficient role-based workflow to solve these challenges.

You are someone who is trained how the system organizes users in three roles, Users, Register Officers and Admins. The users can register, post properties and view available properties, request transactions and process payment while the Register Officers can check and confirm property transactions. They administer the site, authenticate the users, provide a structure to the system of property management. The system also includes a chatbot-based help desk that helps users navigate problems related to property listing and transactions, and increases the efficiency of interaction. Through the use of technology to automate and organize real estate activities, the platform fills the gap between conventional property transactions and new digital solutions, offering an expandable and flexible method of real estate management.

II. EXISTING SYSTEM

Real estate transaction management systems are currently executed using manual processes or using point solutions software not efficient or centralized. While this is done over separate, unlinked networks, the users around them have to take up the job of reconciling grids, payment processing and property tracking. The real estate problems of inaccuracy and inconsistency, aka mismanagement and delays, lie in the multi-point process.

Also, Register Admins and Officers will face issues as they rely on multiple systems to process approvals and register a request. The absence of connection between these systems leads to communication bottlenecks and delays in processing user requests that take time. Hence, the entire process of property listing verification, transaction approval and regulatory compliance takes time, therefore the overall efficiency of real estate management process is low.

Moreover, in traditional help desk methods, given that they are resource-intensive, time-consuming, and usually inefficient, users lose timely support when they need instant responses to their queries. If not wrangled up with the process, users will get stuck with queries relating to property, becoming frustrated and burnt out. Lack of features like chatbots hamper user experience as well so a solution that is more interactive, organized and efficient in real estate management is needed.

DISADVANTAGES

Slowness: The manual registration and approvals slow down the entire approvals and transactions.

Broken down abstract: This breaks down communication into gaps, therefore, spoiling the smooth property management.

Lack of proper Support: Chatbots, as one of the effective smart features, have poor User Support. It has large gaps in communication between buyers, sellers, Admins, as well as Register Officers, which leads to bad performance in registering and approving.

Risk of Manual Procedures and Inconsistencies: The use of manual input along with cross checking of data adds time to the transactions and incorrect recording of the property.

Self Service Mechanism Not Implemented: The current system don't have any self service mechanism such like a chatbots which would make it difficult for customers to get the responses with immediate effect thereby making additional work for the support personnel.

III. PROPOSED SYSTEM

Proposed Real Estate Management System is to take property transactions to another level by having a simple, secure, efficient system for all to participate. Users sign up and will be approved by admin, they upload property data, then they can search and filter listings, make a request, which includes a payment request, and finally track transactions. Processing of the registration request and following up registration transactions are the responsibilities of the Register Officers. The site's activity and approvals is tracked and processed by admins to ensure that system integrity is maintained. A super way is to incorporate a chat based helpdesk due to which you can provide instant support and seamless communication to the users and provide a good user experience. The system uses the latest systems technology to help run a real estate transaction more easily, more clearly, and more trustably.

