A Mini Project Report on

House Marketplace

T.E. - I.T Engineering

Submitted By

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CERTIFICATE

This to certify that the Mini Project report on **House Marketplace** has been submitted by Jateen_Tirlotkar (20104091) , Raj_Solkar (20104087) and Devesh Zope (20104086) who are a Bonafide students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfillment of the requirement for the degree in **Information Technology**, during the academic year **2022-23** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

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ABSTRACT

House marketplace is a location where people can regularly gather the purchase and Sell of Flats. Housing market analysis has witnessed considerable changes in recent decades, especially as a result of the complexity of human settlements and the dynamics of property market analytical techniques. This paper reviews various techniques/methods adopted by researchers and housing experts in analyzing the housing market in recent times. The present study is a literature review and, therefore, essentially relies on published data sourced from academic journals, conference papers, thesis, and other secondary sources. The paper highlights the methods considered appropriate and relevant for different property market scenarios, especially in developing countries. The paper, therefore, recommends what it regards as the most appropriate basis for a housing market analysis and research in developing countries against the backdrop of the dynamics of the property market

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Chapter 1

Introduction

House marketplace is a location where people can regularly gather for the purchase and sale of Flats.It is a property portal which deals with every aspect of the consumers' needs in the real estate industry.One stop solution for Residential properties for rent,buy,sell without Brokerage.House marketplace app is a Revolutionary tech platform that helps you Sell or Rent your property quickly, easily and more securely.Can be useful to students/employees for finding nearby apartments.We will see the entire system more interactive and try to bridge between user and developer. One can easily navigate and visit numerous properties digitally in a matter of seconds. The user will able to use search bar functionality to get information. Filter for searching the property as per location, pricing,carper area wise will be added as per the future scope of the project.

1.1 Purpose

Brickz is a disruptive real-estate platform that makes it possible to buy/sell/rent a house without paying any brokerage. The main purpose of starting Brickz was that paying hefty brokerage can not be the only option to find a new home. As tenants, we have been paying these brokerages year on year without seeing any advantage of the broker. The only reason he existed was that there was a huge information asymmetry in the market. Brickz is a platform that removes this information asymmetry and provides a marketplace for free exchange of this information that used to cost 1-2 months of rent as brokerage.

1.2 Problem Statement

Earlier Customer used to walk into the Developers office asking for required property walks into the developers office asks Developer for required property.Developer searches for named properties/location/flats among cluster/group of books.After finding out it serves to the customer.If customer is interested in buying that flats, Developer sales the flat by completing all formalities, and makes entry into the Customer Details Register manually.All the permanent data of the order such as the name of the property/flat, Estate_ID, as well as name of buyer/customer, Member ID and so on are maintained in a master file for future reference.The customer has the option of paying by cash or check or credit card.At the time customer pays the price he is issued a receipt acknowledging the

same. BRICKZ is nothing but a website that is supported by a database.It consists of data-entry of forms,in which the customers can fill-up the data. After validation, the data can be added to the database the owner can search,view, and records.

1.3 Objectives

1. The platform offers end-to-end one-stop solution for property seekers.
2. To build a user friendly platform so customers can adapt it easily.
3. To provide various options for buyers in one place.
4. To provide suggestions on buying, selling, and leasing of properties as well.

1.4 Scope

Brickz is a website design to handle the basic tasks of the House marketplace. Hence the main function of this system is to convert the manual trading service of flats in the better quality service that customers want.

- Allows the customer to view details of various flats available.
- Add the Flats/Houses to the Stock.
- Allow admin to check the availability of the flats.
- Customers can view all Flats online.
- Displays the details like customer details, rates of flats, locations, remarks details etc

