

**WEB 224**

# **Web Programming**

**Garcia, Richard C.  
Pangan, Kharlo P.  
Gorospe, Carlo Anton A.  
Liangco, Jofel R.**

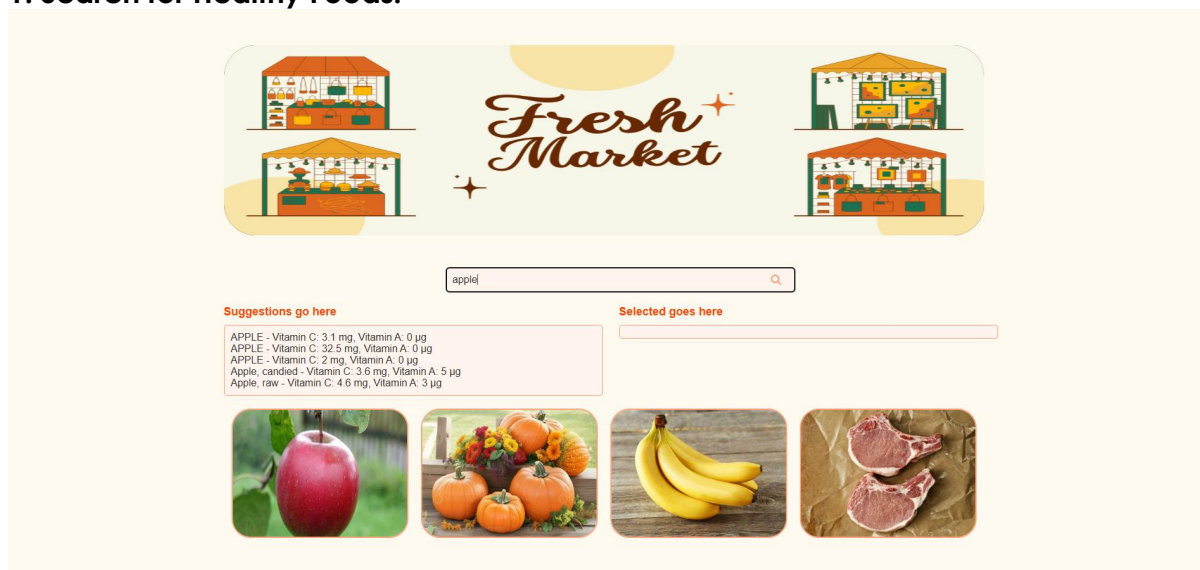
**BSCpE - 2C**

## Introduction

In today's super-fast world, eating a balanced diet is necessary for overall health. Unfortunately, it can be difficult to find fresh and good-for-you foods in the city especially if you are not familiar with the area. In response to this problem, we are launching Healthy Market Locator project – which is a web-based application that enables users to trace nearby markets where they can buy nutritious food effortlessly.

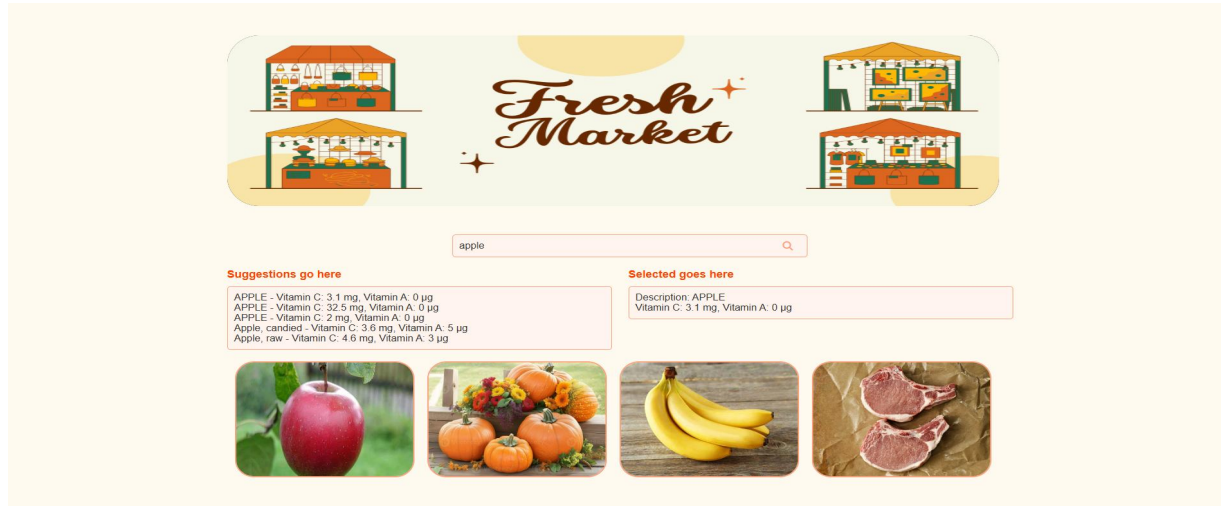
## Project Overview:

