UML Thrifty

Abstract:

The main objective of this project to design and develop a student-friendly responsive website for Thrift Store. We kept the website specific to students and is only used when logged in and authenticated by student email id. Also, this project was motivated by an urge to learn and implement the Progressive Web Application. The Website is built using ReactJS, html, CSS and Firebase for back-end programming.

Introduction:

Uml Thrifty web application is student specific application where user can register and login using their student email id and add their products to the thrift store by clicking on the button ‘Add Products’, by giving their contact information and uploading their product description and images. In the way all the students who have logged in can see the added products and contact the seller for the pick-up meetings. We have added dropdowns in order to filter the products.

We chose ReactJS for our web application because, it is no surprise that it is sweeping the codebase. A JavaScript library for front-end development that is open source is called ReactJS. Today's users demand faster, more dynamic websites, while programmers need a cutting-edge, adaptable development environment.

Web Technologies used:

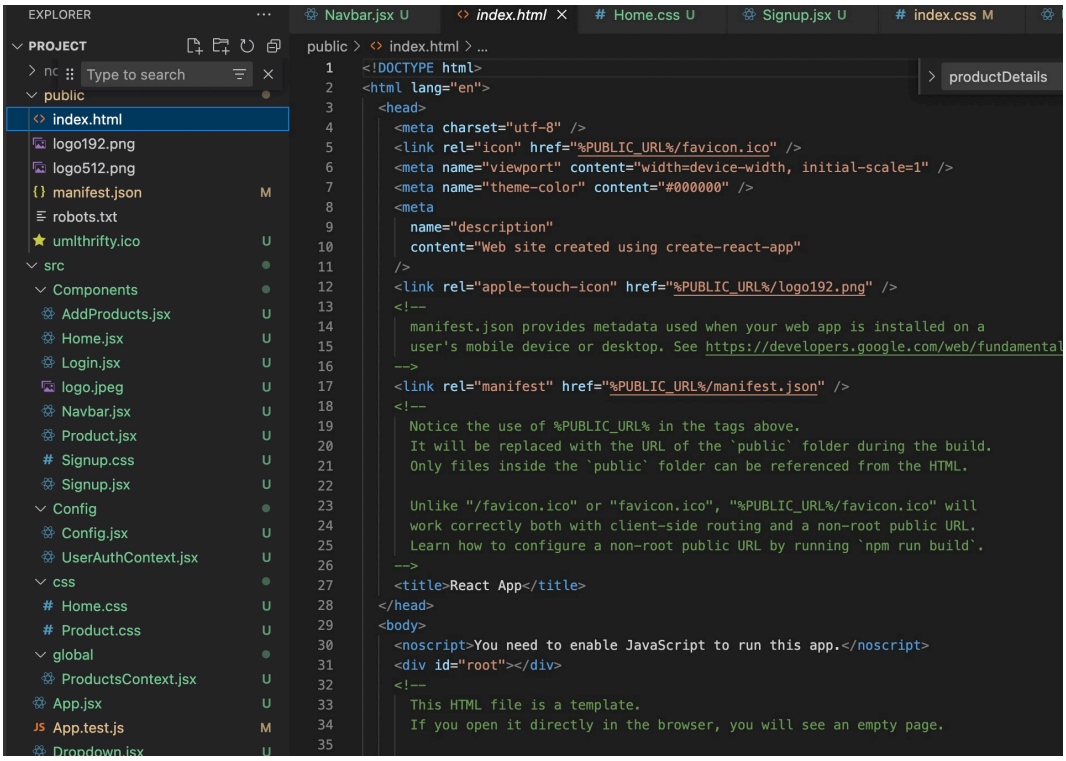
Web technologies refers to the way computers/devices communicate with each other. We used front end and back end.

Front-End

Front-end refers to the web page's user interface. It is how the website appears to users when they visit it. The main front-end web technologies are described in the section that follows.

