**Phase 5 Project 1**

**Kitchen Story an E-commerce Portal(Write up)**

The code for this project is hosted at https://github.com/suruthiram/phase5\_project

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**Project Details**

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

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## Core concepts used in the project.

1. Object-Oriented: used to create and model objects for users and their credentials.
2. REST API: used to communicate between the back-end and the front-end sides.
3. Data Access Object: to abstract and encapsulate all access to the data source.
4. Object–Relational Mapping: to map the objects to the database.
5. Databases: used to store and retrieve data.
6. Data Sources: used to define a set of properties required to identify and access the database.
7. Collections: used some collections such Arraylist to store collection of data.
8. Exception Handling: used to catch problems that arises in the code especially in I/O blocks.