

KFC Ordering System

- **Project Report: KFC Ordering System**

1. Introduction

1.1 Team Members

- Mian Daniyal Hassan: Lead Developer

1.2 Project Overview

- **The KFC Ordering System:** is a console-based application designed to simulate the ordering process within a KFC restaurant. It allows users to interact with the system as either a customer or a branch manager.
- **Customers:** can place orders for various items, view the total cost including taxes, and choose their preferred currency for payment.
- **Branch manager:** have the ability to manage inventory, update quantities of existing items, and add new items to the inventory. This system aims to streamline the ordering process and inventory management, enhancing efficiency and customer satisfaction.

1.3 Technologies Used

- Programming Language: C++
- Libraries: Standard Template Library (STL)

2. Project Features

2.1 Feature 1: Customer Order Placement

Customers can select items by entering their codes, **specify the quantity**, and choose whether they want to add more meals. They can then **select their preferred currency** for payment (PKR, Euro, Dollar), and the system **calculates the total bill, including sales tax** based on the selected currency rates.

2.2 Feature 2: Branch Manager Inventory Management

Branch managers can view the current inventory status, **update quantities** of existing items, and **add new items** to the inventory. **Each item requires details** like name, quantity, and price. Managers can also confirm orders placed by customers.

3. Code Explanation

3.1 Main Function

The main() function serves as the entry point of the program. It presents the user with options to enter as a customer or a branch manager. Based on the selection, the program navigates through different sections of the code to handle the corresponding functionalities.

3.2 Functions

3.2.1 Function 1: pay1

This function calculates the total bill for a given item, considering the price, quantity, and tax. It outputs the total bill amount in PKR and returns the calculated bill amount.

```
int pay1(int price, int quantity, int tax){  
    tax = tax * quantity;  
    int bill = price * quantity + tax;  
    cout << "Total Bill in PKR: " << bill << endl;  
    return bill;  
}
```

3.2.2 Function 2: Inventory Management

This section includes functions for managing inventory, such as displaying inventory status, updating item quantities, and adding new items. These functions involve user interaction for inputting item details and updating inventory accordingly.

4. Sample Code Snippets

Key code illustrating the structure and logic of the program:

```
// Displaying inventory status  
cout << "Fried Chicken: " << s1 << endl;
```

```
// Updating item quantity
```

```
s1 = q1 + order;
```

```
// Adding new item to inventory
```

```
cout << "Enter the name of item " << m + 1 << ": ";
```

```
cin >> name[m];
```

5. Conclusion

The KFC Ordering System successfully simulates the ordering and inventory management processes within a KFC restaurant environment. Despite facing challenges in handling complex user inputs and ensuring accurate calculations across different currencies, the team managed to develop a functional prototype that meets the project's objectives.