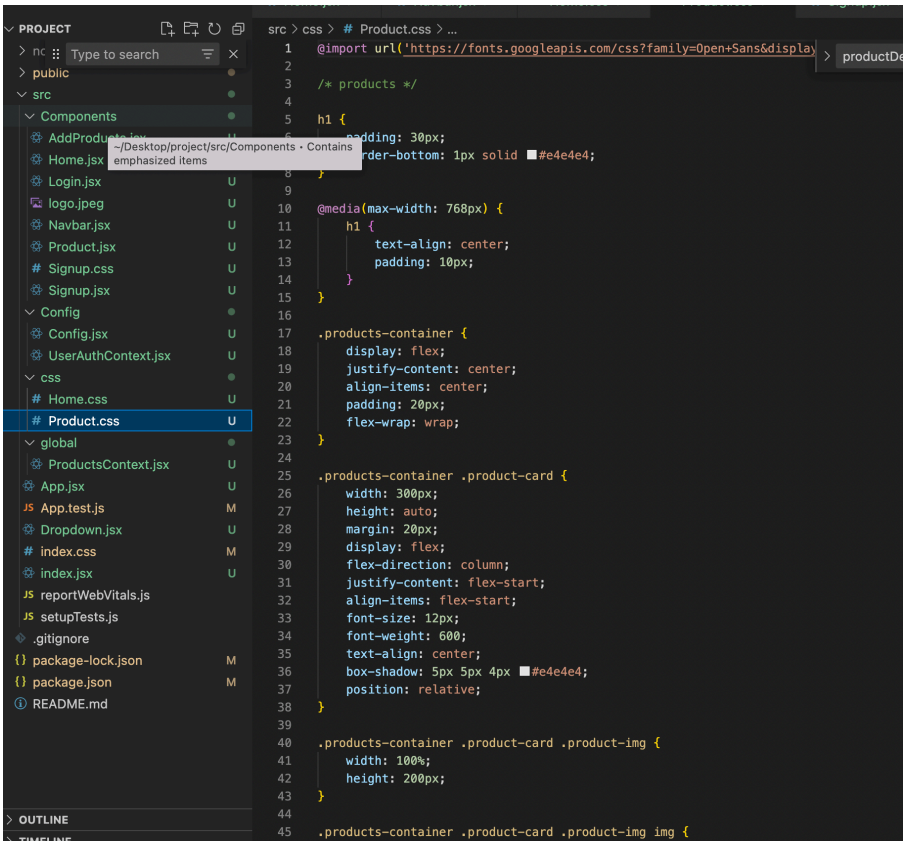
HTML (Hypertext Markup Language)

HTML describes the webpage structure. Tags are used to represent the many elements that make up HTML. These components specify how the content ought to be shown on the browser.



CSS (Cascading Style Sheets)

CSS is used to style the HTML document. CSS can be defined inside an HTML file, injected into an HTML element, or applied externally as a (.css) extension.



JavaScript

The most well-known object-oriented programming language for web pages is called JavaScript (JS). Programming on the client and server sides can both be done in JavaScript. JavaScript enables programmers to build animations, multimedia controls, and content that updates dynamically, among other

ReactJS

ReactJS, sometimes referred to as React or React.js, is a free JavaScript front-end development library. In order to create an interactive user interface, ReactJS is frequently utilized by developers. ReactJS is frequently preferred over its rival frameworks due to its simplicity, native approach, data binding, performance, and testability.