### 1. Search for Healthy Foods:



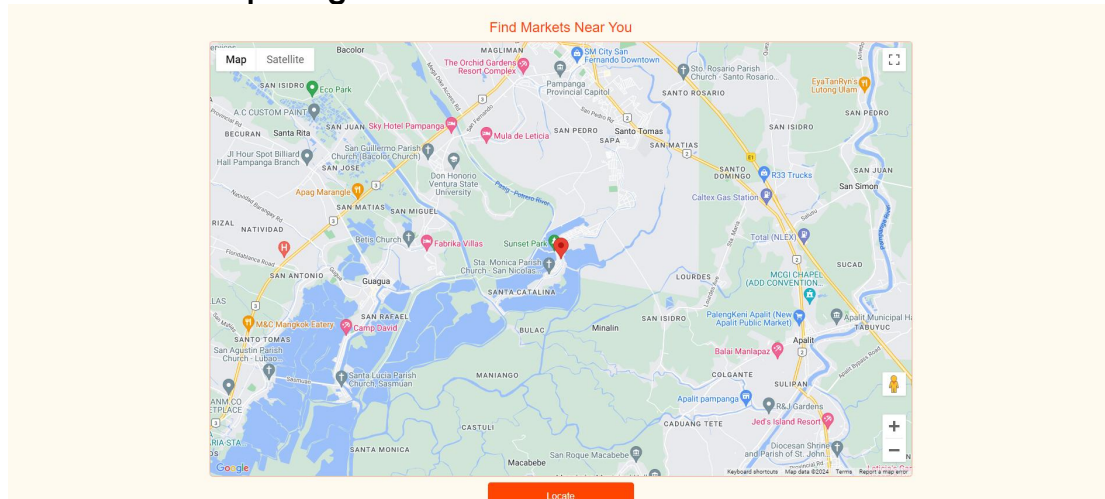
- The project comes with a friendly user interface where users can search for various healthy foodstuffs. Thanks to Food Data Central API, users can explore numerous nutritious items that have been customized to their taste.
- Upon typing a query into the search bar, the application dynamically fetches relevant food items and displays them along with essential nutritional information such as Vitamin C and Vitamin A content.

## 2. Selected Food List:

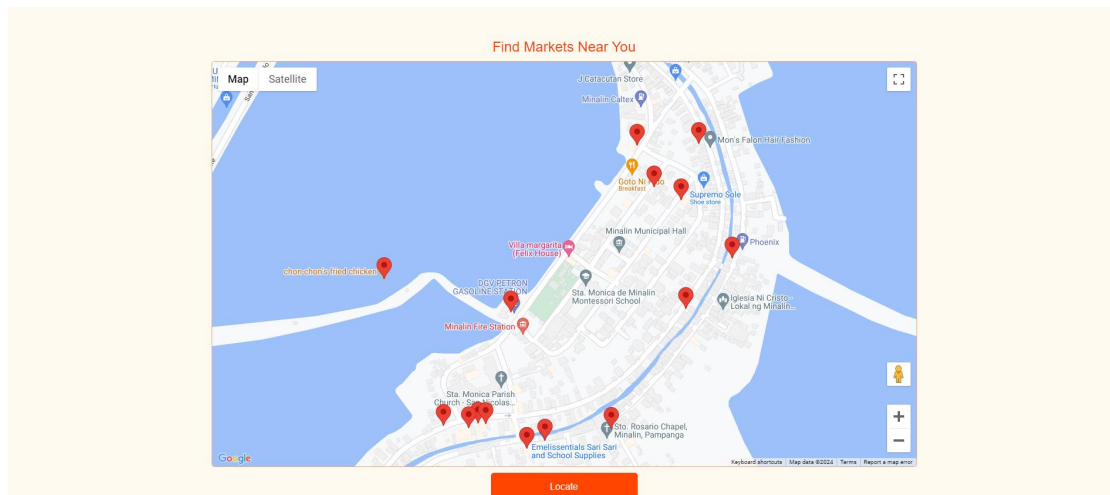


- The app encourages users to maintain their own personalized list of selected foods. By permitting users to add the food items they have chosen to a particular selection of food, this project promotes mindfulness when shopping as well as planning for diet.
- Users can make notes on each foodstuff they choose to select, this helps them make their choices knowledgeably, and also they can use these note to remind themselves which product to pick up when they go to the market.

## 3. Interactive Map Integration:



- An interactive map feature has been added to the app using Google Maps JavaScript API. Healthy food markets can be found easily near the users with a single click.



- Upon clicking on a market location, users are presented with detailed information including the market's name, rating (if available), opening hours, and address.

#### 4. WebSocket Communication:

```
Server is listening on port 8080
A new client has connected. Total clients: 1
A client picked: {"type":"Locates Nearest Market Available"}
A client picked: APPLE
A client picked: MANGO
A new client has connected. Total clients: 2
```

- The project implements WebSocket communication to enhance real-time interaction between the client and server.
- Users and Server side are notified of the total number of connected clients, picked foods, and markets located which ensures transparency and efficiency in data exchange.