COMSATS University, Islamabad

Islamabad Campus

Department of Computer Science

DATA STRUCTURES AND ALGORITHMS – SP2021

TOPIC: FOODPANDA MANAGEMENT SYSTEM

SUBMITTED TO:

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SUBMITTED BY:

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1. Description of the project (proposal)

The proposed project is about the **CRUD** (Create, Read, Update, delete) based Food Panda Management system in which customers can get orders from the nearby Food Panda. The customers can buy products from the store by first selecting the product category. The available product categories in our stores include **Chicken-Burger (Rs. 200), Andy-wala Burger (Rs.150), Small-Sized-Pizza (Rs. 400), Large-Sized-Pizza (Rs.750), Fries (Rs. 100), One-Liter-Coke (Rs. 120)** and **Shuwarma (Rs.150).** .

Once the user selects the required product category, the system will check that whether the selected product category stock is available at the shop. If the stock for the selected category is available, the user will be directed to products screen. In case the stock is unavailable for that category, user will be referred to the nearest store where the selected product category is available.

The shortest path to find the nearest store includes traffic rate and the distance to the destination store. The overall cost decides to recommend the nearest store. The system uses **Dijkstra's algorithm** to find the **optimized path** for the nearest store in the food panda network.

The available products are shown to user to buy the desired product. The details of the product include **Order Id, Order name, Order price, Customer name, Customer Mobile number,**).

Food Panda Management system also takes the **feedback** from the user and store in the stack. It also maintains the history of delivered orders to find the sale of shop.

2. Data Structures used with purpose

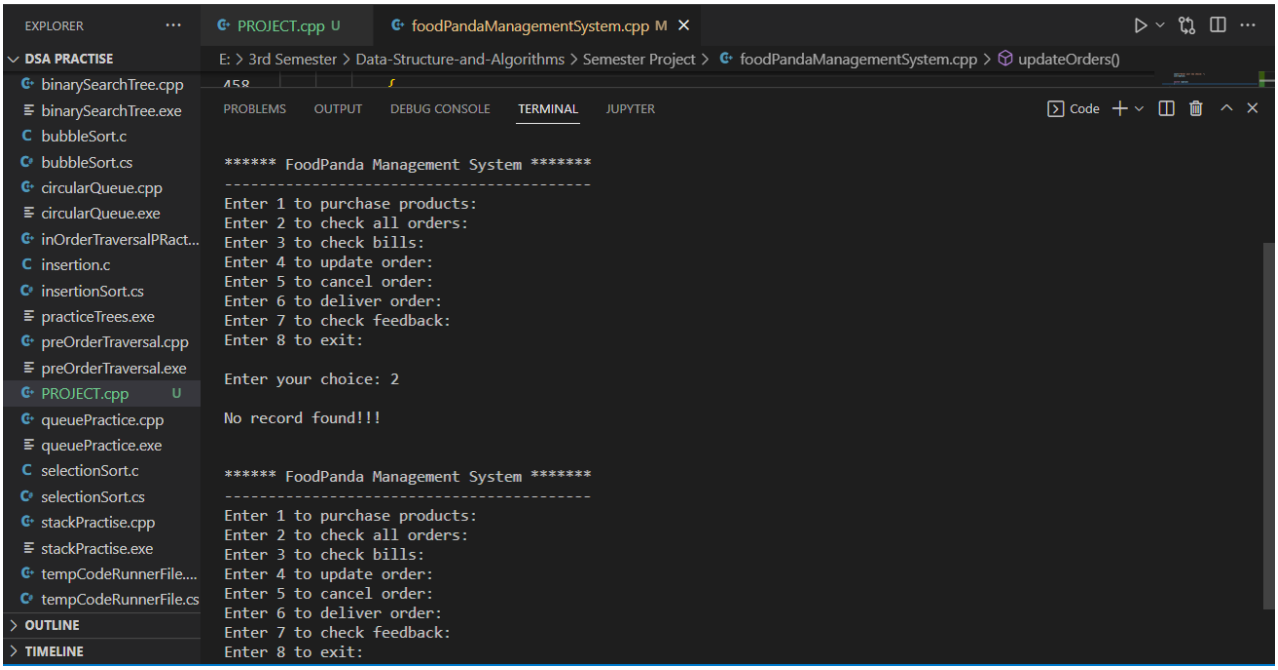
Linked List for storage of orders (add, update, cancel, deliver etc).
Graph for storing Food Panda costs.
AVL Trees for storing delivered orders.
Stack for giving and delivering feedback

structs used in the code:

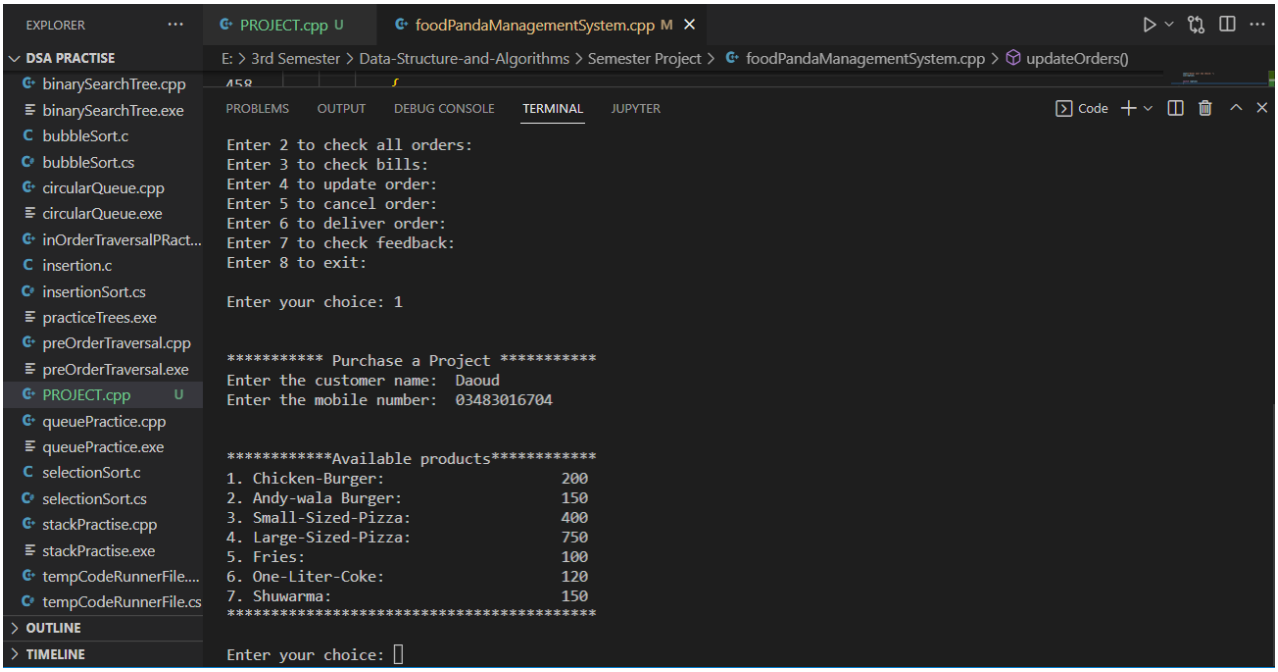
Structure	Purpose
struct Orders	Used to store/retrieve orders.
struct Trees	Used to store information of delivered orders.
struct Stack	Used to give and receive feedbacks.

3. Output

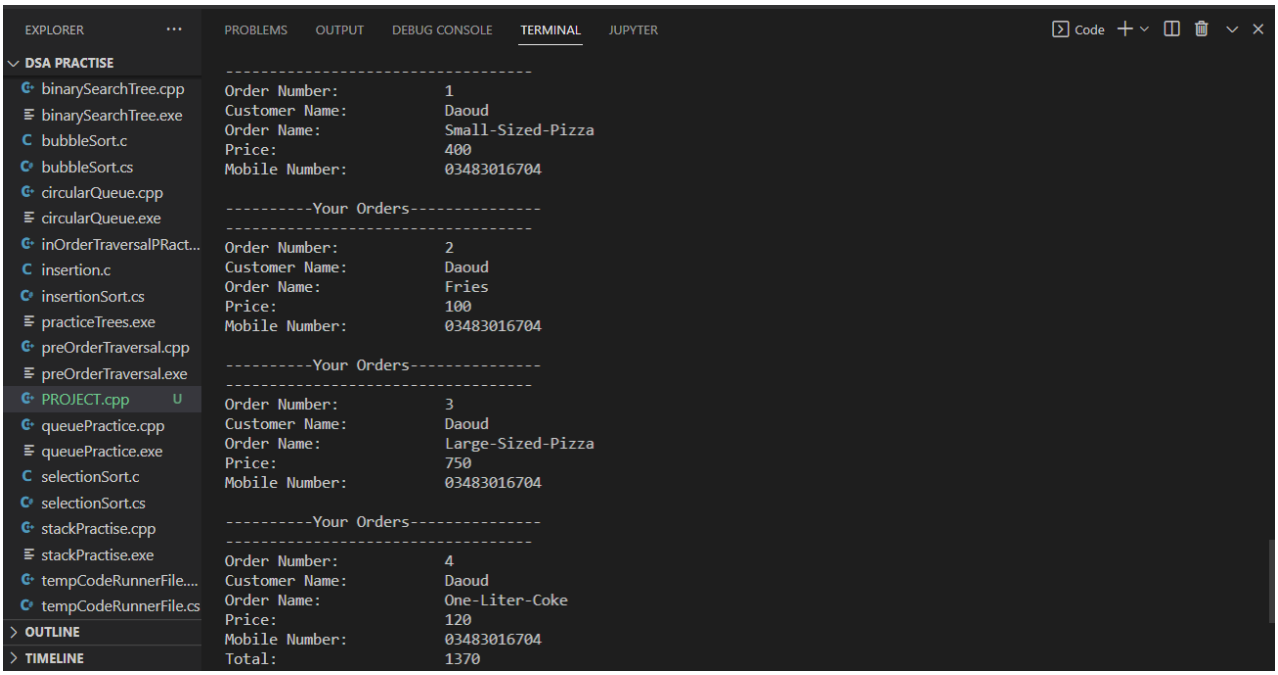
When Product is out of stock in that market