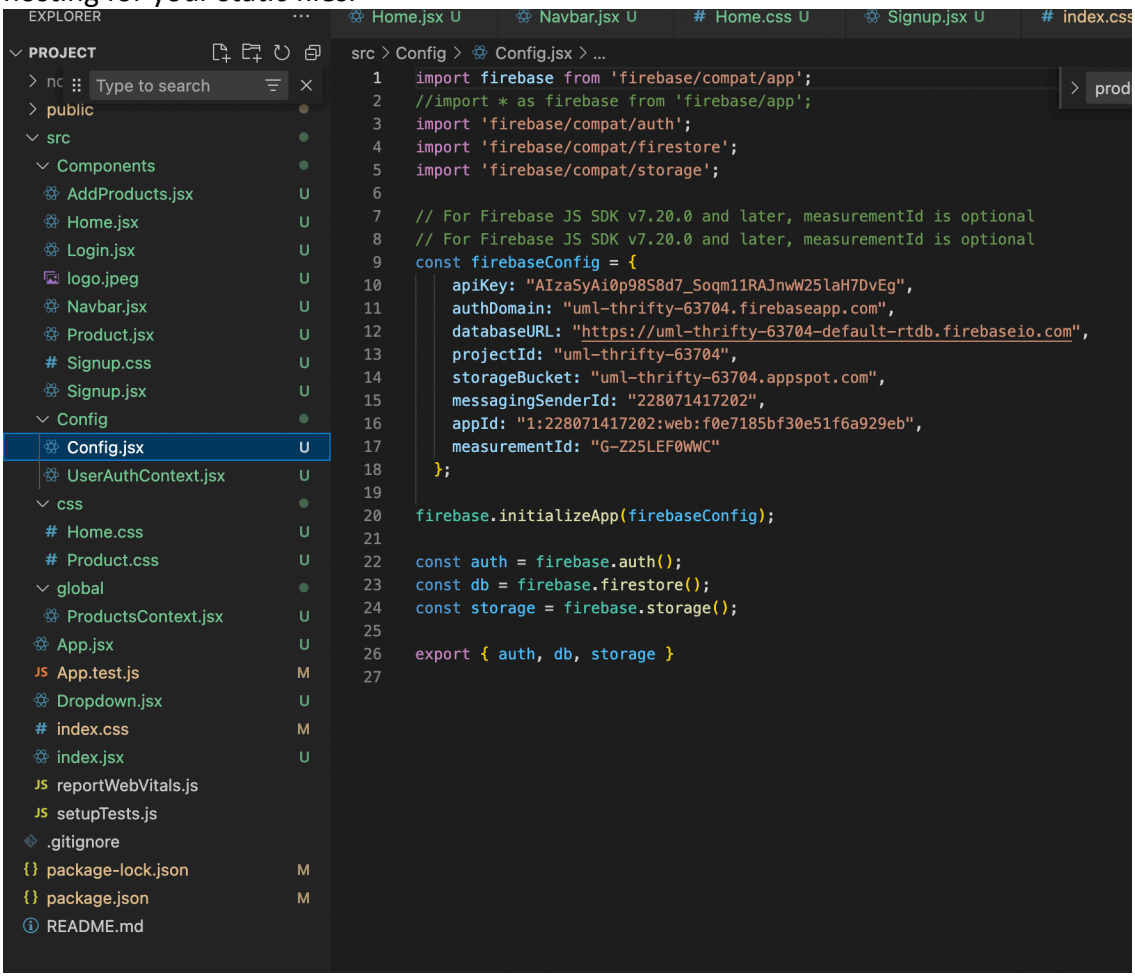
React Components

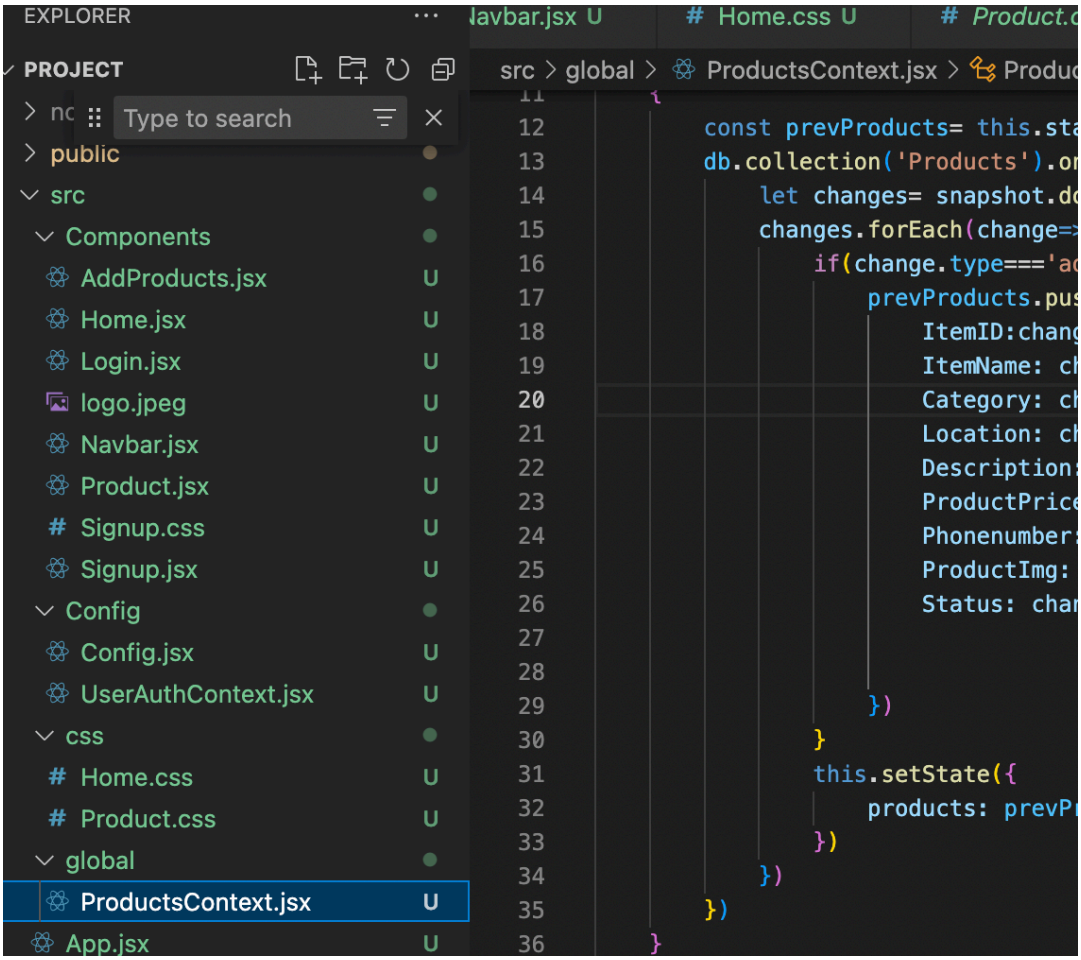
In React, components play a crucial role. Components are discrete, reusable User Interface elements that supply the display with data. With the help of ReactJS, it is possible to build smaller components, mix them, and nest them within one another to construct a whole user interface. The react elements that components, often referred to as props, return explain the contents of the user interface.

Back-end:

No SQL database for firebase:

Cloud Firestore is a NoSQL document database that lets you easily store, sync, and query data for your mobile and web apps - at global scale. It is a **Backend-as-a-Service (BaaS) app development platform** that provides hosted backend services such as a realtime database, cloud storage, authentication, crash reporting, machine learning, remote configuration, and hosting for your static files.

