INTRODUCTION

React JS is JavaScript library used for building reusable UI components. My project is an application for a real estate agency allowing on one hand property owners to publish their real estate for sale or rent, and on the other hand people to view these goods and to choose the ones that most suit their needs. Our contribution in this capstone project involves designing and implementing the mobile application that allows clients to make real estate transactions from their phones/tablets. The real estate agency will make profit thanks to the transactions between clients, who make most of the transaction steps through the application. The mobile application is meant to make the clients interact with the real estate agency and what it allows as functionalities (that are discussed in later sections of this report) very smooth and possible whenever they wish and wherever they happen to be. It involves the analysis and design phases.

TECHNOLOGY LEARNT

I have learnt that React is a completely different world of coding altogether. Using React JS, we write jsx code it is a prepocessor that adds xml to javascript we can use react without jsx, but using it makes react more elegant. We can develop interactive UI quickly, it is component based . if we make a small change in any of the fields on the page, the entire page reflects the changes in a fraction odf a second .

When I was started with it, I was so sure that it is just javascript and I can learnt it within some time, but ity is completely different .

Many companies who have websites that needs quick response time prefer this technology . some of the well known sites are developed in this technology eg American express , flipkart , facebook , Instagram , Yahoo.

REASON FOR CHOOSING THIS TECHNOLOGY

I decided to learn React JS as it help to make websites.

React is easy to learn and that is one of the most important reasons to choose this library. As it doesn't take much time to learn this technology, you can quickly begin to build things with it.

React is easy to learn and that is one of the most important reasons to choose this library. As it doesn't take much time to learn this technology, you can quickly begin to build things with it.

React is used by great companies and startups such as Facebook, Dropbox, Khan Academy etc. Allowing developers to utilize individual components of an application on both client-side and the server-side, React JS speeds up the development process.

As compared to other front-end libraries and frameworks, the React JS code is easier to update and manage due to its modular structure. Moreover, apps built with React JS are extremely flexible and can be scaled easily. This flexibility saves a huge amount of developers' time and money in the long run.

OBJECTIVE

- The aims of this project are as follows:
- To manage the different operations done in real estate business.
- The Real Estate name obviously referring to houses that are the main concern of any real estate agency is aimed towards enabling any person throughout the globe to easily buy or rent any property as per his/ her like without making physical efforts to know about the property.
- As stated inexplicitly above, this capstone project is the web application, or the website that has the aim to manage the different operations done in real estate business.
- This capstone project is implemented by us (5 team members) In one word, this website is meant to help people find their future house or sell their property just in a few clicks.
- The project app will help people display, add, delete and buy properties without needing any mediator person or any expense.
- To make property buying and selling a feasible and inexpensive process for Everyone.

PROBLEM ANALYSIS

●Product Analysis

This project includes several functions related to a real estate business. This website is designed in order to make the real process of buying and selling properties a little more handy and a little more easier.

The user can be able to register him/her-self on the portal entering the required credentials. Further the same credentials will be used in order to login to the portal.

Home Page of our website includes the options of login/signup which is to be done in order to access the full fledge website. About section tells the user about the app and its creators. Contact section gives the user the details to contact the Admin of the website in order to sort any query or to register any complaints.

The properties section opens up a new page in order to represent the various properties available for the user along with their details {No. Of bedrooms, No. Of bathrooms, Location, Price, for-(Rent/Sale)} which makes it easier for the user to select and buy any particular property according to his/her choice.

●Feasibility Analysis

This website is very feasible for users to use . User can easily sign up to the website by going to sign up section and then login with his id .

User can straightforwardly then go and see the properties and get their details and can buy which ever he want.

SOFTWARE REQUIREMENT ANALYSIS

UI Development – React 17.x, ES 6, HTML 5, CSS, BOOTSTRAP

Frontend to Backend Communication – REST API

Backend – Node JS

Server – Express

Database – MongoDB

Node – MongoDB connection using Mongoose

IDE USED – VS Code

Hardware Requirement Specifications

PROCESSOR :- Intel i3 or i51.8 GHz.

