Mini Project Report (KCS-554)

on

SHOPPER: An E-Commerce

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SYNOPSIS

Shopper is a dynamic E-Commerce mini project that utilizes React.js for the frontend and Express.js, Node.js, and MongoDB for the backend. This project focuses on fundamental functionalities, such as user authentication, a shopping cart system, and distinct product categories for men, women, and kids.

Key Features:

1. **User Authentication:**

Implement secure user registration and login.
Store user passwords securely in the MongoDB database.

2. **Shopping Cart with React:**

Develop a dynamic shopping cart in React.js for real-time updates.
Enable users to easily add, remove, or modify items within the cart.

3. **Product Categories:**

Organize products into different categories (men, women, kids) for efficient navigation.
Implement category-based filtering for an enhanced user experience.

Technical Implementation:

1. **React.js Frontend:**

Create a single page application and visually appealing user interface using React.js.
Utilize state management libraries like react-router-Dom for efficient data flow.

2. **Express.js and Node.js Backend:**

Set up an Express.js server to handle HTTP requests.
Implement server-side logic for user authentication, cart management, and category filtering.

3. **MongoDB Database:**

- Design and create a MongoDB database to store user information.
- Establish a connection between the Express.js server and MongoDB for data retrieval and manipulation.

4. RESTful API:

Develop a RESTful API to facilitate communication between the frontend and backend.

Testing and Deployment:

1. Testing:

Conduct thorough testing of both the frontend and backend components.

2. Deployment:

Deploy the frontend on a static file server or services like Netlify or Vercel.

Learning Outcomes:

Shopper provides students with a comprehensive understanding of building a modern E-Commerce application using React.js for the frontend and Express.js, Node.js, and MongoDB for the backend. This mini project emphasizes practical skills in frontend development, backend logic, and database management while incorporating industry-standard technologies.

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