ADVANTAGES

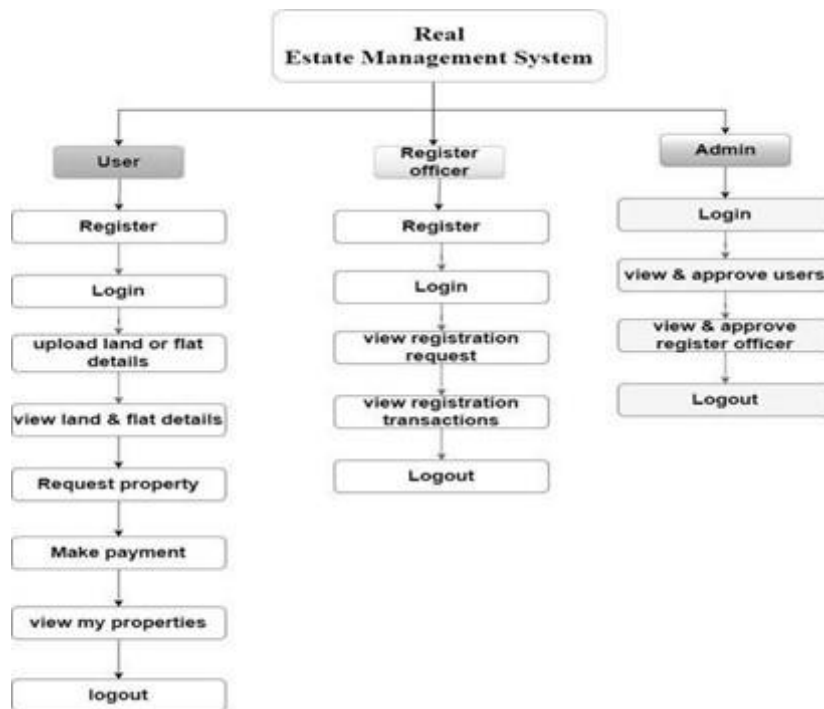
Less Effort: The transactions can be done easily and in reduced effort. Easy to use: An easy to use interface coupled with better filtering and chatbot support will make using this website simple.

Systematic Control: Admin and Register Officer positions bring about greater transparency and enforcements in terms of compliance and good practice.

Ease of Setup and Scalability: It is easy to set up the system to a large amount of users and future proof in technology advancements.

Specific Needs Tailoring: The site also offers specific needs tailoring in terms of the requirements of real estate agencies and individual agents.

Design:



The Real Estate Management System has three user roles User, Register Officer and Admin, having each one with different functionalities. Users log in, register, upload the info about land or flats, view all available properties, apply a property, pay, and follow up to purchased properties until he logs out from the account. Users can register and request for registration, while the Register Officers log in to register or accept and reject registration requests and track registration transactions. Users are registered and office mongers are authorized for easy operation before the admins log out and log in to manage and authorize users. This sequential flow makes the properties easy to exchange, validate secure, and can be effectively managed.

IV.EXPERIMENTAL RESULT

This was tested thoroughly using almost all there are of unit testing, integration testing, black box testing and white box testing. As expected, the modules worked out well, performing smoothly in only property listings, user requests, and money transactions. The user registration and authentication worked perfectly as only authenticated user is able to access the system. The attempts were blocked to access, which improved the security of the system.

It also compares the system with the conventional and automated system for its efficiency. Unlike in conventional property transaction users, in the proposed system, the paperwork and manual approvals are automatically carried out without delays, so the approvals will be shorter and operations will be important. The conventional systems have lower security as it's based on manual authentication whereas the proposed system follows encryption, secured authentication and fraud detection mechanisms which secure and transparent process in the transaction. As a whole, the Real Estate Management System has been a success in accomplishing it's goal of increasing efficiency, security and usability.

User(Admin) Actions:

- It can edit, add or delete attributes, users and also roles.
- Manages all the system
- Oversees financials, transactions, and reporting.
- Is capable of creating or editing user accounts with roles assigned.
- It is responsible for tracking system usage and for managing security settings.
- Provides support to other users.

