

Seneca College

Applied Arts & Technology
SCHOOL OF COMPUTER STUDIES

Workshop 3

INSTRUCTIONS

- *This workshop must be completed individually without any outside collaboration. All work must be your own. Copying or reproducing the work done by others (in part or in full) or letting others to copy or reproduce your own work is subject to significant grade reduction or getting no grade at all and/or being treated as academic dishonesty under the College's Academic Dishonesty Policy.*
- *Your application must compile and run upon download to receive any mark.*
- *To submit the workshop, please follow the Submission Guideline provided at the end of this document.*
- *You must submit your workshop by the due date. Late submissions policy is specified in the Academic Procedures for Evaluations document available through the class plan on Blackboard.*

Description:

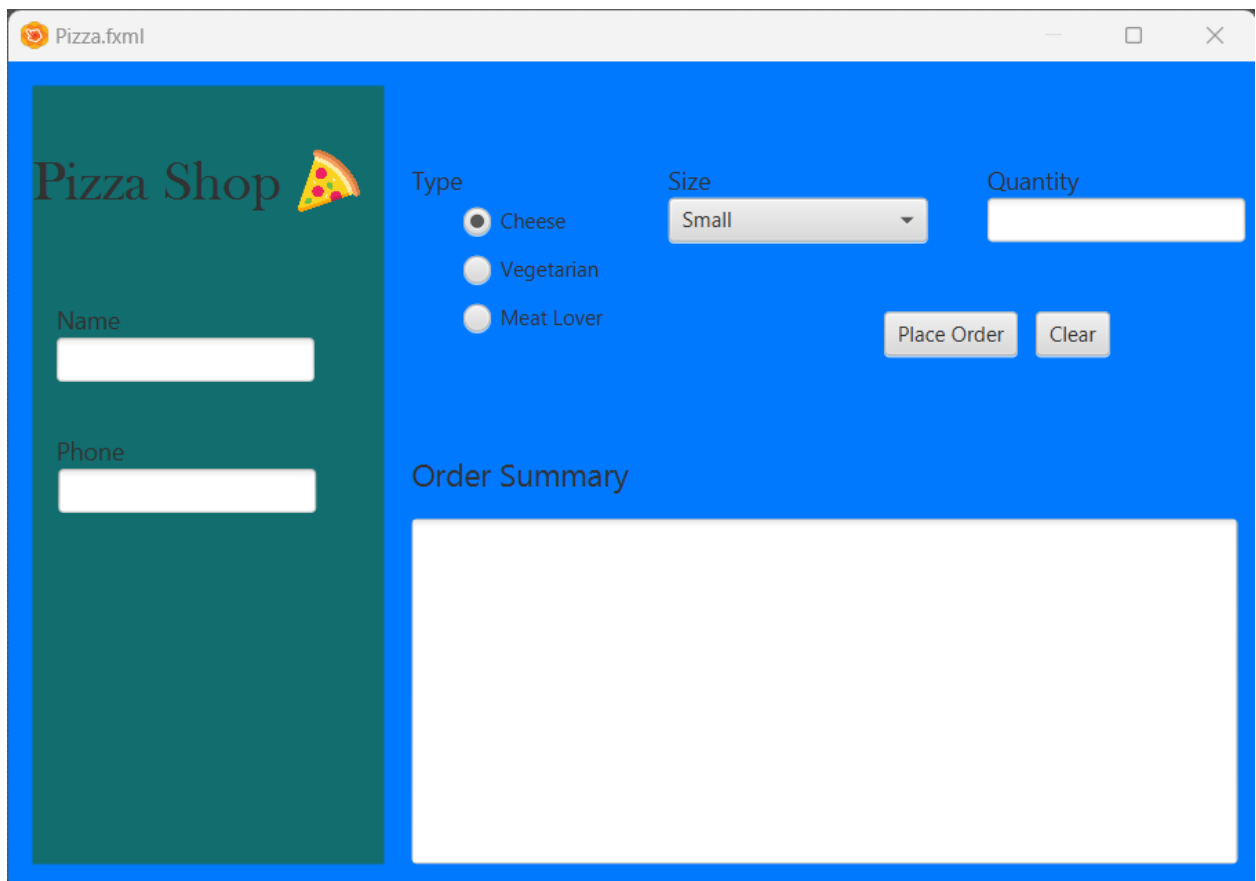
This workshop lets the student practice about designing a bit more complicated JavaFx screen. Create a **Pizza Ordering Application** which helps you to practice different design layouts and model classes.

Task:

You are being hired by a company which design and deliver the ultimate software solutions to their clients. Your job is to design and deliver to one of their client who runs a pizza shop a desktop application which will help the client not only to manage the orders also to store them in a data structure.

Requirements:

- Following the MVC design pattern you are required to create model classes in this project which will deal with multiple model classes like Customer and Order at the minimum.
- You are required to use Scene Builder to design the pizza shop application a snapshot is provided below



The screenshot shows a JavaFX application window titled "Pizza.fxml". The application has a blue background. On the left, there is a dark green vertical panel with the text "Pizza Shop" and a pizza slice icon. Below this, there are two text input fields labeled "Name" and "Phone". To the right of the green panel, there are three radio buttons under the label "Type": "Cheese" (selected), "Vegetarian", and "Meat Lover". Next to these is a "Size" dropdown menu currently showing "Small". To the right of the size dropdown is a "Quantity" text input field. Below the "Type" and "Size" sections are two buttons: "Place Order" and "Clear". At the bottom right, there is a section titled "Order Summary" with a large white rectangular area for displaying the order details.

- You are allowed to discuss the design of the window during the lab times and discuss better options. (Design can be changed on the basis of ease of use of the application from clients perspective).
- You are required to choose the data structure of your choice to store the information of a client and order details. (ArrayList, Map, LinkedList etc...)
- Discuss during the lab days about the data structure you want to choose.
- You are required to follow the java naming conventions for classes and member variables. Your solution should be designed to follow the OO-design concepts using encapsulation, abstraction etc.

Event handlers:

- **Clear** button should clear all the fields and should not save the data.
- **Place Order** button should properly create the objects of class(es) and store them in the data structure(s).
- **Place Order** button should also display the summary of the order after placing the order.
- **Order Summary** should display the information as follows

Customer Name:

Customer Phone:

Pizza Type:

Pizza Size:

Quantity:

Total before tax:

Total to be paid: (should include tax if applicable)

Workshop Header

/*****

Workshop #

Course:<subject type> - Semester

Last Name:<student last name>

First Name:<student first name>

ID:<student ID>

Section:<section name>

This assignment represents my own work in accordance with Seneca Academic Policy.

Signature

Date:<submission date>

*****/

Code Submission Criteria:

Please note that you should have:

- Appropriate indentation.
- Proper file structure
- Follow java naming convention
- Do Not have any debug/ useless code and/ or files in the assignment

Deliverables and Important Notes:

- Your submission should include:
 - Your codes, your implemented interfaces and the image of the received outputs.
- Late submissions would result in additional 10% penalties for each day or part of it.

Remember that you are encouraged to talk to each other, to the instructor, or to anyone else about any of the workshops, but the final solution may not be copied from any source.

All deliverables are supposed to be uploaded as a combined PDF file on the blackboard once done.