SHOPEE- E- COMMERCE APPLICATION

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OBJECTIVE:

1. Streamline Product Discovery and Purchasing: Create an intuitive platform for users to browse, search, and filter product listings, making it easier to discover and purchase items that meet their needs.

2. Facilitate User Engagement and Feedback: Allow customers to leave and update reviews, helping others make informed purchasing decisions and providing feedback to product providers.

3. Enhance Security and Account Management: Implement robust user authentication and account management features, including secure password reset and update options, to ensure safe access to the platform.

4. Support Admin Oversight: Equip administrators with tools to manage product listings and user accounts, allowing them to maintain an updated, user-friendly platform.

5. Responsive and Dynamic Shopping Experience: Utilize modern web technologies to create a mobile-friendly and dynamic user experience, enabling seamless navigation and interaction across devices.

PROJECT DESCRIPTION:

1. This e-commerce platform, developed using modern web technologies, provides a user-friendly environment where customers can browse products, manage their shopping cart, view order details, and engage with the community by leaving reviews. The platform includes secure user account functionalities, allowing customers to create accounts, log in, and manage personal information easily.

2. Product Browsing and Search: Users can explore available products with advanced filtering and search options, enabling them to find items based on categories, price, or specific attributes.

3. Cart Management: Customers can add items to their shopping cart, review an order summary, and proceed to a smooth checkout process.

4. Order Tracking: Users can track their past orders and view detailed information to stay updated on their purchase history and order status.

5. Admin Features: Administrators are provided with tools to manage product listings and user accounts, ensuring the platform remains updated and responsive to user needs, offering a seamless experience for both customers and admins.
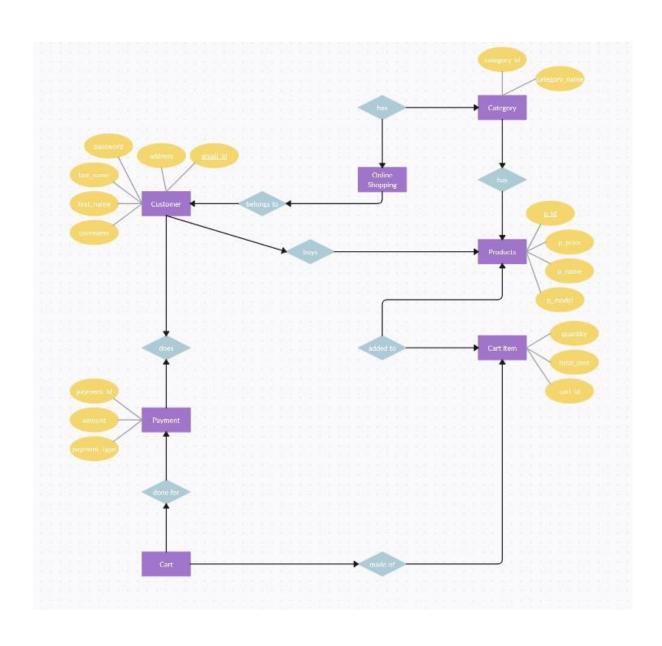
STACK OVERVIEW:

Frontend (Client-Side) Technologies:

1. React.js: Provides a responsive, dynamic user interface with a SPA architecture, enabling smooth navigation and reusable components for features like product listings and shopping cart management.

2. CSS Frameworks: Ensures a visually appealing, mobile-responsive design for a seamless experience across devices.

3. Redux: Manages complex application state, particularly useful for maintaining consistency in user authentication, product listings, and cart data.

Backend (Server-Side) Technologies:

1. Node.js and Express.js: Together, these provide the server environment and framework to handle API requests, enabling CRUD operations for products, orders, and user data.

2. MongoDB and Mongoose: MongoDB stores all data on products, orders, and user profiles, while Mongoose adds structure and validation, allowing for reliable data management.

3. JWT: Secures user authentication and authorization, ensuring that only authorized users access sensitive data and functionalities.

ER DIAGRAM:

FEATURES:

- User Account Management: Allows users to register, log in, reset, and update passwords for secure access.

- Product Discovery: Includes options to filter and search products by various criteria, making it easier to find items.

- Customer Reviews: Users can leave, update, or delete reviews for products, enhancing engagement.

- Shopping Cart and Checkout: Users can add items to the cart, review an order summary, and complete their purchase.

- Order History: Allows users to view order details, improving post-purchase experience.

- Admin Functionality: Provides tools for administrators to manage product listings and users, supporting a well-maintained platform.

CONCLUSION:

This e-commerce management system utilizes modern web technologies to provide an efficient, secure, and user-friendly platform for managing online retail operations. With a responsive interface, a powerful backend, and secure authentication mechanisms, it streamlines the management of products, users, and orders. The system empowers administrators to effectively oversee the platform while ensuring a seamless experience for users. Designed for scalability, it also offers potential for future enhancements in areas such as product discovery, user engagement, and overall operational efficiency.

REFERENCE:

Github https://github.com/Dheeranmanokar/Ecommerce-rithick-manoakr-riffath-sakthi-nanmudhalvan

Videolink:
https://drive.google.com/file/d/1NjT8wlrgOKn99mMNl_iuVRxXS3ZBUEhV/view?usp=drivesdk