UE19CS204 – Web Technologies Mini Project

Project Title - Apparel Store

Section - D

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GITHUB Link - https://github.com/NidhxGupta/Web-Project

Abstract

Today, consumers have so many choices to choose from when it comes to clothes and accessories. However, multiple choices can often lead to confusion, especially when it comes to brands. This project is an attempt to provide the benefits of online shopping to the customers. The customers can search for clothing according to their requirements from a wide variety of brands available in our catalogue from all over India. It saves time as well as provides more options as compared to local shopping. It is easily accessible, efficient, easy to use and customer friendly. We are using MERN stack to implement this website. This website targets kids of all ages, men and women. It's for the Shopaholics(who are generally up to date with the latest fashion trends),the Luxury Shoppers, Mall Visitors and the pre-existing fashion e-commerce app users. We aim to provide a smooth shopping experience to all users!

Technologies Used

- MongoDB

  MongoDB is a document oriented Nosql database used for high volume data storage, instead of using tables and rows as in the traditional relational database.
- Express.js

  Express.js is a backend web application framework for node.js released as free and open source software.
- React.js

  React is an open source, frontend, JavaScript library for building user interfaces or UI components.
- Node.js

  Node.js is an open source, cross-platform, backend, Javascript runtime environment that executes the code outside the web browser.

Additional Libraries and Modules Used

- Express Validator

  Express-validator is a set of express.js middlewares that wraps validator.js validator and sanitizer functions. We have used this to validate user input before storing information in database.
- dotenv

  Dotenv is a zero-dependency module that loads environment variables from a .env file into process.env. We have used this module to pass environment variables to the app.

- Mongoose

  Mongoose is a Mongo DB object modeling tool designed to work in an asynchronous environment. Mongoose supports both promises and callbacks. We have used this tool to connect our app to Mongo DB. We have also used this tool to create the schema/storage format for the data stored in database.

- Shortid

  This package is used to generate short non-sequential url-friendly unique ids which generate any number of ids without duplicates

- Slugify

  When a resource is requested, the client sends a slug to the server's API to look up the resource from the database and return a JSON containing everything the client needs to be able to display the resource. This package helps in managing the slugs.

- Nodemon

  nodemon is a tool that helps develop node.js based applications by automatically restarting the node application when file changes in the directory are detected.

- Bcrypt

  This package is used to hash passwords. We have used this package to hash passwords and save them in the database. The same package is also used to verify if the password entered by user during login is same as the hashed password as saved in db or not.

- Json Web Token

  This package is used to create unique json web token for each user when an account is created. Each token generated is due to the unique application secret provided by us which makes the login process safe for the user.

- multer

  Multer adds a body object and a file or files object to the request object. The body object contains the values of the text fields of the form, the file or files object contains the files uploaded via the form . We have used multer to create middlewares to verify if right user is logging in the right application.

- path

  The path module provides utilities for working with file and directory paths. We have utilized this module to store the file generated by multer which is inturn used to verify if the correct user is logging in with help of the details stored locally.

- cors

  Cross-origin resource sharing (CORS) is a mechanism that allows restricted resources on a web page to be requested from another domain outside the domain from which the first resource was served.

- Redux

  Redux lets the React components to read data from a Redux store, and dispatch actions to the store to update data.

- React Router DOM

  React Router, and dynamic, client-side routing, allows us to build a single-page web application with navigation without the page refreshing as the user navigates. React Router uses component structure to call components, which display the appropriate information. We have used this to navigate to the pages based to user request.

- Redux Thunk

  Redux Thunk middleware allows us to write action creators that return a function instead of an action. The thunk can be used to delay the dispatch of an action, or to dispatch only if a certain condition is met. Since reducers don’t help in API calls, this package helps in creating a function which helps with the API calls.

- axios

  This package is used to create a centralized API. If the file is changed at one place, it will reflect in all other places, thereby making development process a bit simpler by not affecting the API.

- React Bootstrap

  React-Bootstrap replaces the Bootstrap JavaScript. Each component has been built from scratch as a true React component, without unneeded dependencies like jQuery. We have used this library to build components like the carousel for our website.

- Github

  We are using github for collaborating and for version control.

- Postman

  Postman is a collaboration platform for API development. For creation of the authentication API, using this app, we made sure the APIs worked as it's expected to.

- MongoDB Compass

  MongoDB Compass analyzes the documents and displays rich structures within the collections through an intuitive GUI. It allows us to quickly visualize and explore your schema to understand the frequency, types and ranges of fields in your data set.

- Visual Studio Code

  Visual Studio Code code editor was used to manage code effectively for making sure the functionalities work fine in the application.

Member Contributions

- Nidhi Gupta -> Frontend for Admin App and User App Backend (Authentication APIs and Server setup) for user app and admin app.

- Manasa K Rayachoti ->Frontend and backend of Searchpage and the Product details page.(Fetching product details from server)

- Nikitha M K -> Frontend for user app - Profile page, Backend for Products API and cart page (In Progress)