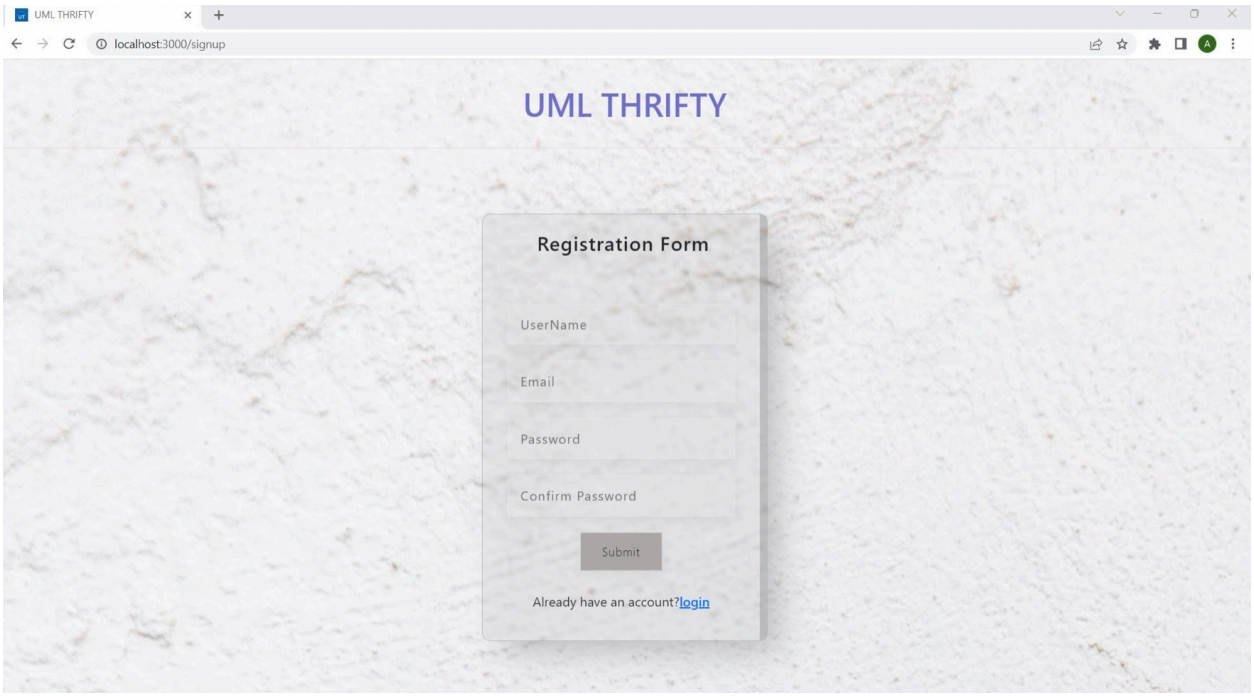




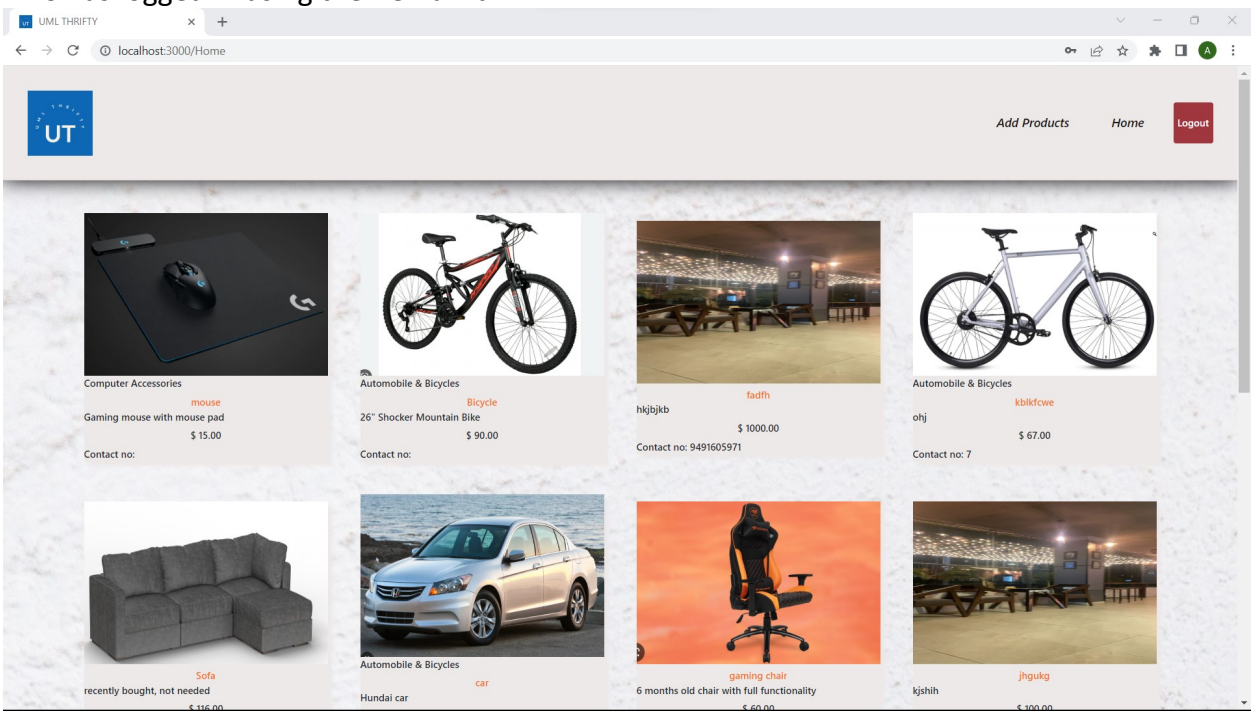
Implementation:

