13.05.2022

KITCHEN STORY PROJECT



Project Objective:

Kitchen Story is an e-commerce portal that lets people shop basic food items on their website. The website needs to have the following features:

- A search form in the home page to allow entry of the food items to be purchased by the customer.
- Based on item details entered, it will show available food items with price.
- Once a person selects an item to purchase, they will be redirected to the list of available items. In the next page, they are shown the complete breakout of the order and details of the payment to be made in the payment gateway. When payment is done, they are shown a confirmation page with details of the order.

Project Background:

This project aims to design and develop an E-commerce website that lets people shop basic food items using Angular and Spring boot. It enables users to search and buy the available products. It was developed as a project of Phase-4 for the Full Stack Java Developer course.

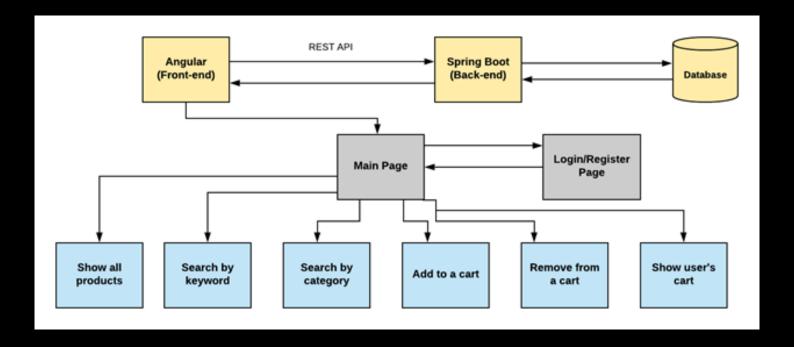
Product Backlog:

- 1. Create database and tables.
- 2. Initialize a Spring Boot project for the Back-End side.
- 3. Create REST APIs with spring Data JPA Repositories
- 4. Create a new Angular project for the Front-End side.
- 5. Create login and register pages.
- 6. Show all products to the home page.
- 7. Create a product details component.
- 8. Search a product by a category.
- 9. Search a product by a keyword.
- 10. Add products to the cart.
- 11. Show user's cart.
- 12. Remove a product from the cart.
- 13. Update user account
- 14. Create the admin view
- 15. Delete a product for the admin
- 16. Add a new product for the admin
- 17. Add bootstrap and font awesome to the components.
- 18. Debug and test the project.

Technologies and tools Used:

- 1. Angular: used in the front-end side to build modern single-page applications
- 2. Spring Boot: used in the back-end side to create the REST API and retrieve data from a database.
- 3. HTML/CSS: to create and format the content of the pages.
- 4. Bootstrap: to use some CSS and JavaScript designs.
- 5. Maven: to manage the project.
- 6. Visual Studio Code: to write and run the Angular code.
- 7. IntelliJ: to write and run the Spring Boot code.
- 8. phpMyAdmin: to administrate and manage the database manually.

Flowcharts of the Application:



Core Concepts Used:

Object-Oriented: used to create and model objects for users and their credentials.

REST API: used to communicate between the back-end and the front-end sides.

Data Access Object: to abstract and encapsulate all access to the data source.

Object-Relational Mapping: to map the objects to the database.

Databases: used to store and retrieve data.

Data Sources: used to define a set of properties required to identify and access the database.

Collections: used some collections such Arraylist to store collection of data.

Exception Handling: used to catch problems that arises in the code especially in I/O blocks.