E-Commerce application :- It consists of a frontend built with HTML, CSS, and JavaScript that allows users to browse products, search for them, add them to a cart, and check out. The backend is a Node.js server using Express.js to provide a REST API and Mongoose to interact with a MongoDB database for storing product and order information.

Functional Requirements :-

- An admin must be able to add new products to the store via a form
- The form must capture the product's name, description, price, and initial stock quantity.
- New products must be saved to the MongoDB database.
- Users must be able to see all available products displayed on the main page.
- Each product card must display its name, description, price, and an Add to Cart button.
- If a product's stock is zero, the Add to Cart button must be disabled and display an Out of Stock message
- Users must be able to search for products using a search bar.
- Users must be able to add a product to their shopping cart by clicking the Add to Cart button.
- The cart icon in the header must display a count of the total number of items in the cart.
- Users must have the ability to remove items from their shopping cart.
- Users must be able to click a Checkout button to finalize their purchase.
- After checkout, the user's shopping cart should be cleared.

Non-Functional Requirements :-

- The initial product list should load quickly when a user visits the page.
- The website should be easy to navigate, allowing users to find products and complete a purchase without confusion.
- The UI should clearly distinguish between available and out-of-stock items.