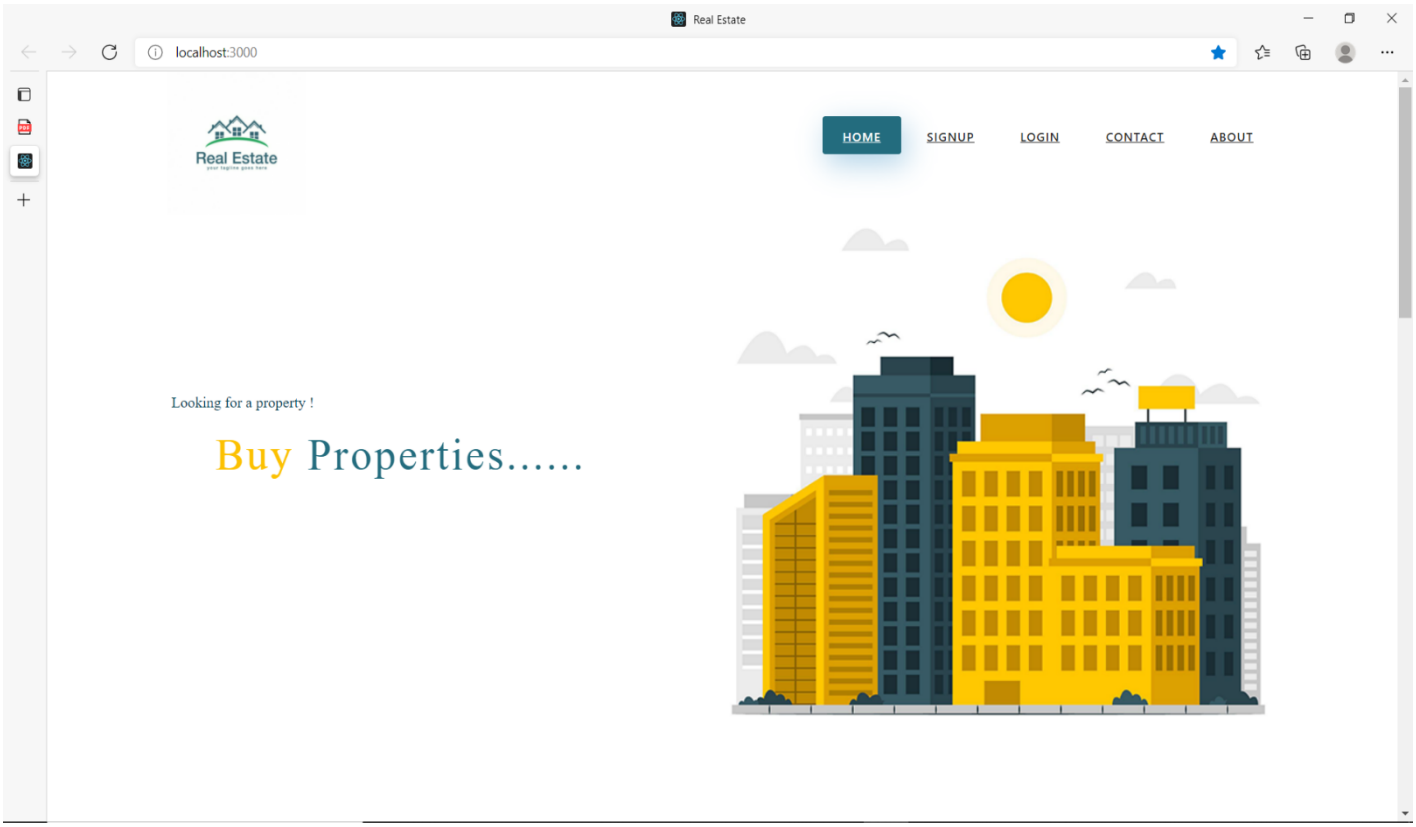
MOTHERBOARD :- According to the processor requirement

RAM :- 4GB.

