**Project Report:**

**Restaurant Management System**

Section: BSCS-3F

Subject: COAL

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# Introduction

The Restaurant Management System is a program developed in Assembly Language using the Irvine32 library. This system provides functionalities for managing orders, calculating bills, taking customer feedback, and managing different categories of food items in a restaurant.

# Methodology

The system is designed with a modular approach, breaking down functionalities into distinct procedures or functions. The program utilizes various input/output operations, file handling, string operations, and control structures to manage the restaurant functionalities.

Login System: The program starts with a login system where the user needs to enter a username and password. There is a limit of three login attempts, and successful login displays a "Login Successful" message.

Menu Selection: After successful login, the user can choose from the following options:

**Pizza:** Allows users to select different sizes of pizzas with corresponding prices.

**Burger:** Provides options for various types of burgers and their prices.

**Barbeque**: Offers choices for drinks and barbeque items.

**Read Feedback:** Allows users to read feedback stored in a file.

**Exit:** Exits the program and displays the total bill.

Ordering and Billing:

Users can choose items from the menu, specify quantities, and continue ordering more items. The system calculates the total bill based on the selected items and their quantities.

Feedback Feature:

Enables users to provide feedback, which is stored in a file for future reference.

## File Handling:

The program includes functionalities to handle file operations:

Reading feedback from a file and displaying it to the user upon request.

Appending user feedback to the existing file for record-keeping.

## User Interface:

The program utilizes a text-based user interface using assembly language, providing clear prompts and options for users to navigate through the system.

# Functions Details

## Display

The Display function is responsible for showing the welcome message and creating an appealing user interface for the Restaurant Management System.

## Loading

The Loading procedure is aimed at displaying a loading message to the user, providing feedback about the loading status of the program.

# ISloggedIN

This function ensures the secure login of the user by prompting for a username and password. It allows only authorized users to access the system.

## Pizza\_max, Burger\_point, Barbeque\_point

These procedures manage the ordering process for different food categories. They prompt users to select the type, size, and quantity of items and calculate the total bill accordingly.

## Drinks, BBQItems

These procedures manage the ordering process specifically for drinks and barbeque items respectively. They also prompt users for choices and quantities and calculate the total bill accordingly.

## ReadFile, feedback

ReadFile reads content from a file (if available) and displays it to the user. The feedback function collects user feedback and appends it to an output file for further analysis.

## OpenOutputFileAppend, SetFilePointerToEnd

These procedures manage the file handling operations. OpenOutputFileAppend is responsible for opening the file in append mode, while SetFilePointerToEnd moves the file pointer to the end of the file for appending data.

# Conclusion

The Restaurant Management System in Assembly Language is a comprehensive program that effectively handles various functionalities of a restaurant, including order management, bill calculation, and user feedback. The modular approach ensures ease of maintenance and scalability for future enhancements or modifications.

The system effectively utilizes file handling, string operations, conditional statements, and user interaction to provide a smooth user experience while managing restaurant operations.