**Grocery Application Document**

**1.Introduction**

The purpose of this document is to outline design for grocery application. This will include a view of high-level architecture. UML diagrams and sequence diagrams will be provided to show the system will be put together and how data flow through the system. There will be discussion on technologies that will be using throughout this project.

**2. API Overview**

**2.1 High Level Description**

This is a micro services project. One service registry project developed to register the services. One micro service project which will read the excel data and other micro service project to perform the required operations on the data. The two services communicate each other if there is any need. The UI is developed using React to show the price trend.

**2.2 Technology Stack**

Java 17

Spring Boot

Micro Services

Eureka Server

Node 20

React 18

Maven

Swagger

Spring Actuator

**3. System Architecture**

Grocery Application

In Memory Data

**4. Rest End Points:**

**Eureka Server registry:**

<http://localhost:8761/>

**Grocery Data Provider:**

<http://localhost:8084/>groceryData

**Grocery sorted data:**

<http://localhost:8085/>items

**Grocery data by name:**

[http://localhost:8085/](http://localhost:8084/)items/name

**Swagger URL:**

http://localhost:8085/swagger-ui/index.html

**Actuator URL:**

<http://localhost:8085/actuator/health>

**5. Sequence diagram**

**5.1 Get all Grocery Items from excel:**

**Grocery Controller**

**Read Data from excel**

**Data Provider Service Service**

Web browser

Get Request

items

Data

Request Data

Response

**5.2 Get All Sorted Grocery Items:**

**Service registry**

**Grocery data provider**

**Grocery api Service**

Web browser

Get Request

items

Data

Request Data

**Response**

**5.3 Get Grocery Item by Name:**

**Grocery data provider**

**Controller**

**Service**

getGroceriesByName

Response

Get request

Data

Resource not Found Exception

Request for Data