Chapter 2

Literature Review

The housing market is very imperative because of the place it holds in the economy (Seo, 2008). Housing construction easily contributes to the Gross Domestic Product (GDP) and its market has a direct impact on the national and international economy (Hu, Cheng, Wang, & Xu, 2013). Consequently, immovable characteristics of housing (Renigier-Biłozor, Biłozor, & Wisniewski, 2017), its location (Cichociński & Dąbrowski, 2013), its importance in the broader economy (Hill & Scholz, 2017), the growing urban population coupled with rising problems of adequate and affordable housing and complex human settlement (UN-Habitat, 2011) and several factors that determine housing price (Mohammed & Sulyman, 2019a) necessitate different approaches to a housing market analysis. Scholars have adopted and developed several conventional methods for the housing market analysis (Mohammed & Sulyman, 2019a). These methods include: hedonic model (Yusuf & Resosudarmo, 2009), logit model (Brounen & Kok, 2011), matched pair audits method (Hanson & Hawley, 2011), spatial approach (Mohammed & Sulyman, 2019b), space syntax (Xiao, 2012), dynamic general equilibrium model (X. Li & Tang, 2018), agent-based model (Ge, 2017), analytical hierarchy process (Tupenaite, Kanapeckiene, & Naimaviciene, 2017), multiple regression model (Wickramaarachchi, 2016), local projection method (Cameron, 2018), ordinary least squares (Zhang & Zhao, 2018), cluster analysis (Guan & Gao2018), month-based model (Bérard & Trannoy, 2018), Mahalanobis-metric matching model (Jung & Yoon, 2018) and artificial neural network model (Del Giudice, De Paola, & Forte, 2017). However, few among these methods are widely used in the literature of the housing market. Some of these methods are modifications of other models, while some are independent. These methods are frequently adopted by scholars in the housing market analysis. These are: multiple regression model, hedonic model, spatial approach, artificial neural network model, and mixed methods. It is therefore imperative to review these methods of housing market analysis. The goal of the study is to review the empirical literature on methods in the housing market analysis in order to examine the best methods for different scenarios.

The literature dealing with homeownership and life satisfaction is surprisingly scant.More importantly, the majority of the literature available to date not only considers the relationship between homeownership and life satisfaction, but between homeownership

and various other characteristics. These include social aspects like neighborhood stability or social involvement. Dietz and Haurin (2003) provide a literature review on various important social and economic benefits of homeownership. They highlight fundamental differences in the behavior of homeowners and related agencies, but emphasize the need for further research, using more advanced econometric methods. Overall, however, the limited empirical evidence indicates a positive relationship between homeownership and life satisfaction (Rohe et al., 2002).

Housing satisfaction is the degree of contentment experienced by an individual or a family member with regard to the current housing situation. Varady & Preiser (1998) defined Housing satisfaction as the "perceived gap between a respondent's needs and aspiration and the reality of the current residential context". The concept of housing satisfaction has been used as a key predictor of an individual's perceptions of general "quality of life" (Djebarni & Al-Abed, 2000). According to Ogu (2002) the concept of housing or residential satisfaction is often employed to evaluate residents' perceptions of and feelings for their housing units and the environment.

Mary and Surulivel (2014) carried out a Study on Buyer Satisfaction in Residential Apartment With Reference to VGN Infra Pvt. Ltd. The study observes the performance of the construction company and its customer satisfaction. The performance is calculated according to the degree of customer satisfaction as professed by customers themselves. Structured questionnaire is used to evaluate the satisfaction level of the customers. percentage analysis, chi-square analysis and frequency analysis were used to evaluate the result. The result of this study discovered that the location and before and after sales services provided by the construction company has a major influence on customer satisfaction. Results also indicate that the company should improve its performance in quality assurance, customization, handover procedures and its related areas.

Chapter 3
Proposed System

- The proposed system is a web-based application and maintains a centralized repository of all related information.
- User's data/ information can be stored for a longer period with easy accessing and manipulation of the same. The project describes how to manage good performance and better services for the clients.
- The Brickz is designed in order to eliminate the problem of the current system. This accessibility of the information will be a great advantage as it reduced effort.
- The system handles all aspects of viewing and bidding of the property, It allows the seller to post the property, delete the property and modify the current property.

3.1 Features and Functionality

- **Registration** - After filling the required data, the client can register in our proposed system. User will be able to Login into the system with his unique username and password.
- **Add Propert**y- Property can only be added by the authenticated users.
- **Manage Profile**- User can view, update or delete the profile of their own.
- **Manage Property**- Property management can be done by the user in which the user has a facility to view, edit or delete it.

Chapter 4

Requirement Analysis

Feasibility Study -

Whenever a new system (hardware or software) is to be introduced, there is a need to study every aspect or manner before working on it. The four main consideration of the study are:

1. Time Feasibility: Time feasibility refers to the time management of the project. It refers to the time and process incurred during the development of the project.

