Lab Assignment #5

Due Date: **On or before Midnight Sunday 1st December 2019** **Marks/Weightage: 30/10%**

Purpose: The purpose of this Lab assignment is to:

- Practice the use of JavaFX components and building a GUI based app using eclipse/JavaFX/SceneBuilder

References: Read the course's text "Java How to program, 11th edition Early Objects", **chapters 12 on JavaFX** and the lecture notes/ppts. This material provides the necessary information that you need to complete the exercises.

Instructions: Be sure to read the following general instructions carefully:

This lab should be completed individually by all the students. You will have to demonstrate your solution in a scheduled lab session and submitting the assignment **through drop box link on e-Centennial**.

>> At the start, you must name your **Eclipse work space** according to the following rule:

FirstName_LastName_SectionNumber_COMP228_Labnumber

For Example: ***John_Smith_Sec006_COMP228_Lab05 (say if your section number is 006)***

>> And after that your **project name** should be as follows:

FirstName_LastName_SectionNumber _Labnumber

For Example: ***John_Smith_Sec006_Lab05***

>>Each exercise should be placed in a separate package named as firstname_last-name_*exercise1*, firstname_last-name_*exercise2* etc.

>> After you complete, exit eclipse and go to workspace folder, zip it up and you will get the following zip file.

FirstName_LastName_SectionNumber_COMP228_Labnumber.zip

Example: **John_Smith_Sec006_COMP228_Lab05.zip** *(if your section is 006..)*

>> Apply the naming conventions for variables, methods, classes, and packages:

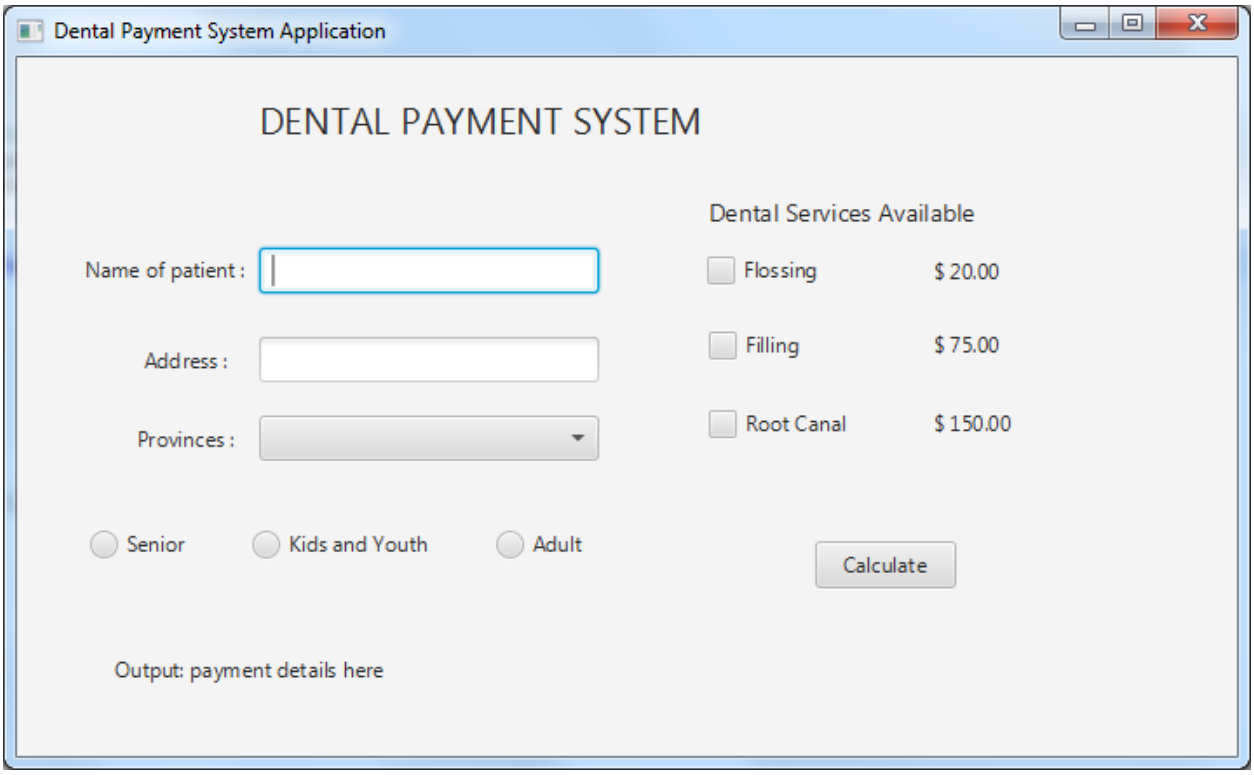
- *variable names* start with a *lowercase* character for the first word and uppercase for every other word
- *classes* start with an *uppercase* character of every word
- **packages** use only *lowercase* characters
- *methods* start with a *lowercase* character for the first word and uppercase for every other word

Note: Late submissions are accepted until up to three days past due date with 25% deductions. After that no submission will be considered.