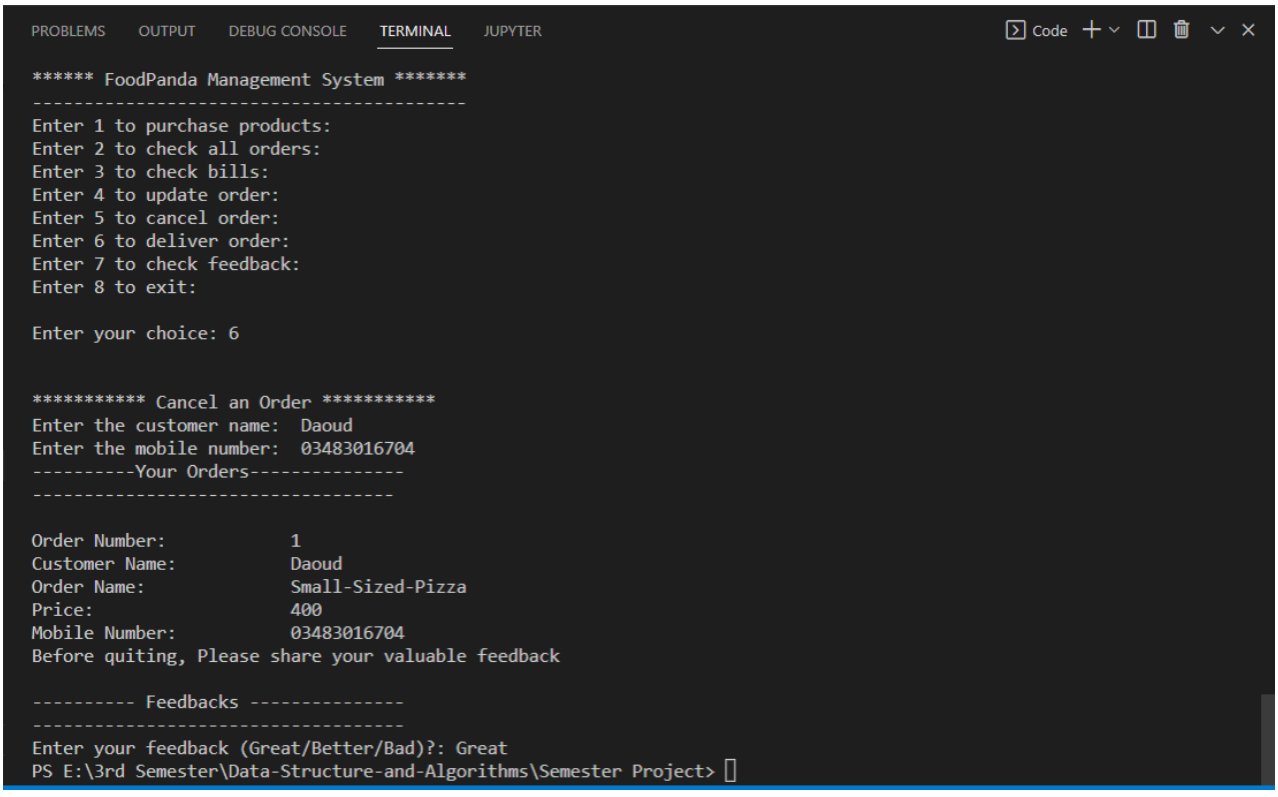
When Product is available in that market



