Full Stack Development with MERN

Frontend Development Report

Date	12/07/2024
Team ID	SWTID1720199985
Project Name	Grocery Webapp
Maximum Marks	10 Marks

Project Title: Grocery Webapp

Date: 12/07/2024

Prepared by: Hima Sruthi & Lohith Pattubala

Objective

The objective of this report is to document the frontend development progress and key aspects of the user interface implementation for the Grocery Webapp project.

Technologies Used

• Frontend Framework: React.js

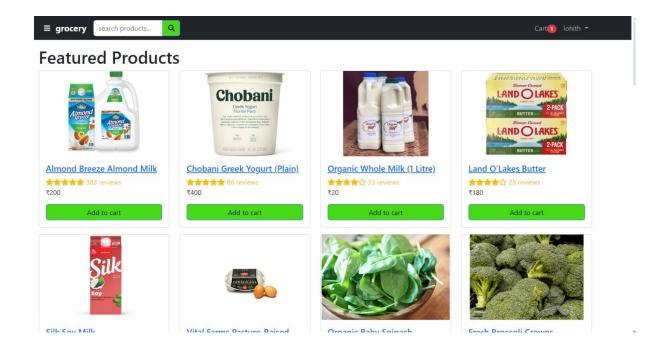
• **State Management:** [Redux/Context API]

• **UI Framework/Libraries:** [Material-UI, Bootstrap]

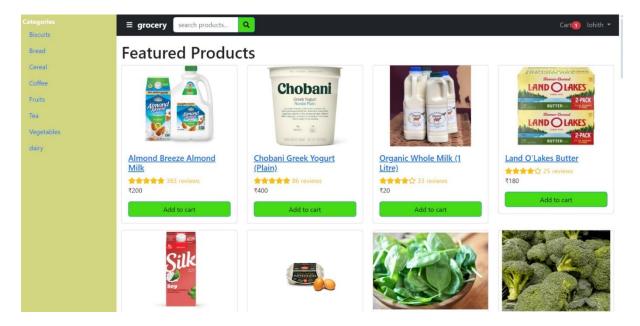
• **API Libraries:** [Axios]

Project Structure

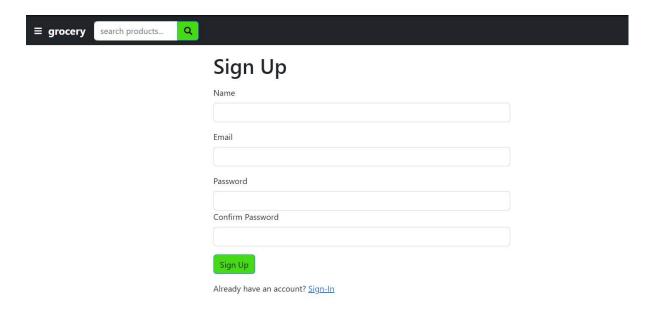
1. Home Page:



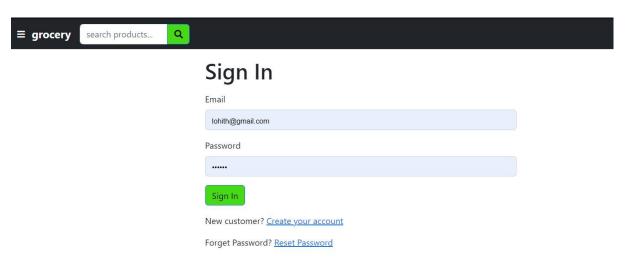
2. Categories Page:



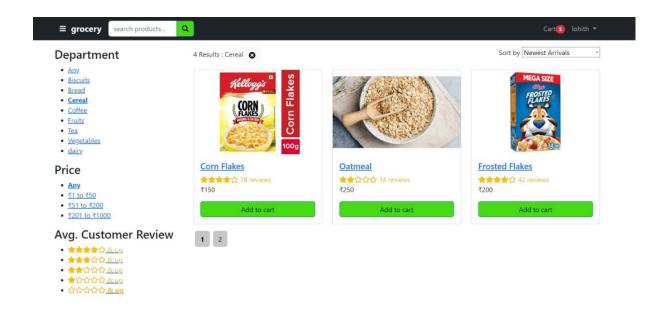
3. Signup Page:

