

6. Specifications

- **Frontend:** ReactJS (User interface for product and order management)
- **Backend:** Java Spring Boot (REST APIs for CRUD operations)
- **Database:** MySQL (Store product data, stock levels, and orders)
- **Authentication:** JWT
- **Notifications:** AWS SNS for low stock alerts
- **Reports:** PDF and CSV report generation using Apache POI

7. Functional Specifications

7.1 Product Management

- Add, update, and delete products
- Track stock levels with automated updates
- Categorize products

7.2 Order Management

- Place new orders
- Track order status (Pending, Completed, Canceled)
- Record sales and purchase transactions

7.3 Reporting

- Generate reports for inventory levels, sales, and purchases
- Filter reports by date range, product category, or order status

7.4 Notifications

- Send email and SMS notifications for low stock alerts