**Module-3) Introduction To Oops Programming**

1. After asking the Name , it should display the following menu.
2. After Entering the Choice , the Screen should be shown like this:
3. Again ask for the choice and also the Quantity now :
4. After you order the quantity how much you want , Generate the Bill and Ask whether he/she wants to continue or not.

#include <iostream>

#include <string>

#include <iomanip> // For formatting output

using namespace std;

// Class definition for the Food Ordering System

class FoodOrderingSystem {

private:

string customerName;

struct MenuItem {

string name;

double price;

};

MenuItem menu[5] = {

{"Pizza", 299},

{"Burger", 99},

{"Sandwich", 149},

{"Rolls", 69},

{"Biryani", 199}

};

double totalBill;

public:

FoodOrderingSystem() : totalBill(0.0) {}

void askCustomerName() {

cout << "Enter your name: ";

getline(cin, customerName);

}

void displayMenu() {

cout << "\nWelcome, " << customerName << "! Here is the menu:\n";

cout << "--------------------------------\n";

for (int i = 0; i < 5; i++) {

cout << i + 1 << ". " << menu[i].name << " " << fixed << setprecision(2) << menu[i].price << "\n";

}

cout << "--------------------------------\n";

}

void takeOrder() {

int choice, quantity;

char continueOrdering;

do {

cout << "\nEnter the number of the item you want to order: ";

cin >> choice;

if (choice < 1 || choice > 5) {

cout << "Invalid choice. Please try again.\n";

continue;

}

cout << "Enter the quantity: ";

cin >> quantity;

if (quantity <= 0) {

cout << "Invalid quantity. Please try again.\n";

continue;

}

totalBill += menu[choice - 1].price \* quantity;

cout << "\nItem added to your order: " << menu[choice - 1].name << " x " << quantity << "\n";

cout << "Do you want to order more items? (y/n): ";

cin >> continueOrdering;

} while (tolower(continueOrdering) == 'y');

}

void generateBill() {

cout << "\nThank you for your order, " << customerName << "!\n";

cout << "Your total bill is: " << fixed << setprecision(2) << totalBill << "\n";

cout << "Have a great day!\n";

}

};

int main() {

FoodOrderingSystem system;

system.askCustomerName();

system.displayMenu();

system.takeOrder();

system.generateBill();

return 0;

}