Following GUI apps are based on Java Fx Scene Builder and using IDE – Eclipse Photon. You need to complete the following exercises using the screen shots shown below:

Exercise #1:

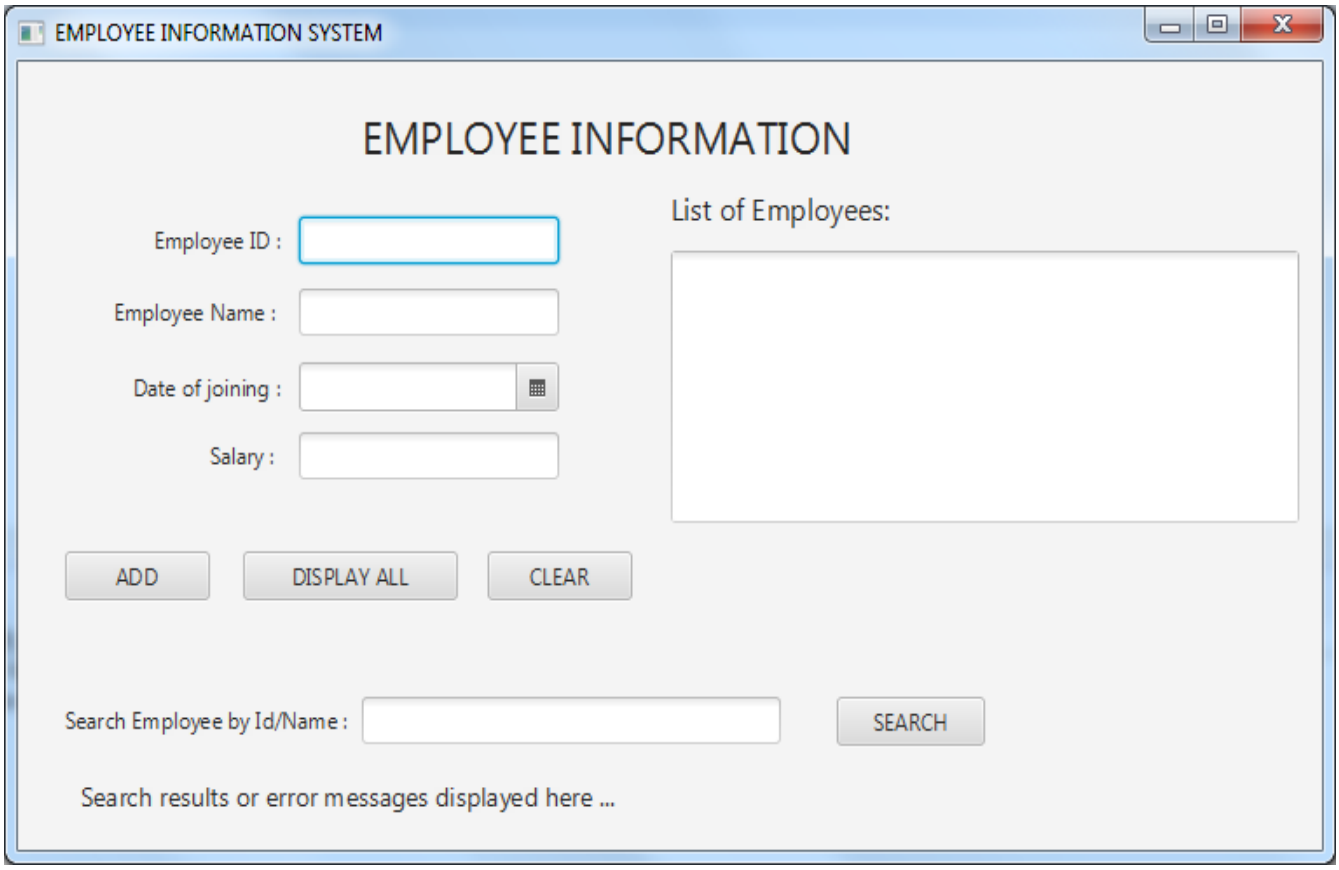
Dental Payment System App. If patient is Senior, then give 10% discount, if he/she is in category –Kids/Youth then 15% discount.
Add one combo box under Address (drop down for Provinces – Alberta – HST 7%, Ontario- HST 13% and Quebec- HST 6%). As per the selection of the province, total charges should be calculated accordingly. You are required to implement exception handling.