2. Technical Feasibility: Technical feasibility refers to technical knowledge and auxiliary devices required. Since our project is in Visual Basic 6 so we need to have a strong base of this programming language. And programming language we have used is React JS.

3. Costing Feasibility: Costing Feasibility refers to the cost the project members have done toward the project since our project is tried to be made as economical as possible.

4. Economical Feasibility: he hardware/software setup required is that the proposed system can be easily run on any dual core smartphone and as the software used to build system is Visual Studio code in windows 10 or we can build this in Linux also. So it does not cost high.

5. Operational Feasibility: Operational feasibility means it is possible to practically implement the project. While installing this software, the hardware, and software. One of the objectives of developing and user friendly application apart from speeding of the operation is that users do not face any problem while making any plans depending on the weather

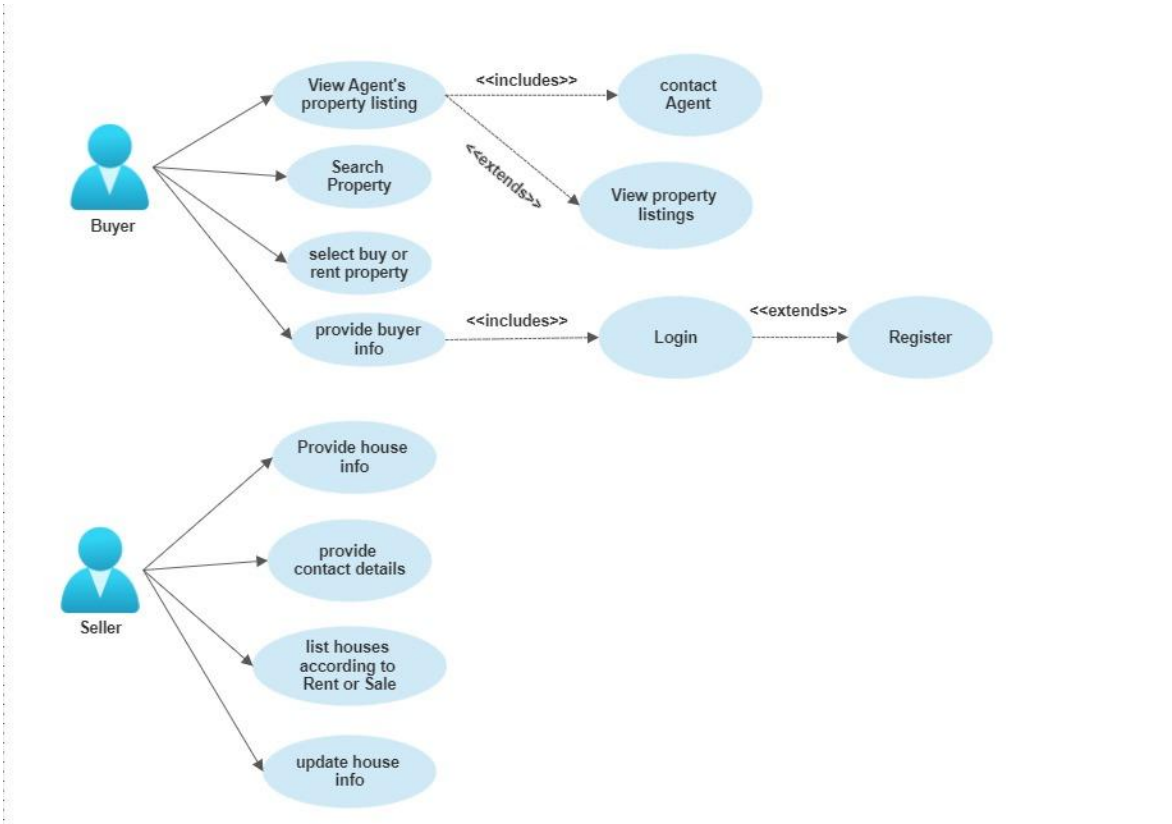
Chapter 5

Project Design

In this phase, a logical system is built which fulfils the given requirements. Design phase of software development deals with transforming the client's requirements into a logically working system.