Project Structure:

Registration Page:
The website opens to be the sign-up page, and is only accessed after authenticated, user must make sure that they login only using their student email id.

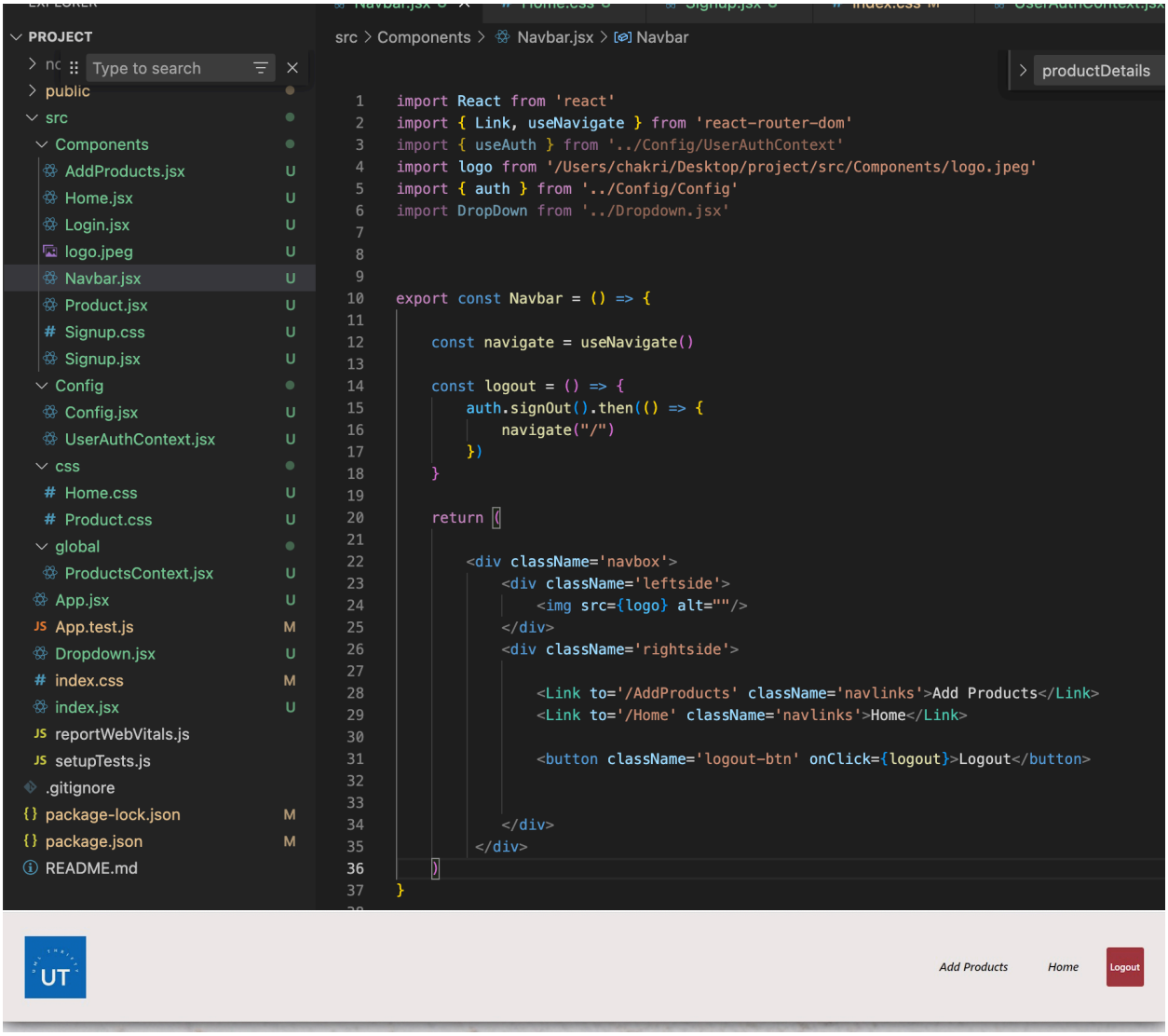


Login Page:
Uml Thrifty is not a public page, and the content can be seen and modified only by the users who has logged in using their email id.



