**Restaurant Analysis**

**Dashboard**

**Name : Manu U**

**Reg no : 12215019**

**Class : KM073**

**Introduction**

The Restaurant Dashboard is a web-based application developed using Shiny, a web application framework for R. It allows users to explore nutritional information and statistics for various fast-food items from different restaurants. The dashboard provides an interactive interface for selecting restaurants and items, visualizing average calorie information, and displaying detailed nutritional information for selected items.

**Features**

1. **Select Restaurant and Item**

Users can select a specific restaurant from the dropdown menu to view nutritional information and statistics for items offered by that restaurant. Upon selecting a restaurant, the dropdown menu for selecting items dynamically updates to display only the items available at the selected restaurant.

2. **Average Calorie by Restaurant**

The dashboard provides a bar plot showing the average calorie content across different restaurants. The plot helps users compare the average calorie content of items offered by various restaurants at a glance.

3**. Nutritional Information**

Users can view detailed nutritional information for a selected item in a table format. The table displays various nutritional components such as calories, fat content, cholesterol, sodium, carbohydrates, fiber, sugar, and protein. Users can scroll through the table to explore all the nutritional details.

4. **Fat Content Analysis**

A bar plot titled "Heading Fat Content" is provided to visualize the saturated fat and trans fat content for a selected item. This plot allows users to assess the fat composition of the item and make informed dietary choices.

5. **Total Fat, Total Carb, Sugar, and Protein Analysis**

The dashboard includes a bar plot titled "Total Fat, Total Carb, Sugar, and Protein" to visualize the total fat, total carbohydrates, sugar, and protein content for a selected item. This plot helps users understand the macronutrient composition of the item.

6. **Vitamins & Minerals Analysis**

A bar plot titled "Vitamins & Minerals" displays the content of essential vitamins and minerals such as Vitamin A, Vitamin C, and Calcium for a selected item. This plot enables users to evaluate the nutritional value of the item in terms of micronutrients.

**Conclusion**

The Restaurant Dashboard provides a user-friendly interface for exploring nutritional information and statistics related to fast-food items. By leveraging interactive visualizations and detailed tables, users can make informed decisions about their food choices based on calorie content, fat composition, macronutrient distribution, and micronutrient content. The dashboard serves as a valuable tool for promoting healthy eating habits and raising awareness about nutritional values in fast-food options.