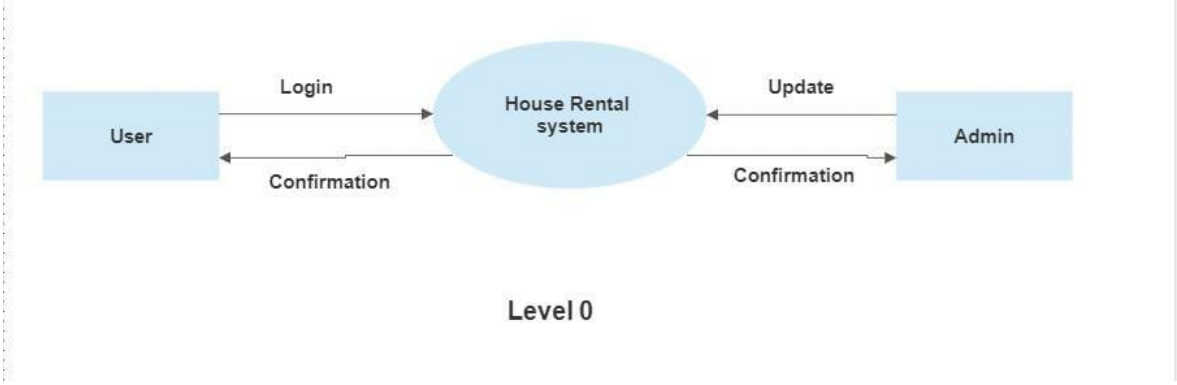
5.1 Use Case Diagram

In the Unified Modeling Language (UML), a use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system.To build one, you'll use a set of specialized symbols and connectors.

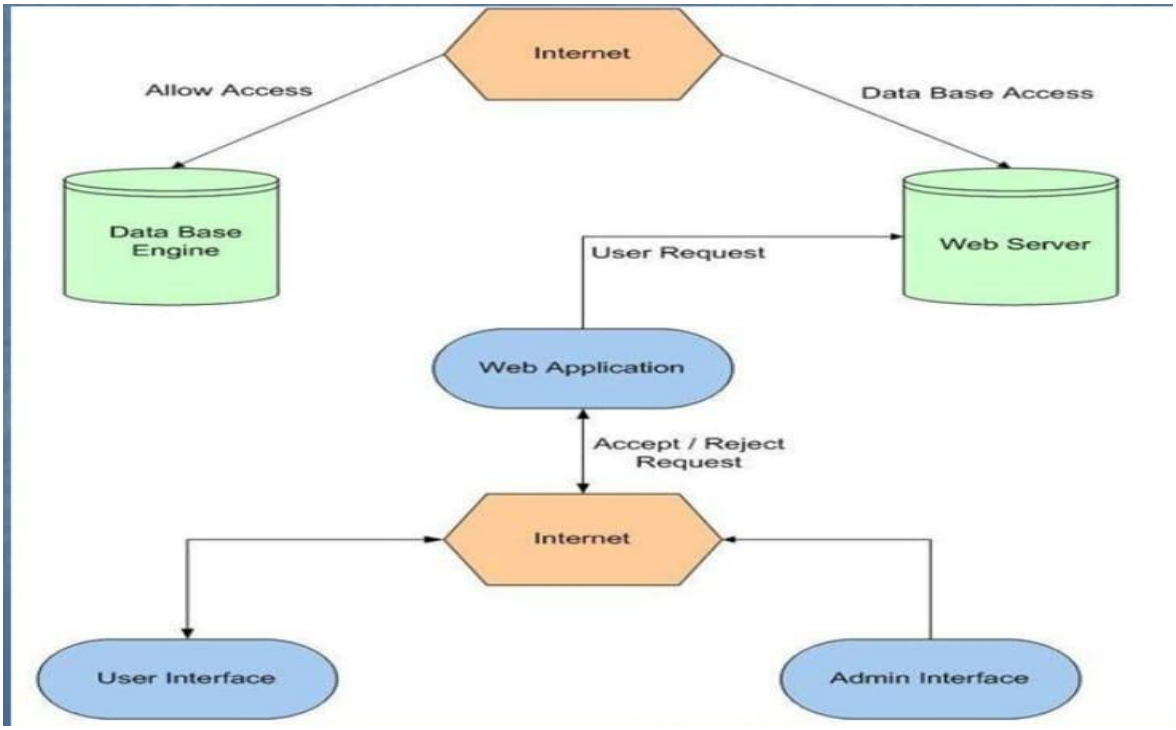


5.2 Data Flow Diagram(DFD)

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. Data flowcharts can range from simple, even hand-drawn process overviews, to in-depth, multi-level DFDs that dig progressively deeper into how the data is handled. They can be used to analyze an existing system or model a new one.