User Screens

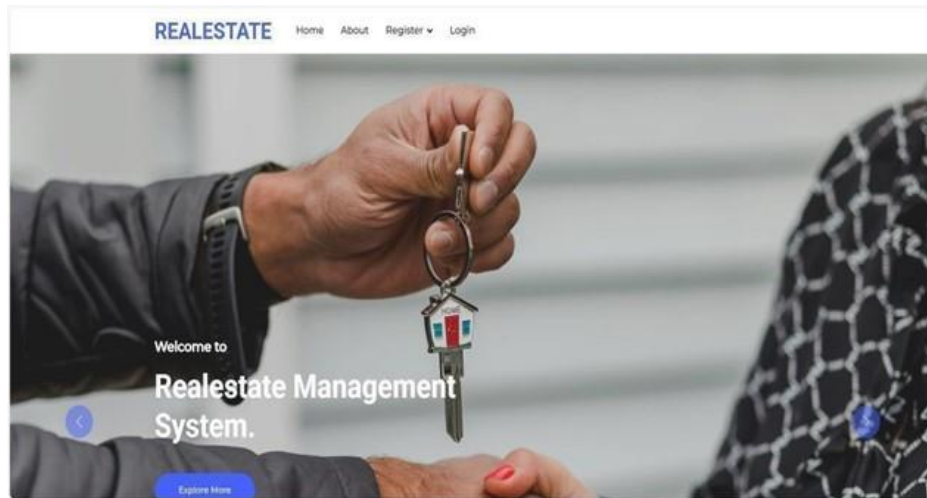


Fig. 1: Home Page

Homepage of the shown Real Estate Management System website is minimalist, clean and a screenshot included. The Header contains a little navigation bar with links Home, About, Register and Login and with the logo of 'REALESTATE'. Welcome to Real estate Management System is the heading which is under the hero section with the background image of the person handing over the house key (as it is done with the transfer of the property). The rhetoric of the user is embraced through a prominent "Explore More" button.

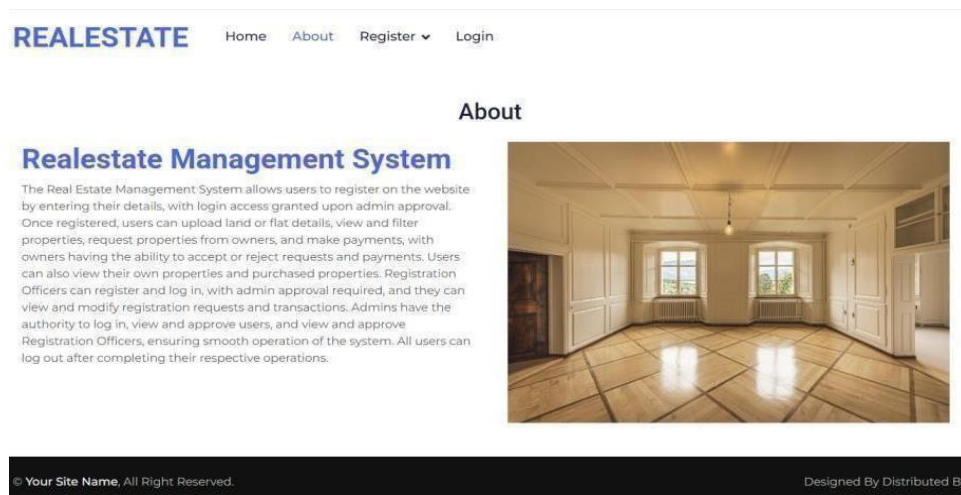


Fig. 2: About Page

ID	User Name	Email	Location	phone	Status	Action
1	shiva kumar	shiva@gmail.com	madurai	95234541	Approved	Reject
2	shiva kumar	shiva@gmail.com	delhi city	88788781	Approved	Reject
3	shiva V	shiva@gmail.com	Hydrabad	7867456	Approved	Reject
4	shiva kumar	shiva.kumar20@gmail.com	27-05-24, India	83713238	Pending	Approve Reject

Fig. 3: Admin approvals

The About of the Real Estate Management System provides introduction about its basic features; including registering, logIn, view property, requesting ownership, and payment. Listings are managed by property owners, administrators regulate users and approve them, while Registration Officers are responsible for approving them. It has to do with role based access control, that is, operation should be smooth and safe transactions should happen as well as efficient management of properties.

Conductor View Route screen of a bus route management software. There are two ways for Conductor to select the starting point of the bus route from which to start a session: using a drop-down menu and by clicking on a “Session” button. In the selected route, a list of bus stops that have been traversed appears on the screen as well. At the bottom, a message is given stating that the session has been successfully started.

