Walmart App Case Study

1	**Name of the Project**	**Walmart App**
2	**Objective/ Vision**	Create an application which can search in products in Walmart and also keep an eye on its prices. The application should have header section, search section and result display section. A user should be to search for a product on home page but only logged in users can keep products in watch list for its prices. The application needs to work with Walmart states from https://rapidapi.com/axesso/api/axesso-walmart-data-service and price management - https://developer.walmart.com/api/us/mp/price
3	**Users of the System**	All Internet users
4	**Functional Requirements**	**1)** 1) Home Page should consist of Register page link through which a user can register himself. Upon registration, the user able to login into his account. **2)** User home page should also have options for to edit his profile and changing his password. **3)** Search Service- Searching of a product can be done in various following ways - 1. By product 2. By keyword 3. Upcoming products **4)** Price management should by using https://developer.walmart.com/api/us/mp/price for products
5	**Non-functional requirements**	a) App should be accessible from any location with access to the Internet. b) App should be responsive to display consistently across multiple device screens. c) App should have an intuitive UI that can be operated by novice-expert Internet users
6	**Tools and Technologies to be used**	**1.** VCS : Gitlab **2.** Middleware : Spring Boot **3.** Frond end : Angular/React **4.** Data Store : MongoDB / MySQL **5.** Testing : JUnit, Mocha, Chai, Jest, Protractor **6.** Container : Docker **7.** Bug Fix : Sonarlint **8.** CI : Gitlab

STACKROUTE

User Stories

1	**As a user I should be able to register with the application so that I can login and use the functionalities of the application.**
2	**As a user, I should be able to login with my user name and password in order to access the functionalities of the application.**
3	**As a user, I should be able to login with my Gmail account in order to access the functionalities of the application.(Optional requirement)**
4	**As a user I should be able to search resources to view their details**
5	**As a user, I should be able to save resources to a wishlist/favourite so that I can access them later**
6	**As a user, I should be able to access items saved to my wishlist/favourite**

Notes:

- The application should be based on microservices architecture
- API Gateway pattern should be implemented using Spring Cloud Gateway
- Services should register themselves with Eureka Service Discovery server.
- All layers of microservices should be covered with automated unit and integration tests
- All microservice endpoints should have API documentation

High Level Architecture Diagram