5.3 System Architecture



Chapter 6

Technical Specifications-

Hardware Required :

1. Standard computer with at least i3 processor Standard computer with 4GB of RAM
2. Standard computer with 100GB of free space
3. Active Internet Connectivity with good bandwidth.

Software Required :

1. React JS
2. HTML , CSS , JavaScript
3. Visual Studio
4. Firebase
5. API

Operating System :

1. Windows 10

Chapter 7

Project Scheduling

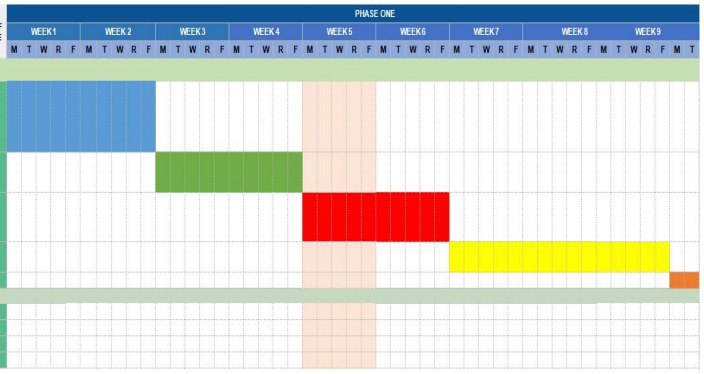
PROJECT TITLE House Market place

PROJECT GUIDE Ms.Yaminee Patil

INSTUTUTE & DEPARTMENT AP SHAH INSTITUTE OF TECHNOLOGY(Informatior

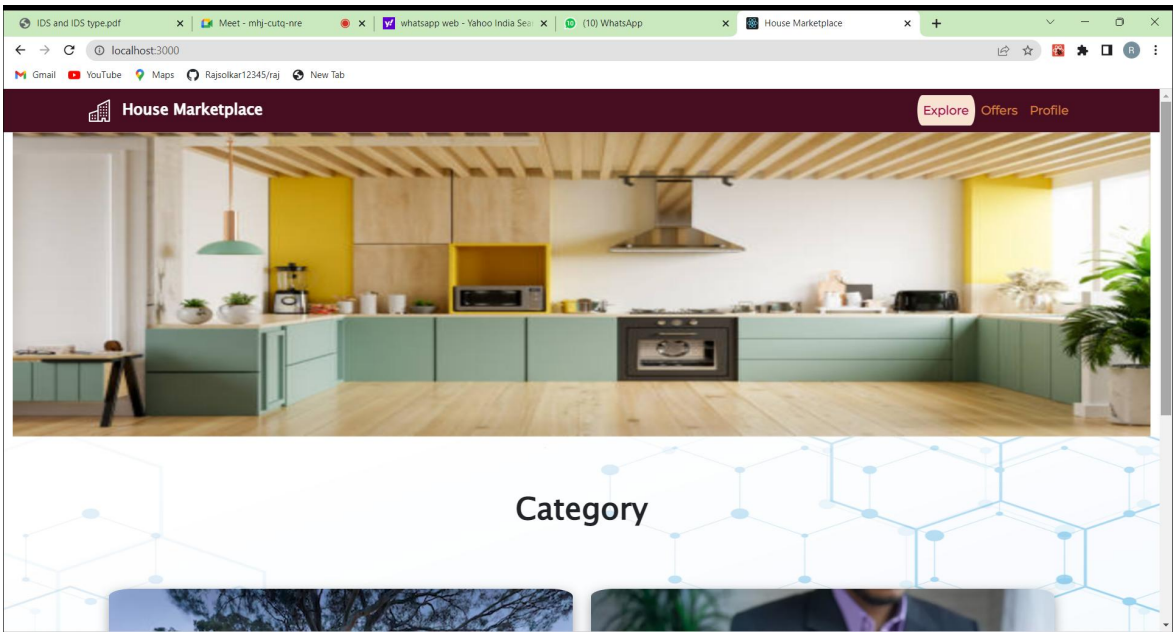
DATE 14-3-2022

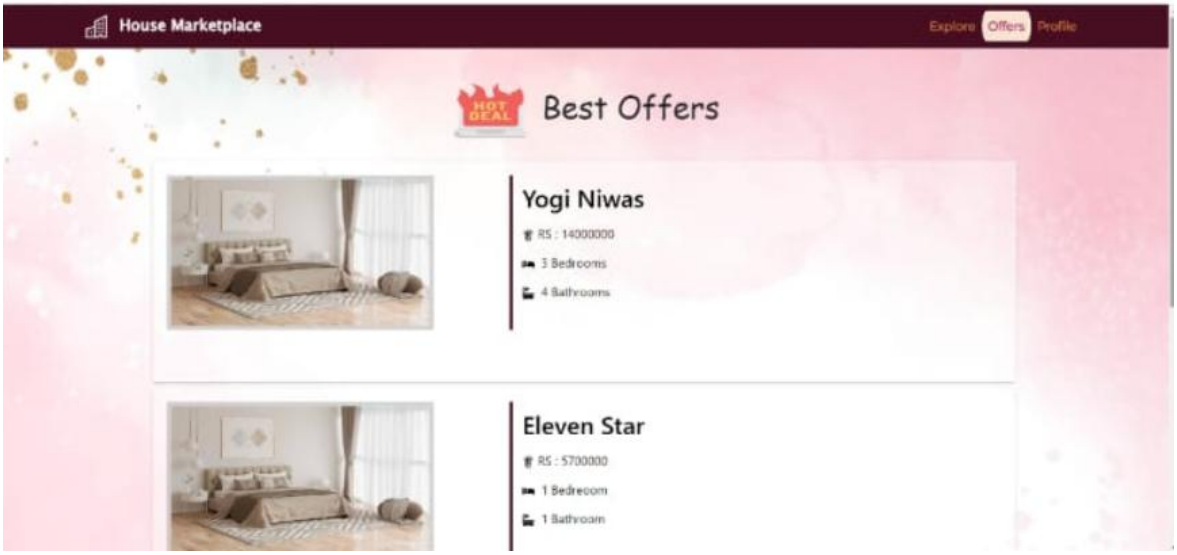
WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION (Weeks)	PERCENTAGE OF TASK COMPLETE
1	Project Conception and Initiation					
1.1	Group formation and Topic finalization. Identifying the scope and objectives of the Mini Project	Jateen	7-11-22	7-22-22	2	100%
1.2	Identifying the functionalities of the Mini Project	Devesh	7-25-22	8-5-22	2	100%
1.3	Discussing the project topic with the help of paper prototype.	Jateen,Raj,Devesh	8-8-22	8-19-22	2	100%
1.4	Designing the Graphical User Interface(GUI)	Raj	8-22-22	9-9-22	3	100%
1.5	Presentation I	Jateen,Raj,Devesh	9-12-22	9-16-22	1	100%
2	Project Design and Implementation					
2.1	Detail website Design	Jateen,Raj,Devesh	9-19-22	9-23-22	1	100%
2.2	Integration of all Webpages	Jateen	9-26-22	9-30-22	1	100%
2.3	Report Writing	Jateen,Raj,Devesh	10-3-22	10-7-22	1	100%
2.4	Presentation II	Jateen,Raj,Devesh	10-10-22	10-14-22	2	100%



Chapter 8

Implementation





Chapter 9

Result and Discussion

App.js M

src > App.js > ...

```
import React from "react";
