Faculty of Engineering and Information Technology

Computer Science Department

Comp 2310 Project Phase II

Individual work Project	**Due Date: Fri. 10/2/2023 by 10:00 pm on Ritaj**

For this assignment, you will use the same classes you created in Project phase I (**PizzaOrder, Delivery, ToGo,** and **Seated**) and build a ***javafx*** GUI to provide input and output as follows:

Your **Driver** class should first build and display a GUI containing the following items:

- customerName (String) – default empty
- orderType (ToGo, Delivery, or Seated) – default **ToGo**
- pizzaSize (int 1 = SMALL, 2=MEDIUM, and 3 = LARGE) – default 1 (SMALL)
- List of Toppings (at least three: Onions, Olives, and Green Peppers) – default none
- toppingPrice (double) - default (10)
- orderPrice (double) – default (0.0)

You are free to design your interface, but you need to *at least use ONE OF EACH of the following* (you may use more that one of each if you like):

- ***Label***
- ***Button***
- ***CheckBox***
- ***RadioButton***
- ***ComboBox***
- ***TextField***

The default *GUI* displayed should NOT have any Labels or Text fields for ***tripRate*** (double), ***zone*** (int), ***ServiceCharge*** (double), nor ***numberOfPeople*** (int). As soon as the user selects a pizza order of type **Delivery**, a ***tripRate*** label and text field as well as a ***zone*** label and text field should appear appropriately and if he/she selects a pizza order of type **Seated** then the ***tripRate*** and ***zone*** Labels and Textfields should disappear and get replaced by a ***serviceCharge*** and ***numberOfPeople*** Labels and Textfields appropriately. When the user selects a **ToGo** pizza order then ***tripRate*** + ***zone*** **OR** ***serviceCharge*** + ***numberOfPeople*** labels and textfields should disappear from the GUI.

Your GUI should include three buttons at the bottom labeled ***ProcessOrder***, ***PrintOrders,*** and ***Reset*** respectively**.**

After the user fills the form and presses the button ***ProcessOrder*** your program should do the following:

- Your program should create an appropriate object based on the pizza order type selected (**ToGo, Delivery, or Seated**) using the data provided by the user in the GUI.
- Add the created pizza order object to an ***ArrayList*** of type **PizzaOrder** called ***orders***.
- Use the created object to calculate the ***orderPrice*** and display it to the GUI.
- You do NOT need to check for valid text field inputs (double, int, …). You may assume that the user enters valid data for each of the text fields.

Pressing the button labeled **PrintOrders** should **sort** and print a list of customer names and order prices for orders saved in ArrayList ***orders*** to a separate stage (different from the original GUI).
Pressing the **Reset** button should reset ALL items and fields to their default values as specified above as well as remove all the orders from the ArrayList orders.

Please note the Following:

1. Your program should be well commented based on Java formal documentation.
2. **Due Date: Fri 10/2/2023 by 10:00 pm** as a reply to this message via Ritaj.

What you need to turn in:

1- Your project folder (containing all your project files) should be compressed (.rar) and saved as ***proj_II_youridnumber_yourLabsectionnumber.rar*** (for example if your student id number is 1211234 and your lab **section** is section 9 then the project folder should be called proj_II_***1211234_s9.rar***). Turn in your project by ***replying to the course coordinator's message*** on Ritaj and attaching your code .rar file (***proj_II_youridnumber_yourLabsection.rar***).

2- You must include your full name, student id number, and lab section number in a comment at the beginning of each of your class code files.

Late Projects (even one minute late) will NOT be accepted for any reason.