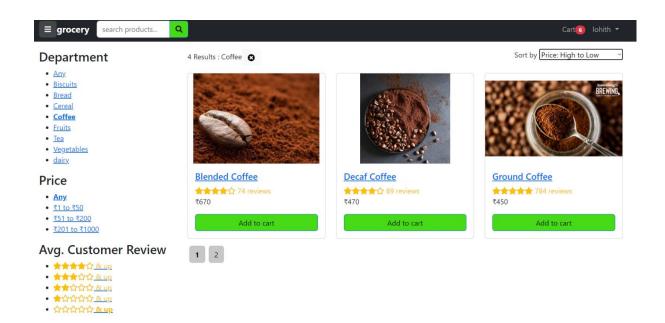


4. Signin Page:

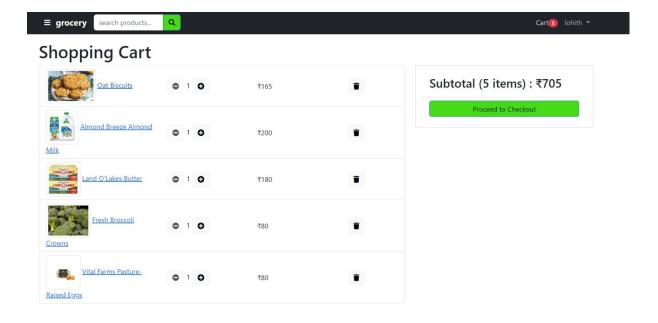


5. Search Products:

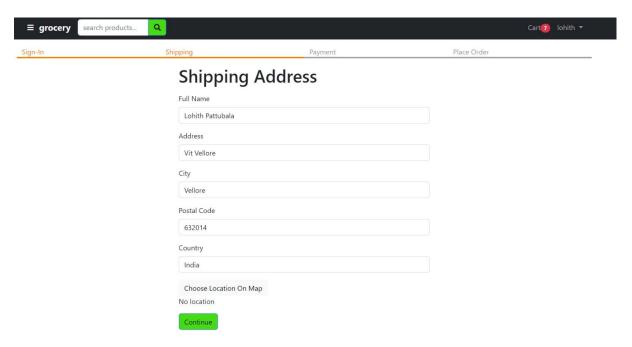




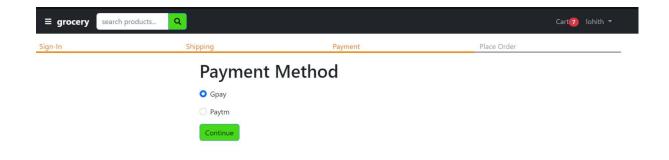
6. Shopping Cart Page:



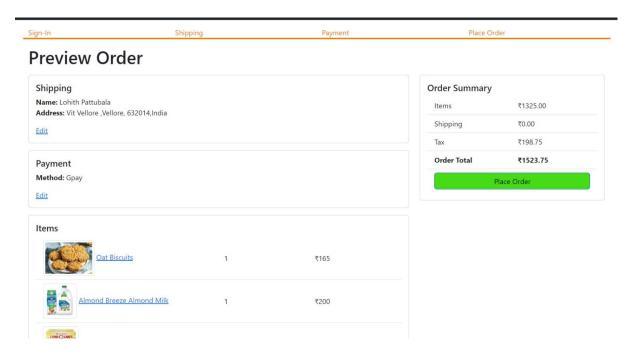
7. Shipping Address:



8. Payment Page:



9. Order Placing:



Key Components

1. App.js

• Responsible for routing and main application layout.

2. /components

- AdminRoute.js: Ensures only admin users can access certain routes.
- CheckoutSteps.js: Displays the steps in the checkout process.
- **Product.js:** Represents individual product items.
- **SearchBox.js:** Provides a search interface for finding products.

3. /pages

- CartScreen.js: Displays the shopping cart with selected items.
- **HomeScreen.js:** Landing page of the application.
- OrderScreen.js: Displays user orders.
- **ProductScreen.js:** Shows detailed information about a specific product.
- SearchScreen.js: Shows search results for products.
- **SignupScreen.js:** Handles user sign-up and registration.

Routing

Routing is managed using React Router. Here are the main routes:

- /OrderRoutes.js: Manages API routes related to orders.
- /ProductRoutes.js: Manages API routes related to products.
- /SeedRoutes.js: Manages routes for seeding the database.
- /UploadRoutes.js: Manages routes for uploading files.
- /UserRoutes.js: Manages API routes related to user operations.

State Management (If Applicable)

State management is achieved using [Redux/Context API].

Integration with Backend

The frontend communicates with the backend APIs hosted on [backend URL]. Key endpoints include:

- **GET /api/data** Retrieves data for display.
- **POST /api/user/login** Handles user authentication.
- **GET /api/products** Retrieves a list of available grocery items.
- **POST /api/users/login** Handles user authentication.
- **POST /api/orders** Processes user orders.
- **POST** /api/upload Handles file uploads.
- POST /api/seed Handles database seeding

User Interface (UI) Design

- The UI design follows clean and user-friendly principles focused on ease of navigation and accessibility.
- Implemented using Material-UI for a consistent and responsive design.

Third-Party Integrations (If any)

- Google API: Additional Functionalities (e.g., Maps)
- Google Pay, Paytm: Payment Processing