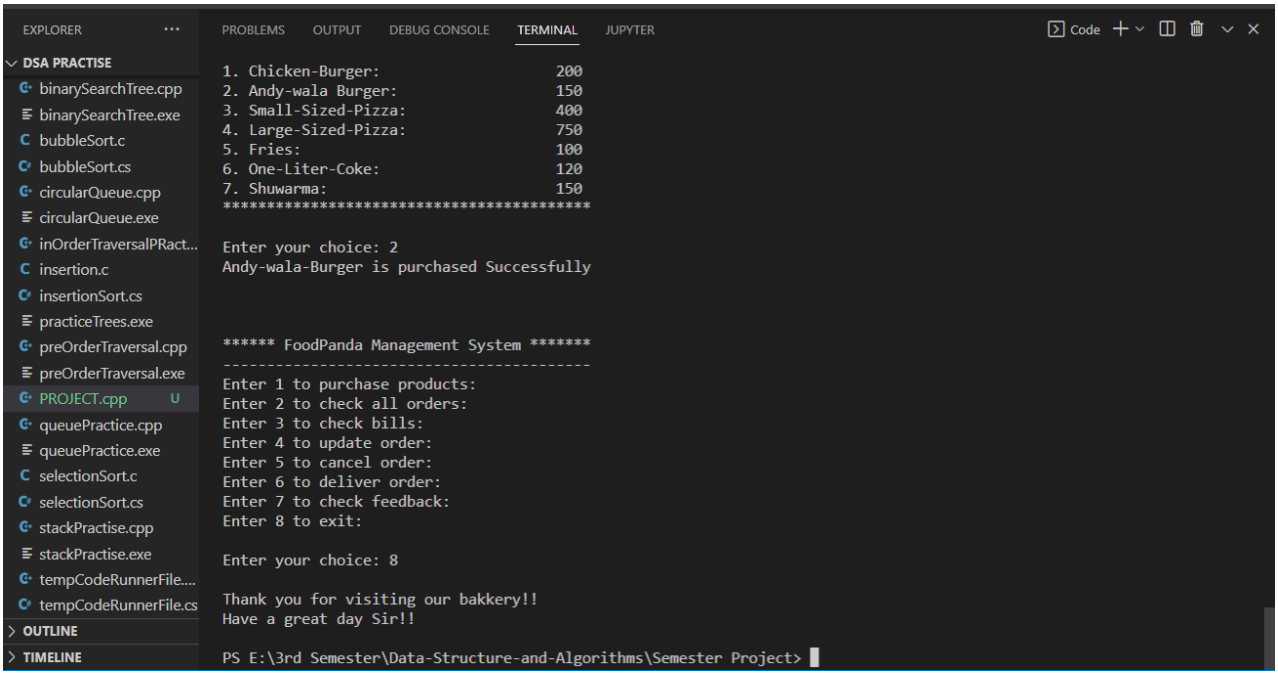
Bill after purchasing:



Order delivered after Feedback:



Exit


EXPLORER
DSA PRACTISE
binarySearchTree.cpp
binarySearchTree.exe
bubbleSort.c
bubbleSort.cs
circularQueue.cpp
circularQueue.exe
inOrderTraversalPRact...
insertion.c
insertionSort.cs
practiceTrees.exe
preOrderTraversal.cpp
preOrderTraversal.exe
PROJECT.cpp U
queuePractice.cpp
queuePractice.exe
selectionSort.c
selectionSort.cs
stackPractise.cpp
stackPractise.exe
tempCodeRunnerFile....
tempCodeRunnerFile.cs
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
Code
1. Chicken-Burger: 200
2. Andy-wala Burger: 150
3. Small-Sized-Pizza: 400
4. Large-Sized-Pizza: 750
5. Fries: 100
6. One-Liter-Coke: 120
7. Shuwarma: 150
Enter your choice: 2
Andy-wala-Burger is purchased Successfully
****** FoodPanda Management System *******
Enter 1 to purchase products:
Enter 2 to check all orders:
Enter 3 to check bills:
Enter 4 to update order:
Enter 5 to cancel order:
Enter 6 to deliver order:
Enter 7 to check feedback:
Enter 8 to exit:
Enter your choice: 8
Thank you for visiting our bakkery!!
Have a great day Sir!!
PS E:\3rd Semester\Data-Structure-and-Algorithms\Semester Project>