Fig. 4: User Registration

Fields in our Real Estate Management System User Registration Form include Full Name, Email, Password, Phone Number and Address. For repeat users, a login link is provided and for submitting there is a 'Register' button.

User Actions:

- The user's query is extracted and the user should make a response to the query.
- The user can ask if they like the properties and pricing total, but the user can also ask an other property.
- If it succeeds it will show the response on screen to process to other steps.
- This gives them flexibility to edit or delete information they had uploaded regarding property.
- These details like document writer names that are registered in the document writer, the names of the register officer, can also be gotten by the user.



Fig. 5: User Login Form

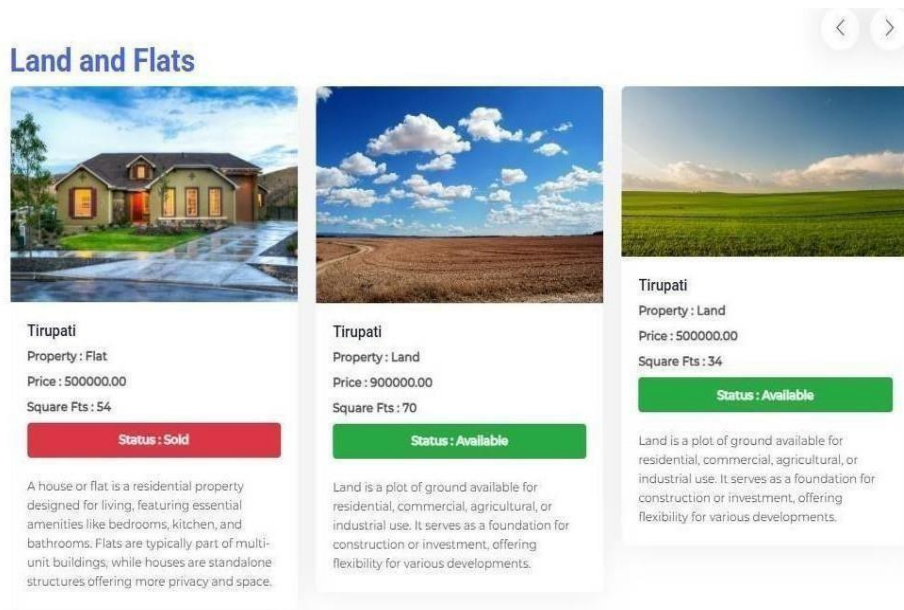


Fig. 6: Properties Details

After logging in, a user is directed to the property listing page under "Land and Flats" category, where he/she can view different Supreme available properties (flats, land). The general info of each listing includes the type of property, its price, the location and the status of the property; sold out or not. Each listing consists of image, brief description and a red or green indicator of status so that better user experience will be provided. The users can upload their own flat or plot photos to post them to view as possible buyer or renter. Users are expected to respond on to system fetches, and such requests are aims. If a user should like a property and is satisfied with the price information, he or she can apply for further

processing. Once you accept the request, the response will be shown on the response screen where the user can move to the next steps. Users are also able to see document writer details and the name of officers whose names are registered.

