Development of Kitchen Stories (React App + Spring Boot APIs)

Developer: Newton Bujiku – bujikun@vodacom.co.tz

GIT URL:

The progress of the project is hosted at github repository below:

https://github.com/bujikun/java-fsd-newtonbujiku-bujikun-vodacom.co.tz

Under the Phase 4 directory

SPECIFICATION

This is an application with 2 parts:

- 1. Front-End written using ReactJS and Redux Toolkit
- 2. Backend written using Spring Boot 3

TECHNOLOGIES & CONCEPTS

This application uses the following concepts and technologies

- Java 17
- Spring Data JDBC
- Spring Boot 3
- Oauth2 Resource Server
- React JS 18
- Redux Toolkit
- Lombok
- Bootstrap 5
- MySQL
- Maven
- IntelliJ Idea
- Git & Github
- Agile Scrum Framework

For Java concepts in the project: The application requires JDK 17

Since the backend is a Spring application it uses various Spring concepts like AOP, Spring Context, Auto Configuration, Inversion of Control(Dependency Injection) etc. The front end uses modern React 18 with hooks.

PROJECT IMPLEMENTATION

The project was completed in 2 sprints:

Sprint 1

The following were achieved in this designing sprint:

- Determining Java concepts to be used
- Choosing database technology and build tools
- Defining project scope and structure
- Preparing remote repository
- Sprint planning and review

Sprint 2 (Building Application Features)

The following were done in this sprint including scrum ceremonies and user stories:

- Sprint Planning
- Build home page with a search bar for querying available products
- User to be able to select searched items and add them to the cart
- User to be able to navigate to a page with a listing of all food items
- User to be able to add items to cart
- User to be able to empty cart items
- User to be able to register their details before checkout
- User to be able to checkout cart items after logging in
- User to be able to view a summary of the order before making payment
- User to be able to log in
- Admin to be able to view all orders made
- Admin to be able to view list of all customers who have placed an order
- Admin to be able to change account password
- Admin to be able to view all food items in stock

- Admin to be able to remove food items from stock
- Admin to be able to add new food items in stock
- Admin to be able to logout

How run the program.

The application requires MySQL Server

- 1. Open the project in Intelli J/Eclipse
- 2. Edit application.yml by providing datasource username and password
- 3. Also edit datasource url (port number) as per your RDBMS
- 4. No need to create a database as the application will create that each everytime it is run. To prevent this remove sql.init.mode from application.yml property after first run, then re run the application
- 5. Initial schema & data file is in the resources folder (schema.sql)
- 6. To start the front end, make sure you have NodeJS installed
- 7. Then using terminal from the root directory run the following command cd front-end npm install & npm run preview

Initial Application State

The backend api runs on port 8080 by default.

2 users will be created initially with usernames

1.admin 2.manager 3.. Each of these 2 users, use password as their passwords.

Admin can do most actions while the manager has limited access.

By default only admin is an administrator and the other 2 are just normal users.

Front end

The frontend react app was created using vite and running npm run preview will make it launch on port 4173 (http://localhost:4173)

Admin Portal

Is available through http://localhost:4173/admin

Login is required to access this.

Username: admin, password: password

The screenshot.pdf file has all the screenshots depicting the execution of the application step by step.