import {BrowserRouter,Routes,Route} from 'react-router-dom'
import { ToastContainer } from 'react-toastify';
import 'react-toastify/dist/ReactToastify.css';
import PrivateRoute from "./components/PrivateRoute";
import Category from "./pages/Category";
import ForgotPassword from "./pages/ForgotPassword";
import HomePage from "./pages/HomePage";
import Offers from "./pages/Offers";
import Profile from "./pages/Profile";
import Signin from './pages/Signin';
import Signup from './pages/Signup';
import CreateListing from './pages/CreateListing';
import Listing from "./pages/Listing";
import Contact from "./pages/Contact";
import Gpay from "./pages/Gpay";

import EditListing from './pages/EditListing';




function App() {
  return (
    <BrowserRouter>
    <ToastContainer />
    <Routes>


      <Route path="/" element={<HomePage/>} />
      <Route path="/offers" element={<Offers/>} />
      <Route path="/category/:categoryName" element={<Category/>} />
      <Route path="/editlisting/:listingId" element={<EditListing/>} />
      <Route path="/signin" element={<Signin/>} />
      <Route path="/profile" element={<PrivateRoute/>} >
        <Route path="/profile" element={<Profile/>} />


      </Route>

      <Route path="/signup" element={<Signup/>} />
      <Route path="/contact/:landlordId" element={<Contact/>} />
      <Route path="/forgot-password" element={<ForgotPassword/>} />
      <Route path="/create-listing" element={<CreateListing/>} />
      <Route path="/gpay" element={<Gpay/>} />
      <Route
          path="/category/:categoryName/:listingId"
          element={<Listing />}
        />
      <Route path="/offers" element={<Offers/>} />



    </Routes>
```

