OOP Project I

PROG1400 Object Oriented Programming

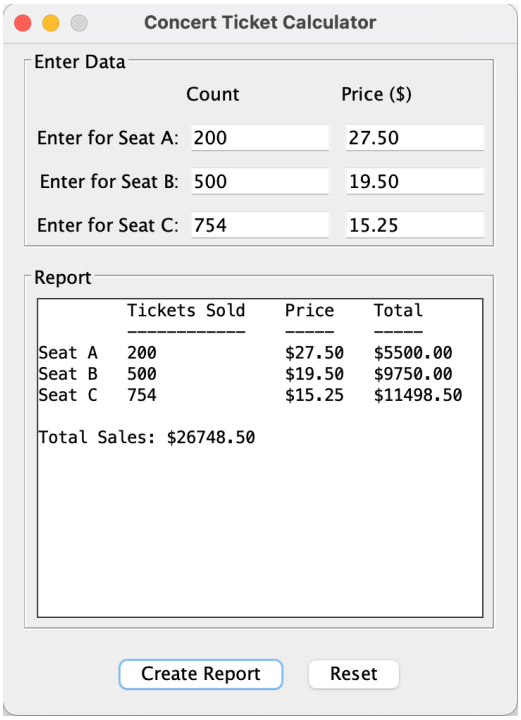
Evaluation : 10% of final grade
Due Date : Feb 23 @ 12:30

Assignment Description

This project will require the student to exercise many of the object oriented programming concepts of Java covered thus far in the course.

Project requirements are:

- Develop an application that computes the total ticket sales of a concert. There are three types of seats for the concert: A, B, and C
- The application will open a single JFrame window to accept input of the total number of tickets sold and the price of each ticket for all three types of seats. The interface should look similar to the figure below and be designed through code and not through a “Drag and Drop” editor.
- Although a clean and user-friendly interface is required, error checking is not required in this project.
- The application will output a report outlining:
    - the number of tickets sold for each type of seat
    - the price of the ticket for each type of seat
    - the total sales for each type of seat
    - the total sales of all seat types
- The report will include proper formatting (currency, etc.) as well as a clean tabular layout (columns) and be displayed to the user in a JTextArea object
- A reset button must be included that will reset the entire interface for the user to input a new set of data and generate another report
- The application must be developed with three custom classes:
    - TicketForm Class : this is your JFrame window
    - Seat Class : represents a type of seat
    - Report Class : represents the report produced after all input
- Your programming code must include internal documentation (commenting) and indentation
- Your application must implement GIT for version control. Marking will be done by checking that commits / branching has been done throughout development



Requirements (Mark breakdown)

Java Application Development	
TicketForm Class Structure and Code *JFrame construction, GUI layout, Report and Reset button functionality, good naming convention, etc.*	6
Seat Class Structure and Code *Good object-oriented design, appropriate Methods, requirements met, good naming convention, etc.*	5
Report Class Structure and Code *Good object-oriented design, appropriate Methods, report formatting, requirements met, good naming convention, etc.*	4
GIT Versioning Commits and Branching	2
Commenting	1
TOTAL MARK	18

Other Notes

- In order to output your report as a table of data, you will need to switch the TextArea's font to be monospaced. Look into the setFont() method to achieve this.
- The creation of the GUI interface on the JFrame object will require the use of layout managers and can be tedious. In order to prohibit the user from resizing the JFrame and breaking your layout, feel free to disable resizing. Look into the setResizable() method to achieve this.
- This project will be marked through a code review during lesson time on the due date – bring the whole working project folder.