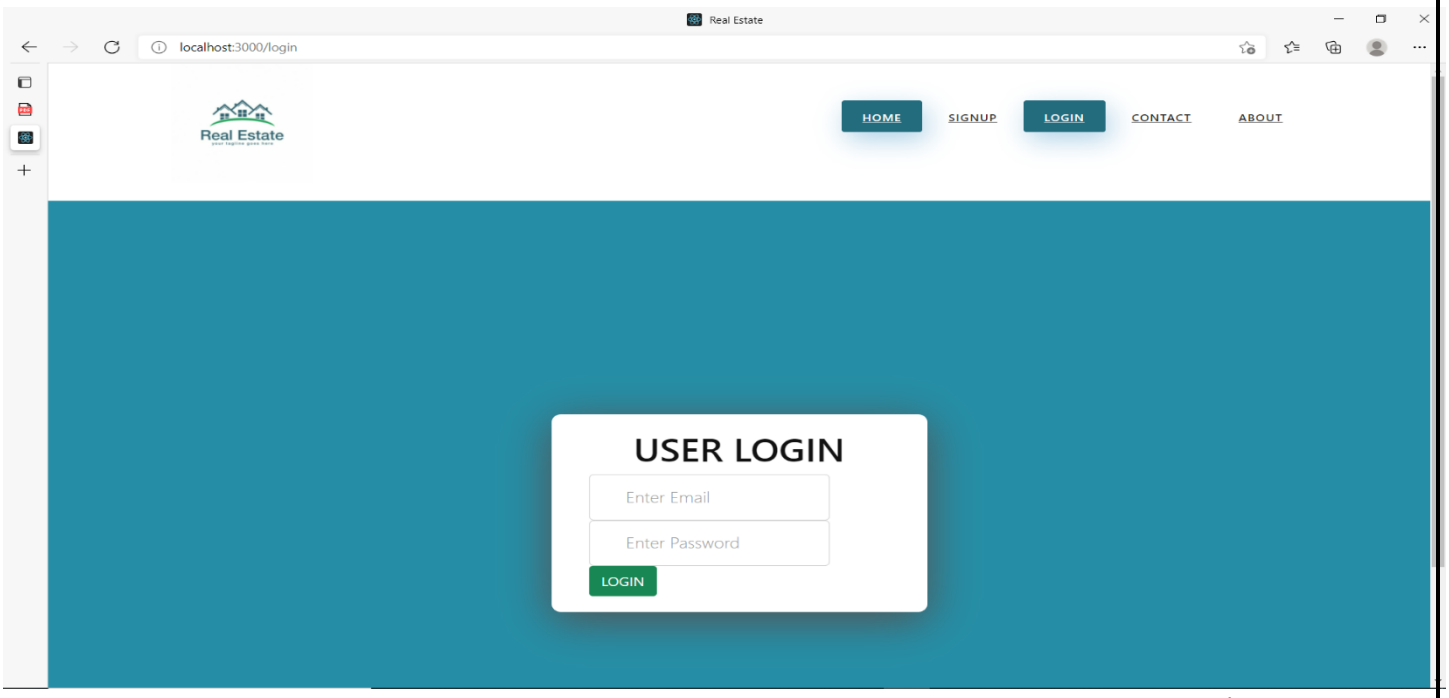
FREE DISK SPACE :- 100MB

DESIGN

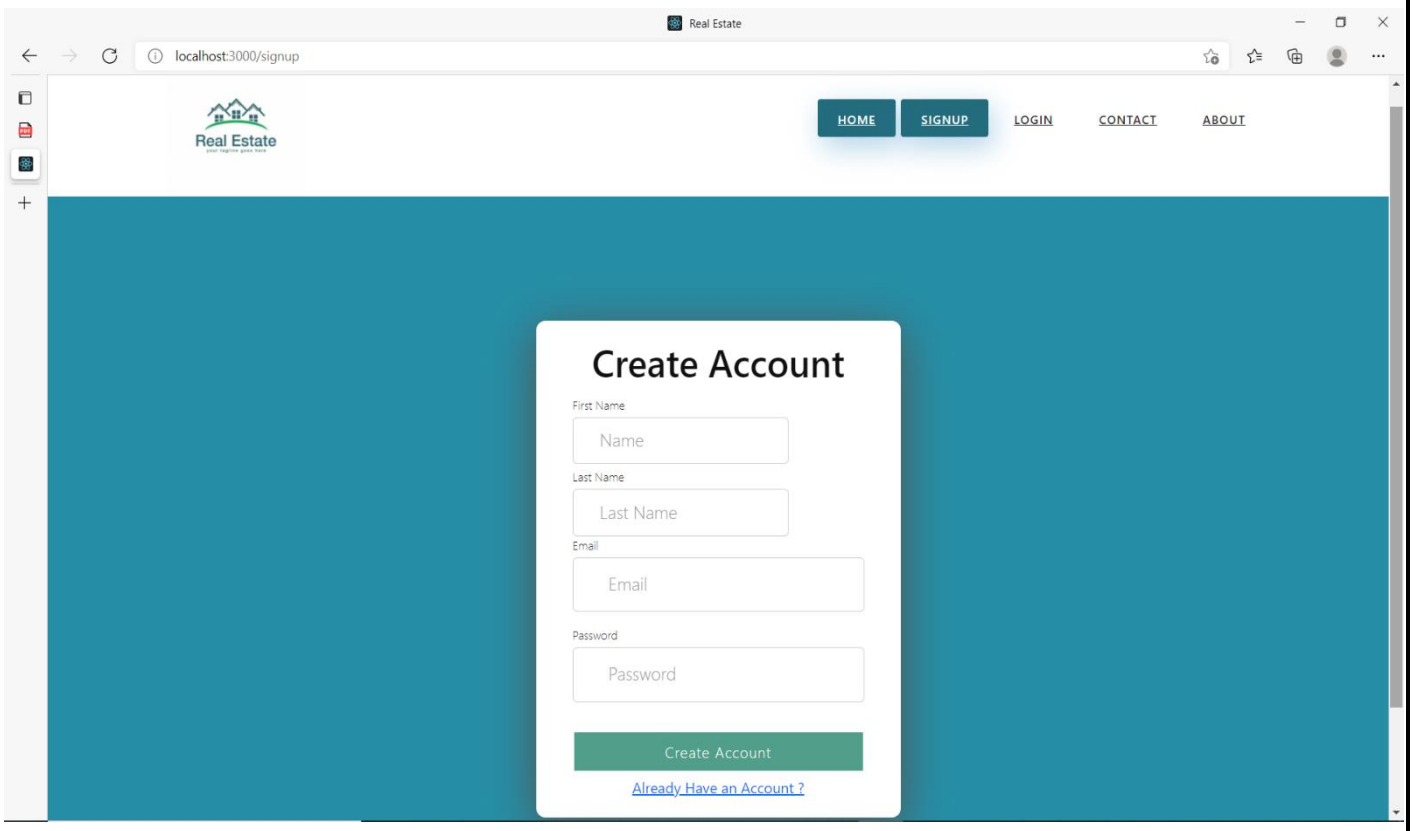
1. Home Page



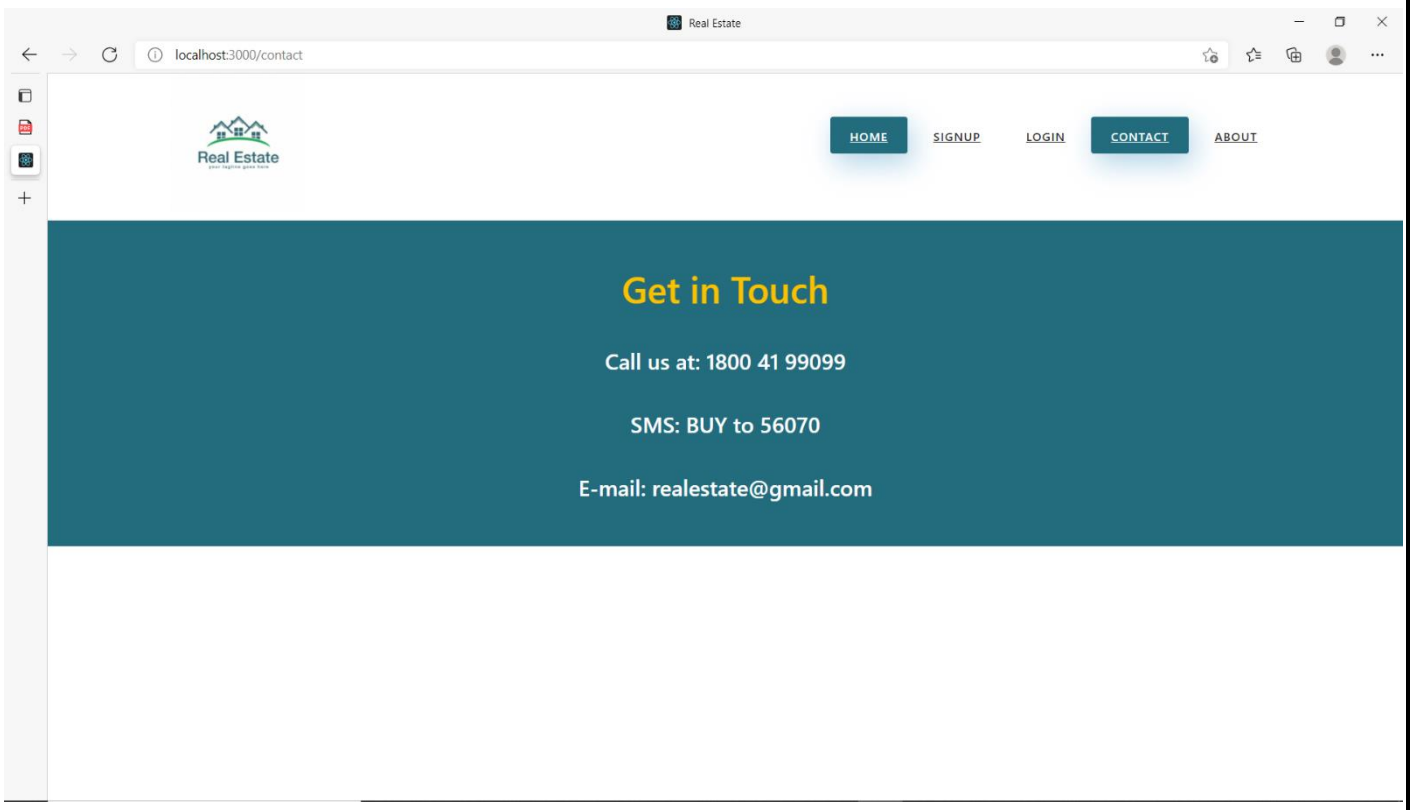
2. User Login Page



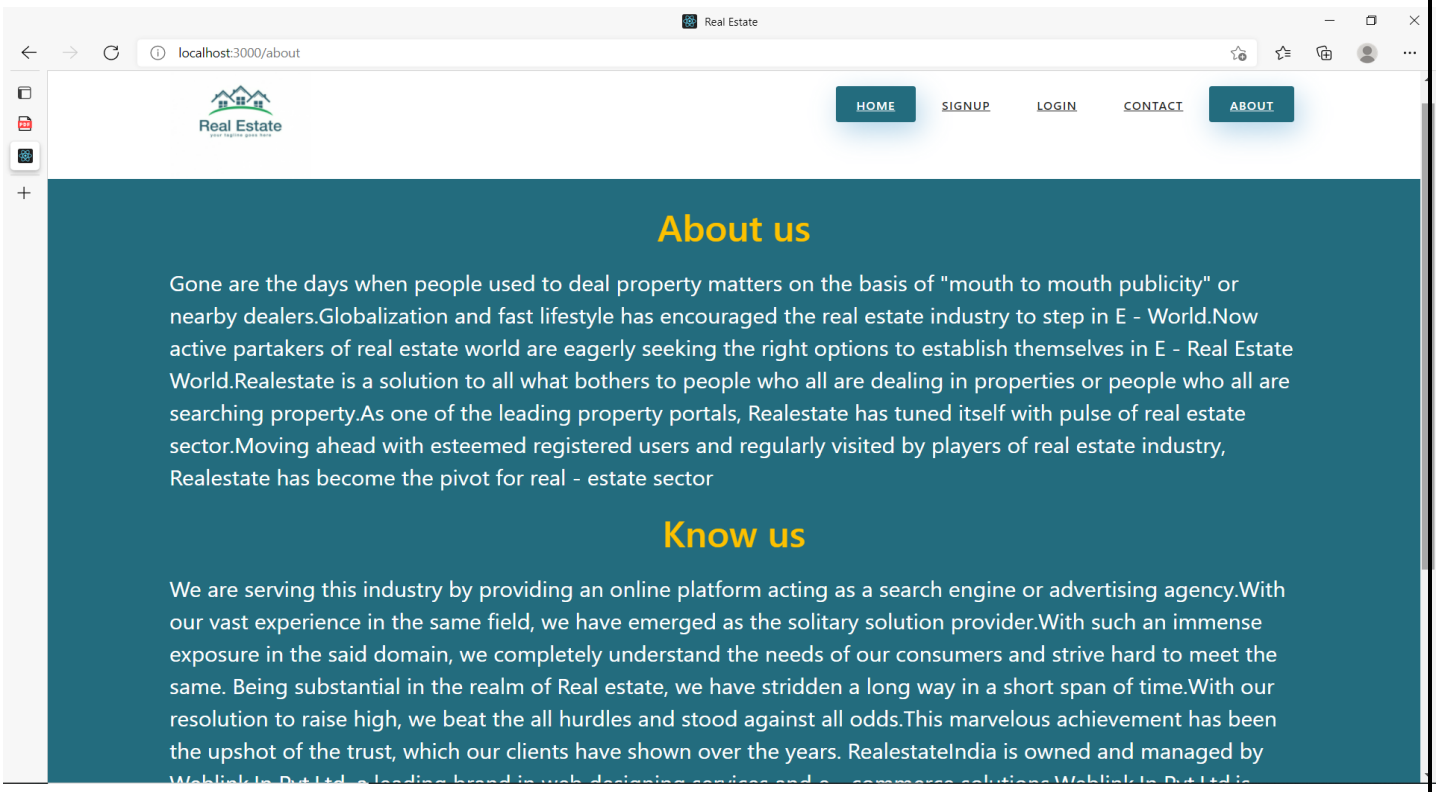
3. Create Account



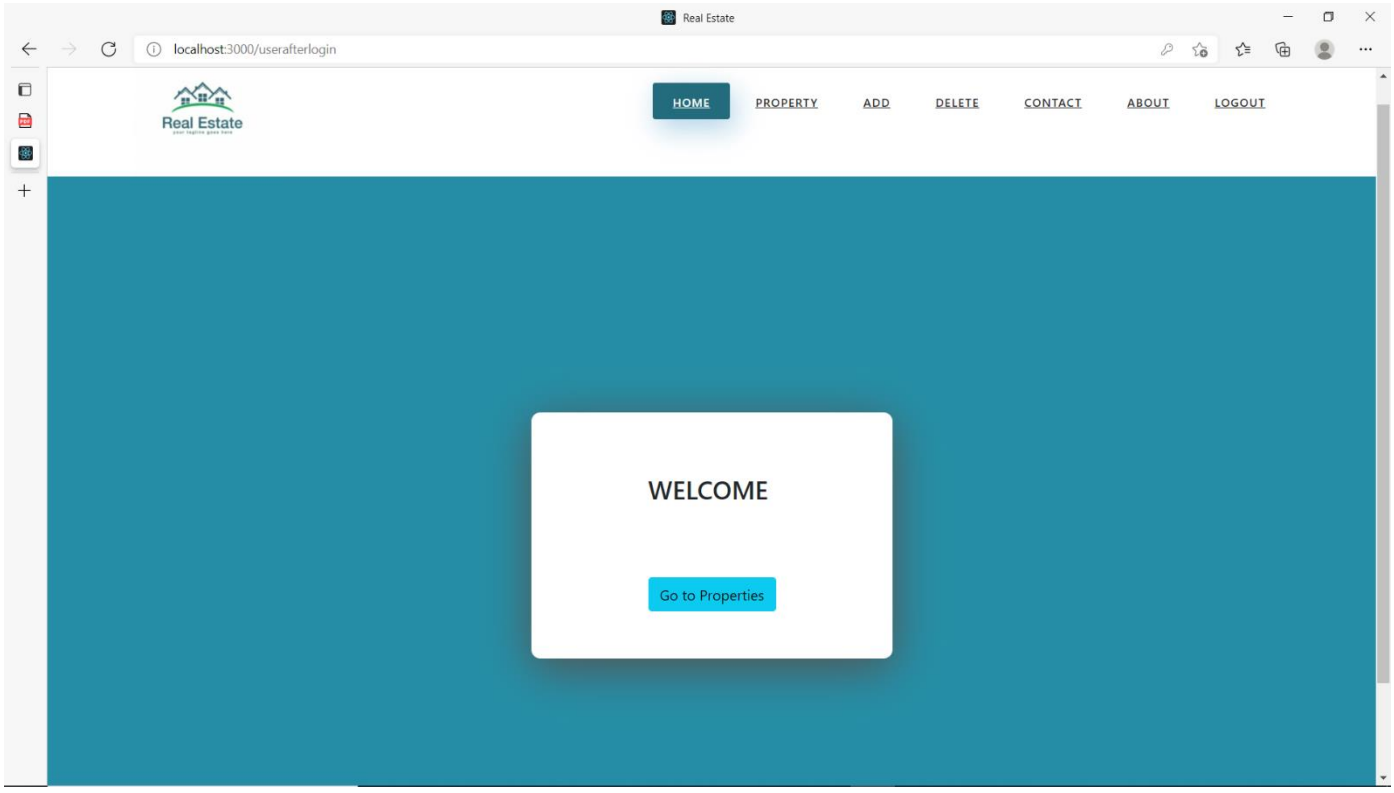
4. Contact us Page



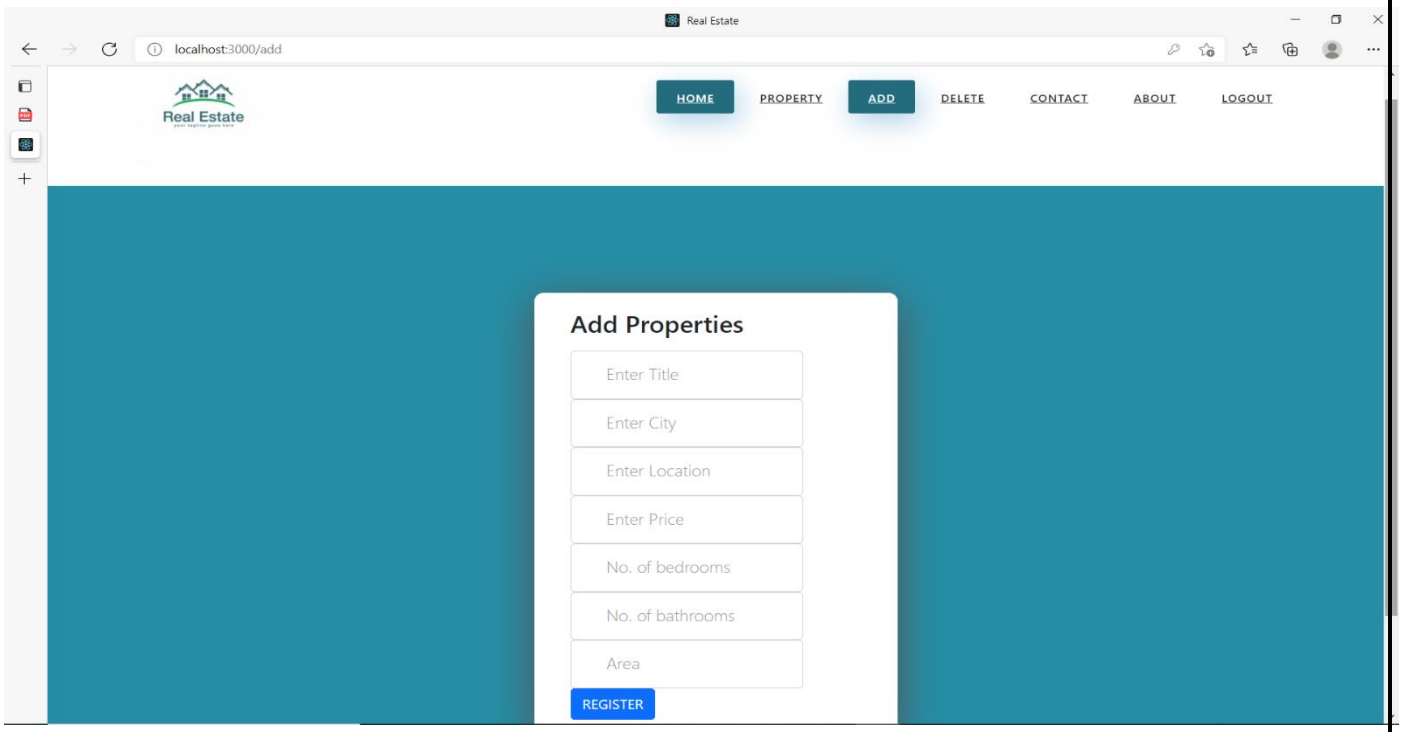
5. About Page



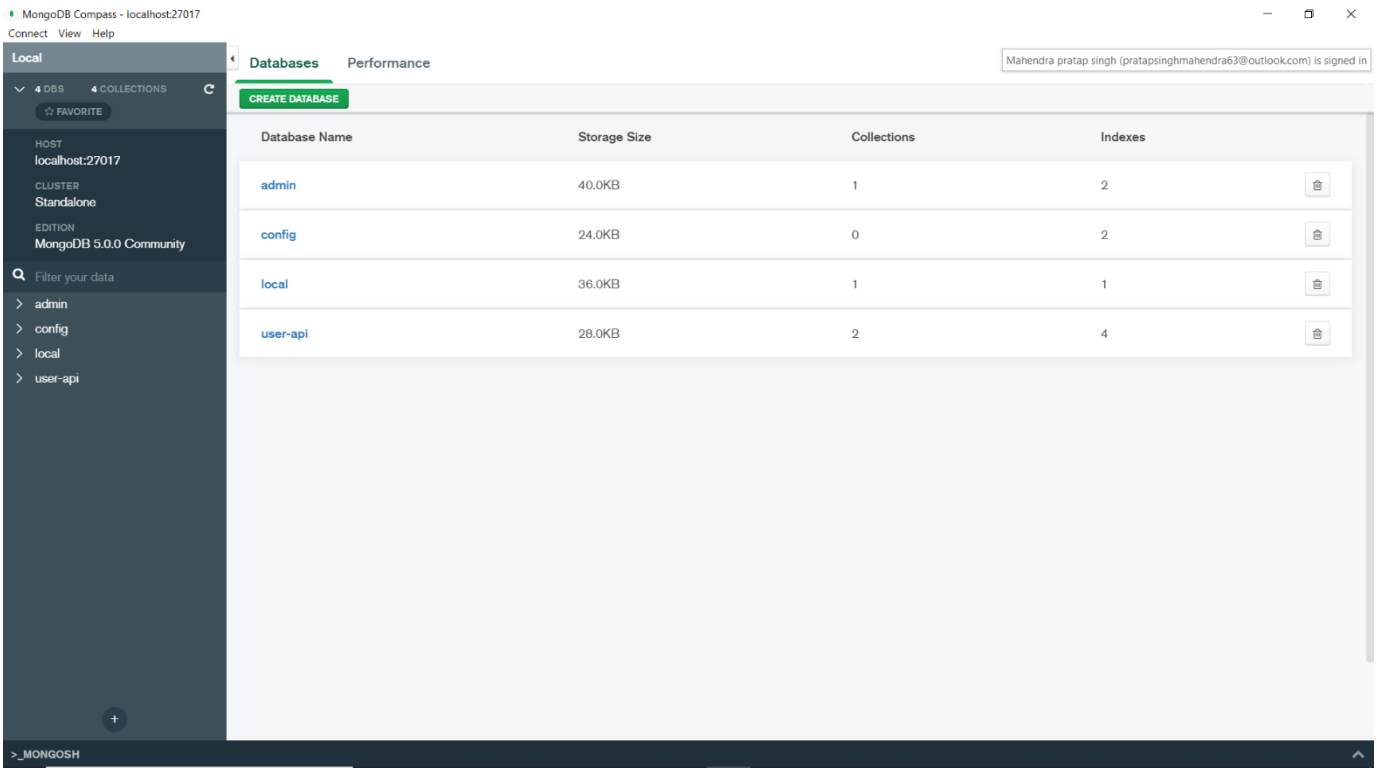
6. After Login

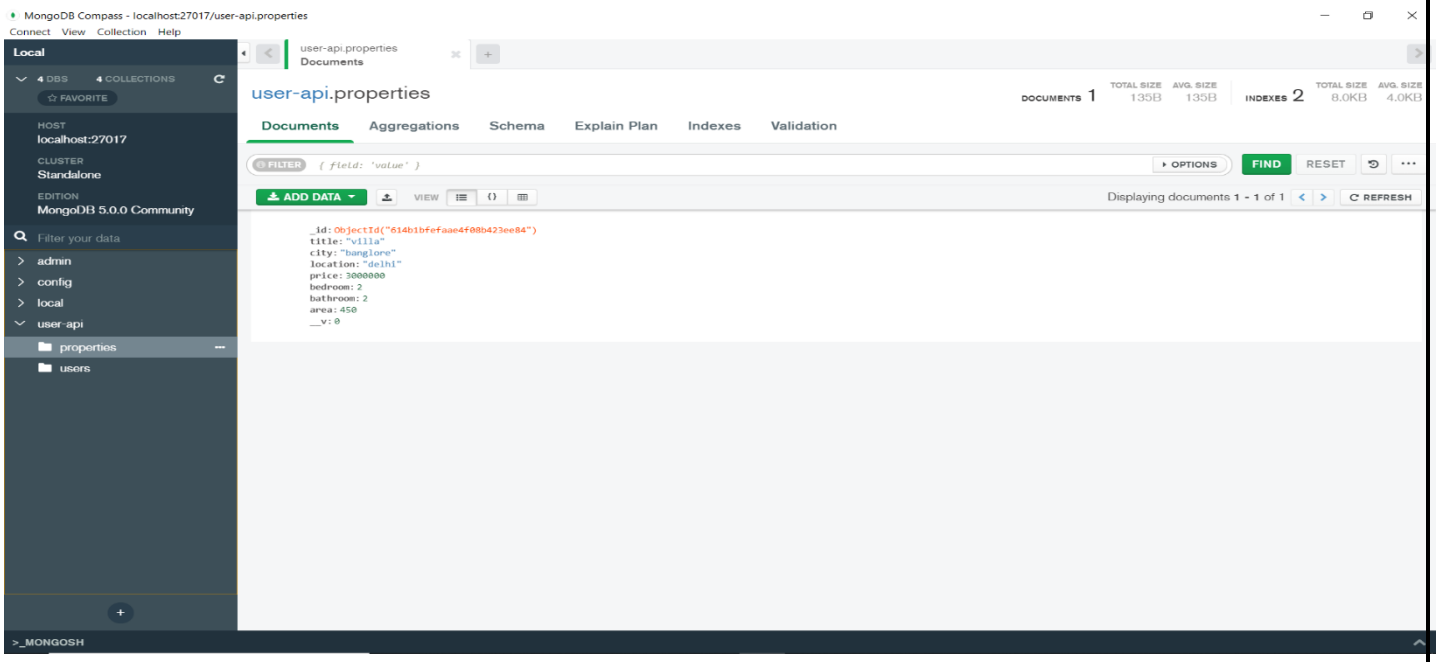


7. ADD/DELETE


Real Estate
localhost:3000/add