Navigation bar:

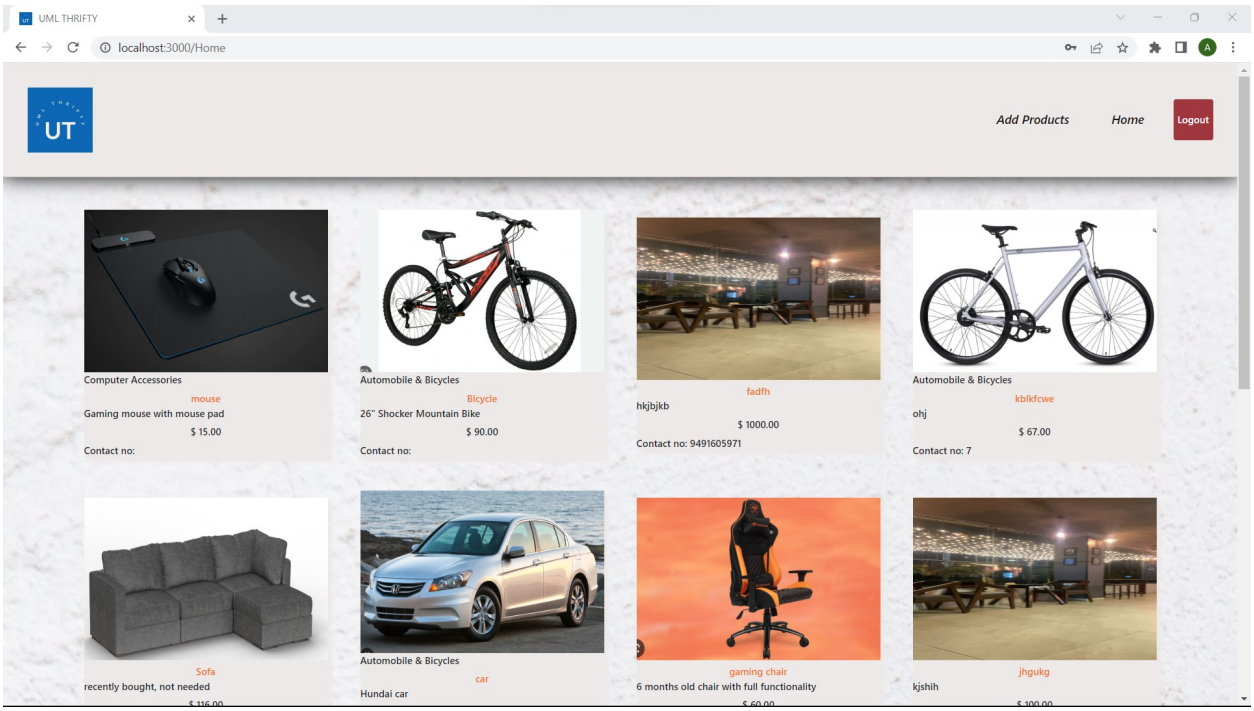
Our navigation bar has home, add-products, and log-out options. Once, the user has logged in, the user will be redirected to the home page, and he/she can add their products by clicking on ‘Add Products’.



Our navigation bar has home, add-products, and log-out options. Once, the user has logged in, the user will be redirected to the home page, and he/she can add their products by clicking on ‘Add Products’.

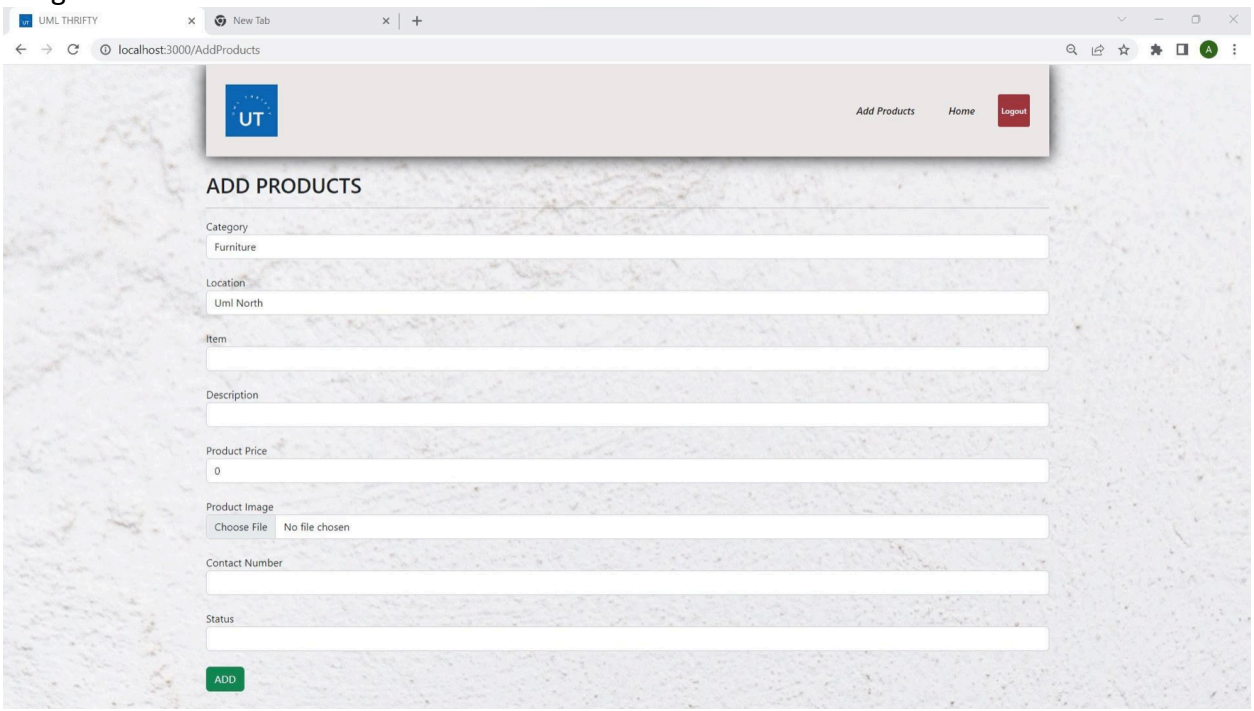
Home Page:

