



# Final Project

Programming Fundamental

*Billing System for Star Seafood Corner*  
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## Introduction:

As a developer I need to create a program which is able to take order, delete order and have inventory of sea food items for Star Seafood corner. So for that purpose I have used C# to make a program that is capable for doing all above mentioned objectives. Why I use C#? Nowadays C# is one of the most popular programming languages. It issued by millions of developers worldwide. Because C# is developed by Microsoft as part of their modern platform for development and execution of applications, the .NET Framework, the language is widely spread among Microsoft-oriented companies, organizations and individual developers. To achieve the above mentioned objectives I have used a couple of things like loops, arrays, conditions and methods etc.

## The C# Programming Language:

C# is a modern object-oriented, general-purpose programming language, created and developed by Microsoft together with the .NET platform. There is highly diverse software developed with C# and on the .NET platform: office applications, web applications, websites, desktop applications, mobile applications, games and many others.

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There are many reasons why we chose C# for our book. It is a modern programming language, widely spread, used by millions of programmers around the entire world. At the same time C# is a very simple and easy to learn (unlike C and C++). It is natural to start with a language that is suitable for beginners while still widely used in the industry by many large companies, making it one of the most popular programming languages nowadays.

C# is a high-level language that is similar to Java and C++ and, to some extent, languages like Delphi, VB.NET and C. All C# programs are object- oriented. They consist of a set of definitions in classes that contain methods and the methods contain the program logic – the instructions which the computer executes.

## Solving the Given Problem:

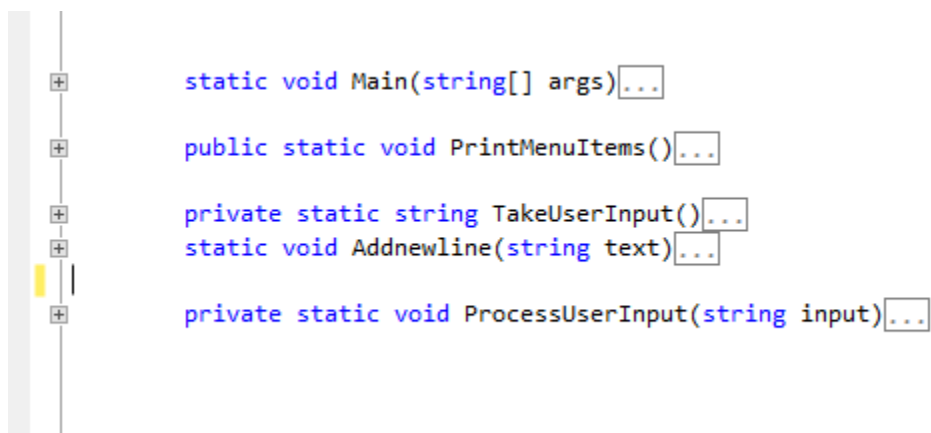
1. To solve the given problem I created an array in which I can store orders and created array also for store seafood items as shown in screenshot;

```
static FishTypes[] fishTypes = new FishTypes[25];  
static Order[] allorders = new Order[500];  
static int currentOrders = 0;
```

2. For the sake of convenience I made different methods to simplify my coding for example created method for printing menu items as shown in screenshots;

```
public static void PrintMenuItems()  
{  
    Console.ForegroundColor = ConsoleColor.Blue;  
    Console.WriteLine("*****Welcome to Star Seafood Corner Billing System*****");  
    Addnewline ("-----");  
  
    Addnewline("          Please enter 'A' to add new order          ");  
    Addnewline("          Please enter 'L' to add list of orders.        ");  
    Addnewline("          Please enter 'D' to delete order.              ");  
    Addnewline("          Please enter 'S' to to view Seafood Items.      ");  
  
    Addnewline("-----");  
}
```

Similarly all methods are shown in below screenshots.



```
static void Main(string[] args) ...  
public static void PrintMenuItems() ...  
private static string TakeUserInput() ...  
static void Addnewline(string text) ...  
private static void ProcessUserInput(string input) ...
```