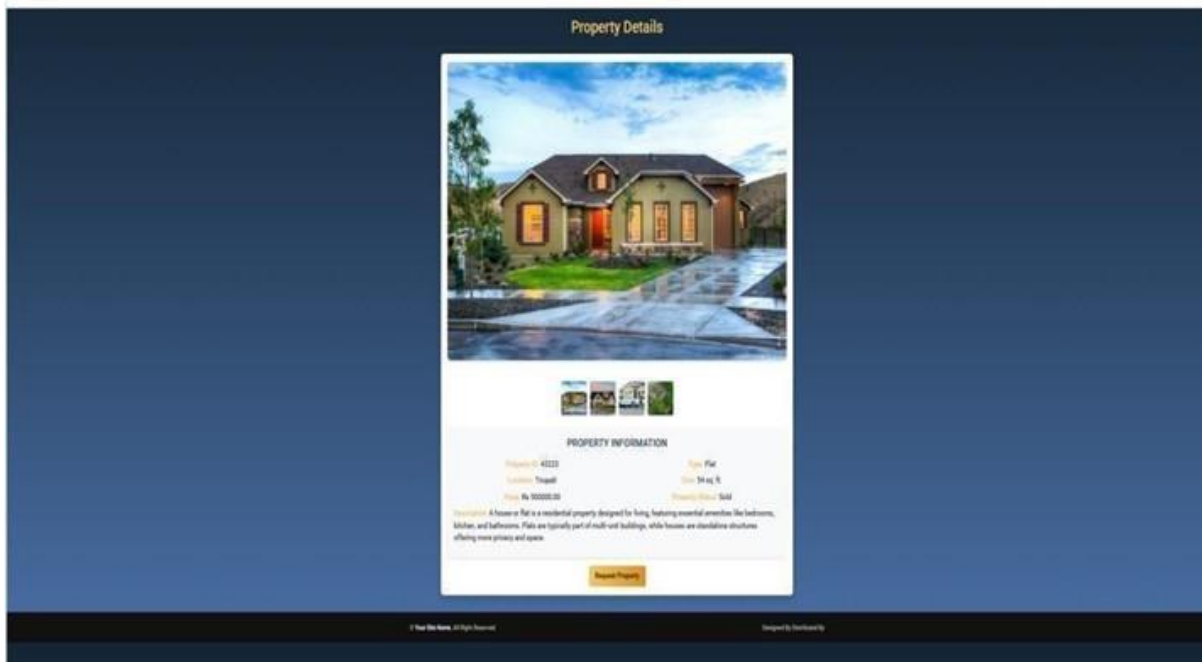


Fig. 7: About a particular property detail

In the above picture, the details about the particular property that is the availability status along with price size etc give the user an option to give them the request if it is available.