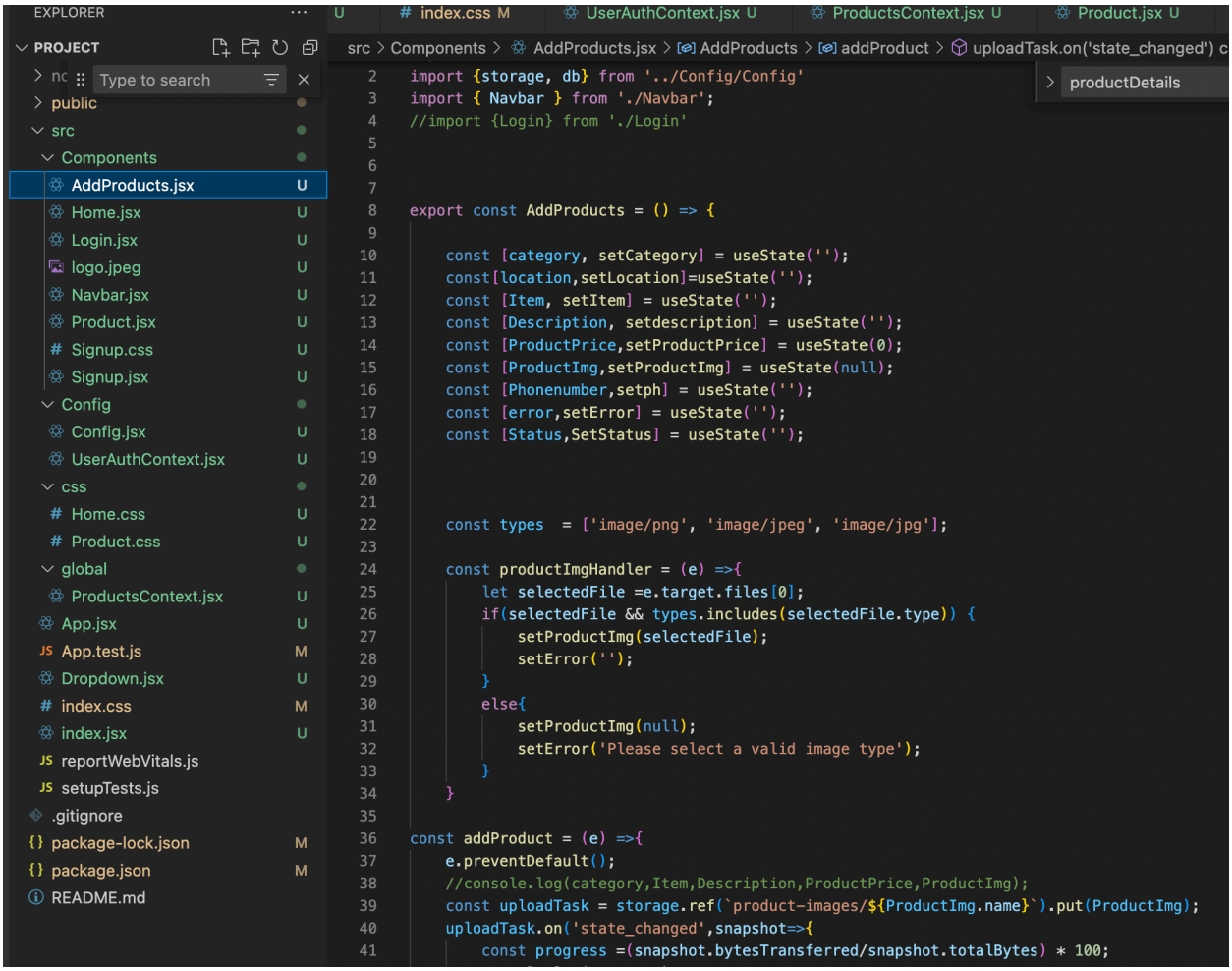
Our home page has its navigation bar displayed on top and it has a filter using drop down by category of the products displayed. All the products can be displaying with their images and details mentioned like contact information, location, status of the product, cost of the product, title and description of the products.