Real Estate
HOME
PROPERTY
ADD
DELETE
CONTACT
ABOUT
LOGOUT
Add Properties
Enter Title
Enter City
Enter Location
Enter Price
No. of bedrooms
No. of bathrooms
Area
REGISTER

DATABASE / TABLE INFORMATION





FLOWCHART

• REAL ESTATE WEBSITE
• USER
• USER REGISTRATION
• USER LOGIN
• DISPLAY PROPERTY
• ADD PROPERTY
• DELETE PROPERTY
• BUY PROPERTY

MODULES AND FUNCTIONALITY

This project includes several functions related to a real estate business. This website is designed in order to make the real process of buying and selling properties a little more handy and a little more easier. The user can be able to register him/her-self on the portal entering the required credentials. Further the same credentials will be used in order to login to the portal. Home Page of our website includes the options of login/signup which is to be done in order to access the full fledge website. About section tells the user about the app and its creators. Contact section gives the user the details to contact the Admin of the website in order to sort any query or to register any complaints. The properties section opens up a new page in order to represent the various properties available for the user along with their details { No. Of bedrooms, No. Of bathrooms, Location, Price, for-(Rent/Sale) } which makes it easier for the user to select and buy any particular property according to his/her choice

LEARNING OUTCOME

I have learned to create a website with the help of React JS by this project.I got to knew how to make different components of a project and them link them to make a website .I have used may import classes for this project .

1.Components Are Reusable

In the React JS I have learnt that the tool has a component driven structure and wrapper components of higher level have to be written this process is iterated until the final root components or app is in place.

2. JSX for Templating-

JSX is simplified javascript that facilitates HTML quoting. The syntaxes of HTML tags are used for rendering subcomponents.

3. Optimum Performance with Virtual DOM-

Often, performance issues are common in web UIs which experience optimal user interaction and need frequent view updates . React Js

surmounts bottlenecks by using DOM which is maintained in memory. Changes in view are communicated to virtual DOM.

first which triggers a differential algo for comparing the present and

earlier states of virtual DOM .

It also calculates the leanest possible manner to apply changes with lesser no of updates. The updates are then passed on to DOM to reflect changes in the lowest write time .