3. Let's discuss one by one each method ;

- i. PrintMenuItems this method I created to print all my menu items as we can see the above screenshot.
- ii. Then I create another method **TakeUserInput** in this method I am taking input from user in string and this method returns string as shown.

```
private static string TakeUserInput()
{
    string input = Console.ReadLine();
    return (input);
}
```

- iii. Then I created **ProcessUserInput** method. This method include all the logic portion of my program as discussed above TakeUserInput method so the User will enter on of the following letter "A", "L", "D" below attached screenshots will show the logics ;

```
if (input == "A")
{
    Order newOrder = new Order();

    newOrder.orderNumber = currentOrders + 1;
    Console.WriteLine("Enter Customer Name");
    newOrder.CustomerName = Console.ReadLine();
    Console.WriteLine("Enter Customer Phone Number");
    newOrder.CustomerPhone = Console.ReadLine();
    Console.WriteLine("Enter fish type");
    newOrder.Fishtype = Console.ReadLine();
    Console.WriteLine("Enter quantity in KG ");
    newOrder.Quantity = double.Parse(Console.ReadLine());
    Console.WriteLine("Enter price per Kg for fish");
    newOrder.Price = double.Parse(Console.ReadLine());

    newOrder.totalprice = newOrder.Quantity * newOrder.Price;
    allorders[currentOrders] = newOrder;

    currentOrders++;

    Console.WriteLine("the total order cost is : {0}", newOrder.totalprice);
    Console.WriteLine("New order successfully added");
    Console.WriteLine("-----");

    Console.WriteLine("Press any for main menu");
    Console.ReadLine();
    Console.Clear();
    PrintMenuItems();

    string input1 = TakeUserInput();
    ProcessUserInput(input1);
}
```

```

}
else if (input == "L")
{
    Console.WriteLine("List of All Orders.");
    Console.WriteLine("Total orders {0}", currentOrders);

    for (int i = 0; i < currentOrders; i++)
    {
        if (allorders[i].isDeleted == false)
        {
            Console.WriteLine("OrderNumber: {0} | CustomerName: {1} | CustomePhone: {2} |
        }
    }

    Console.WriteLine("Press any for main menu");
    Console.ReadLine();
    Console.Clear();
    PrintMenuItems();

    string input1 = TakeUserInput();
    ProcessUserInput(input1);
}

else if (input == "D")
{
    Console.WriteLine("Please enter order number to delete");
    int orderToDelete=int.Parse(Console.ReadLine());
    for (int ind = 0; ind < currentOrders; ind++)
    {
        if(allorders[ind].orderNumber == orderToDelete)
        {
            allorders[ind].isDeleted = true;
            Console.WriteLine("Order deleted successfully");
        }
    }
}

```

4. Now let's have program working screenshots.

i. Printing menu,

```
file:///C:/Users/Arsalan/documents/visual studio 2010/Projects/Final_Project/Final_Project/b
*****Welcome to Star Seafood Corner Billing System*****
-----
-           Please enter 'A' to add new order           -
-           Please enter 'L' to add list of orders.      -
-           Please enter 'D' to delete order.           -
-           Please enter 'S' to to view Seafood Items.  -
-----
```

ii. Taking Order;

```
-           Please enter 'S' to to view Seafood Items.  -
-----
A
Enter Customer Name
Syed Arsalan Ali
Enter Customer Phone Number
03333487816
Enter fish type
Surmai
Enter quantity in KG
1.32
Enter price per Kg for fish
1020.33
the total order cost is : 1346.8356
New order successfully added
-----
Press any for main menu
```

iii. List Orders

```
-----
L
List of All Orders.
Total orders 1
OrderNumber: 1 | CustomerName: Syed Arsalan Ali | CustomePhone: 03333487816 | FishType: Surmai | OrderQuantity: 1.32 |
Price 1.32 | TotalPrice 1020.33 |
Press any for main menu
```



iv. Deleting Order

```
-----  
D  
Please enter order number to delete  
1  
Order deleted successfully  
Press any for main menu
```

### Conclusion:

As we can see the in above screenshots that all mentioned goals have been successfully achieved and the program is working fine. It was difficult initially to create logics but after some practice and efforts all thing were working as per expectations.