Add Products:

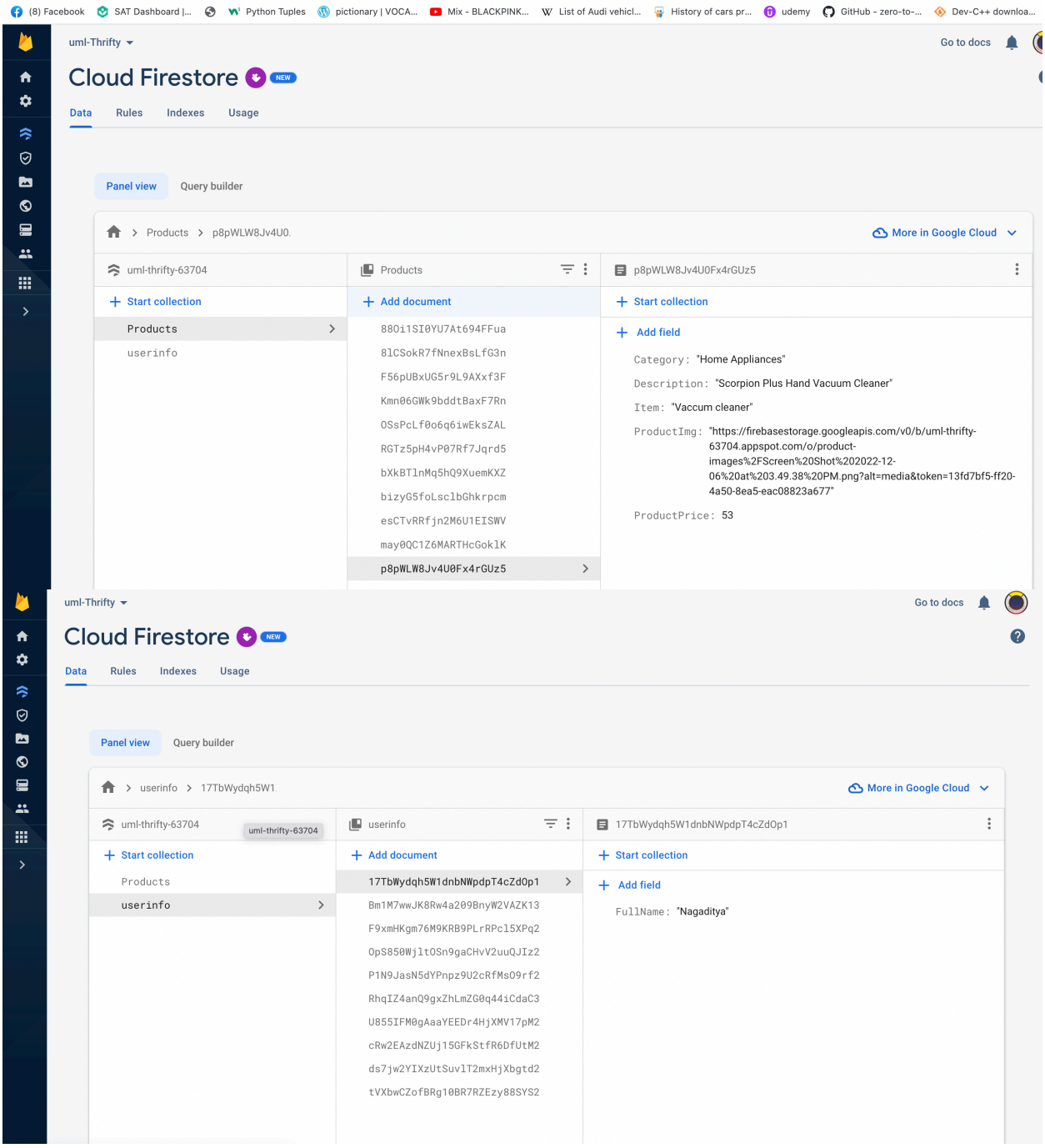
On clicking Add Products from home page, a new page is opened with the navigation bar on top and has all its details like contact information, location, status of the product, cost of the product, title and description of the products to be entered and attach a .png or .jpg or .jpeg image file and should click on ‘Add’ button.





Firebase:

All the details of users entered are stored to firebase, an authentication link from firebase is sent to email id. When logged from the login page, it checks from the stored details of user.
In the same way all the details of products are added to firebase, and retrieved from firebase to display on the home page.



Future additions:

A search bar can be added to filter the display content on home page, and it can be extended for multiple universities so registration must have an addition of their university details.

Conclusion:
We have explored the usage of reactJS and developed the web application to meet the objective of the project to keep the content specific to University students and kept it user friendly.