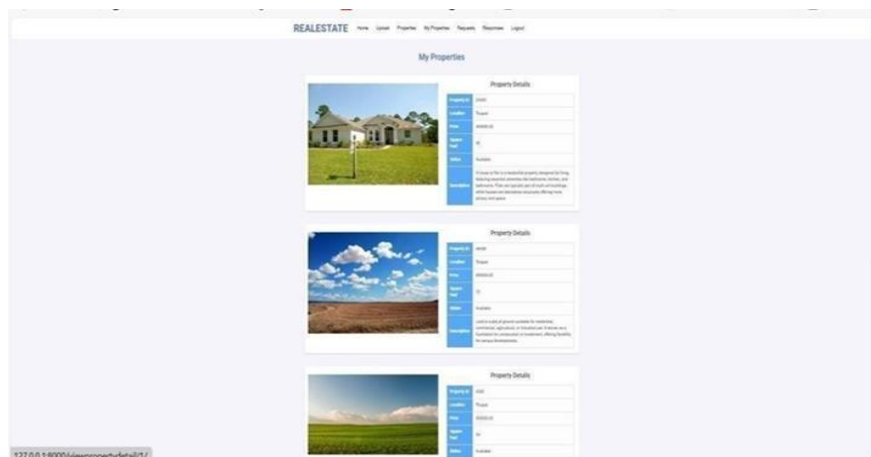


Fig. 8: Property Listings

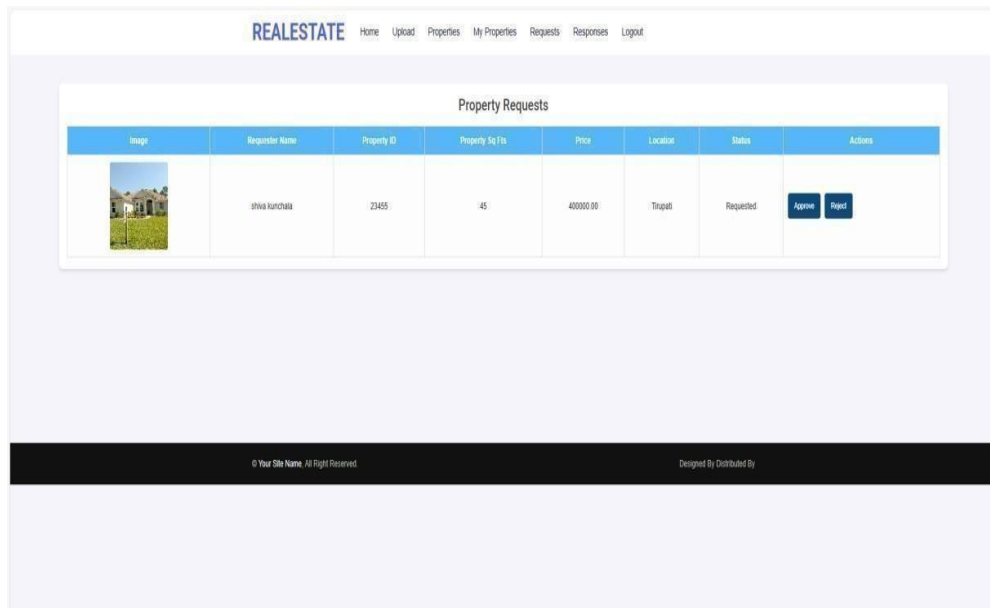


Fig. 9: Request Page

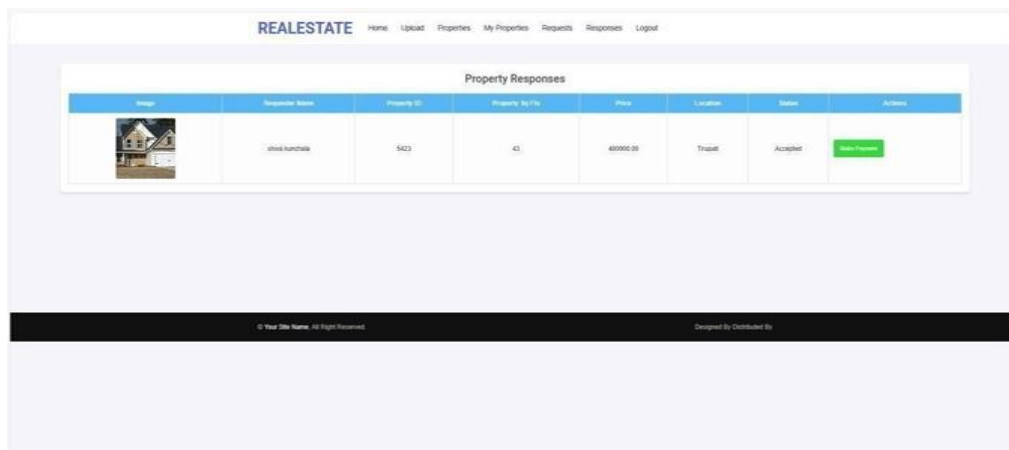


Fig. 10: Response Page

V. CONCLUSION

In this regard, the property transactions are converted to a simple, secure and effective way for the users, the Register Officers and Admins. The system embraces property listing, filtering and payment features thereby allowing one to easily manage property when the system is embraced. Accurate registration processes are enabled by Register Officers, and

Admins give approvals and integrity to the site. With chatbot integrated help desk, users are assured improved user experience as it adds user friendliness of communication and instant support. The thorough system improves the community's transparency, efficiency and user satisfaction in real estate operations. The platform is innovative and makes bargaining of properties easier and at the same time serves as a benchmark in innovating real estate management that takes into consideration the normal needs of all its stakeholders.

VI. REFERENCES

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