HomePage.js M

src > pages > HomePage.js > HomePage

```jsx
const HomePage = () => {
  const navigate = useNavigate();
  const img1 =
    "https://images.unsplash.com/photo-1600585154340-be6161a56a0c?ixlib=rb-1.2.1&ixid=MnwxMjA3fDB8MHxzZWFyY2h8Mnx8cHJvcGVydHl8ZW58MHx8MHx8&
  const img2 =
    "https://images.unsplash.com/photo-1626178793926-22b28830aa30?ixlib=rb-1.2.1&ixid=MnwxMjA3fDB8MHxzZWFyY2h8M3x8cHJvcGVydHl8ZW58MHx8MHx8&
  return (
    <Layout>
      <Slider />
      <div className="home-cat row d-flex align-items-center justify-content-center">
        <h1>Category</h1>
        <div className="col-md-5 ">
          <div className="Imagecontainer">
            <img src={img1} alt="Rent" style={{ width: "100%" }} />
            <button className="btn" onClick={() => navigate("/category/rent")}>
              FOR RENT
            </button>
          </div>
        </div>
        <div className="col-md-5">
          <div className="Imagecontainer">
            <img src={img2} alt="Rent" style={{ width: "100%" }} />
            <button className="btn" onClick={() => navigate("/category/sale")}>
              FOR SALE
            </button>
          </div>
        </div>
      </div>
    </Layout>
  );
};

export default HomePage;
```

Offers.js M

src > pages > Offers.js > default

```jsx
import React, { useEffect, useState } from "react";
import Layout from "./../components/Layout/Layout";
import { IoReloadCircle } from "react-icons/io5";
import "../styles/offers.css";
import { db } from "./../firebase.config";
import { toast } from "react-toastify";
import {
  collection,
  getDocs,
  query,
  where,
  orderBy,
  limit,
  startAfter,
} from "firebase/firestore";
import Spinner from "../components/Spinner";
import ListingItem from "../components/ListingItem";

const Offers = () => {
  const [listing, setListing] = useState("");
  const [loading, setLoading] = useState(true);
  const [lastFetchListing, setLastFetchListing] = useState(null);

  //fetch listing
  useEffect(() => {
    const fetchListing = async () => {
      try {
        //refrence
        const listingsRef = collection(db, "listings");
        //query
        const q = query(
          listingsRef,
          where("offer", "==", true),
          orderBy("timestamp", "desc"),
          limit(10)
        );
        //execute query
        const querySnap = await getDocs(q);
        const lastVisible = querySnap.docs[querySnap.docs.length - 1];
        setLastFetchListing(lastVisible);
        const listings = [];
        querySnap.forEach((doc) => {
          return listings.push({
            id: doc.id,
            data: doc.data(),
          });
        });
        setListing(listings);
        setLoading(false);
      } catch (error) {
        console.log(error);
        toast.error("Unble to fetch data");
      }
    };
    //func call
```

Chapter 10

Conclusion and Future Scope

Real estate marketplaces take time and effort to build, but they generate high demand among users. With a proper strategy, they serve robust tools and time-saviors for small and large agencies.Real estate marketplaces take time and effort to build, but they generate high demand among users. With a proper strategy, they serve robust tools and time-saviors for small and large agencies.User can view, update or delete the profile of their own.

The Future scope of the project includes integration of maps in the listing section where we can see the location of the listed houses through google maps.We can see search filters where the customer can search according to their needs such as built-up area, number of rooms, parking etc.In the further building process legal authentication will be provided by introducing contract forms and bonds within are website.The personal identification verification would be provided after getting the permission by the government to verify it.

References

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https://github.com/techinfo-youtube/house-marketplace-react-firebase/tree/src

https://stackoverflow.com/