



SCSJ2013-06 Data Structure And Algorithm

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Assignment 1 Report

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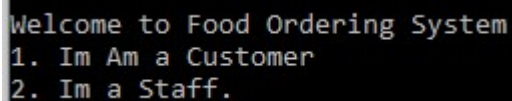
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Introduction:

Nowadays during the covid-19, pandemic there is no argument that the online ordering is one of the most important and useful services that have been increasingly used especially in the field of ordering food as each restaurant has only a limited number of customers to be dine in. If you need to get a meal, you have to go through a time-consuming process especially when you go to a place without having reservation or the restaurant cannot serve all your family members in one table. Facing such difficulties made online food ordering a good choice for customers to get their favorite meals. As a result of that we choose to develop a food ordering system as our assignment objective.

The developed food ordering system, will provide the customer with the option of selecting the meal by giving him the chance to order meal by showing him the ordered list that contains all options. It also will give the staff the ability to update the menu by adding new meals and put them in the right alphabetical order as well as the ability of searching for food item and other functionalities that will be furthered discussed.

The user will be provided with 2 options as the picture shows:



```
Welcome to Food Ordering System
1. Im Am a Customer
2. Im a Staff.
```

After choosing an option the user will be provided with another menu that shows the actions could be done by the user as customer or as staff

```
int menu_Customer()
{
    //dashboard for the staff it can display foods available ,add foods ,delete f
oods,search foods
    int men_choice;
    cout << "Welcome to Customer Dashboard " << endl;
    cout << "1.Show list of Foods" << endl;
    cout << "2.Order Food" << endl;
    cout << "3.Exit" << endl;
    cout << "Please enter your choice from 1..3" << endl;
    cin >> men_choice;
    cout << endl;

    switch (men_choice)
```

First, the customer will choose to show list of food, so that he can view the available food. The list is ordered alphabetically, by implementing Insertion Sorting Algorithm that is done using InsertionSortFood()

```
Please enter your choice from 1..3
1

FoodID Name details
3 Double big mac
1 hotdog roll
2 Nutella crepe
4 SuperSuprem Pizza cheese,large,combo
```

After he has viewed the food list, the customer will be required to choose an option from the customer's main menu. Let's say he choose the second option which is order food. Then will be asked if he is new customer or not. If yes he will be required to enter his information which are id , name, phone no., and address. While he will be entering his id , if he an existence customer.

```
Welcome to Customer Dashboard
1.Show list of Foods
2.Order Food
3.Exit
Please enter your choice from 1..3
2

Are you a new Customer or an excisting Customer ?
For new Customer type (1)
For excisting Customer type (2)
_
```

Going back to the first main menu the provide the user with the using mood so he can be a customer or a staff. when choosing the second option which is to be a staff, the new menu will be executed. this menu contains the actions can be done by staff

```
int menu_Staff()
{
    //dashboard for the staff it can display foods available ,add foods ,delete f
oods,search foods
    int men_choice;
    cout << "Welcome to Staff Managment System " << endl;
    cout << "1.Show list of Foods" << endl;
    cout << "2.Add Food Item" << endl;
    cout << "3.Delete a Food Item" << endl;
    cout << "4.Search for a food Item" << endl;
    cout << "5.Exit" << endl;
    cin >> men_choice;
    cout << endl;

    switch (men_choice)
```