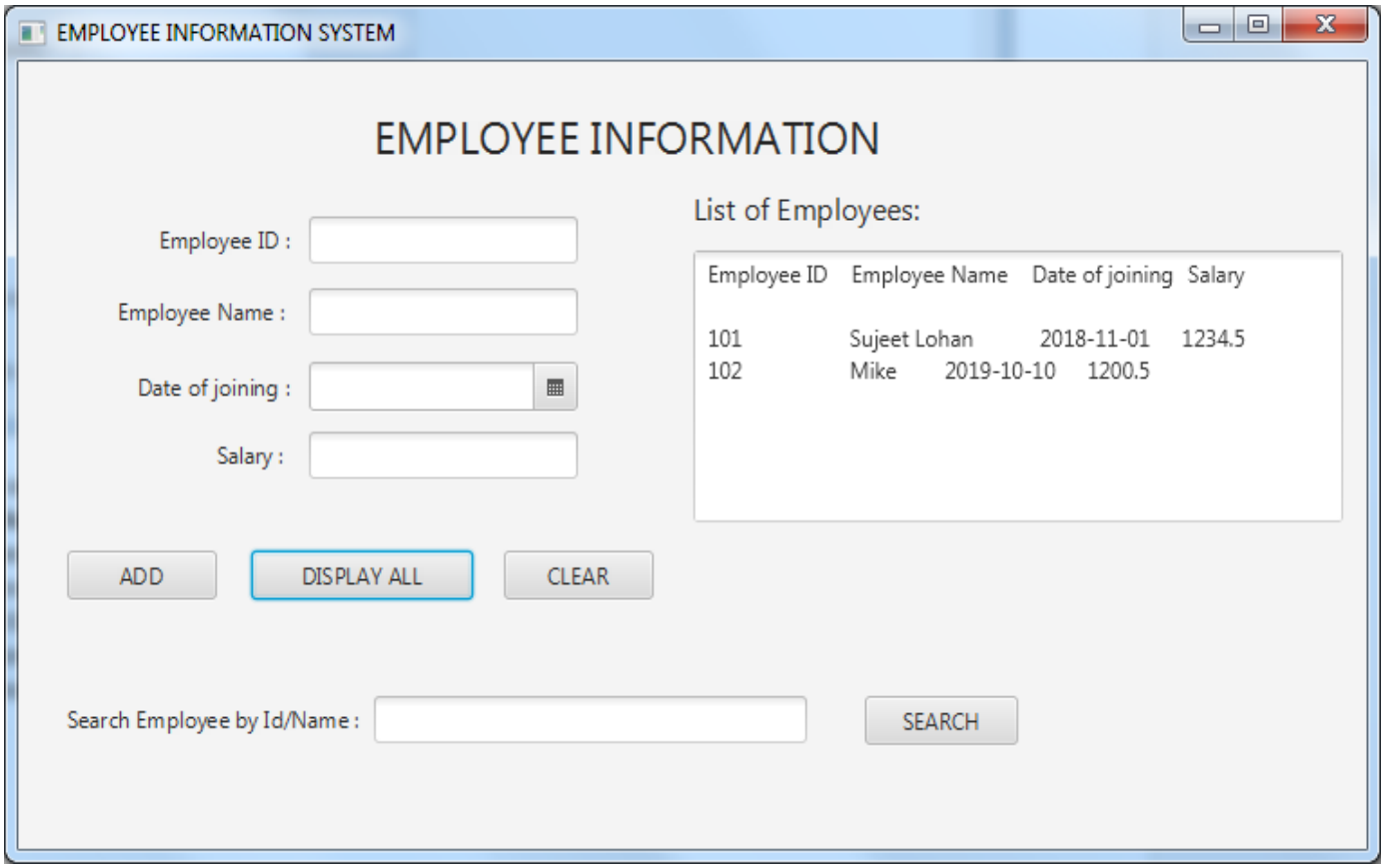


Exercise#2.

Build an Employee Information JAVA FX app which allows the user to enter the following info about an employee:

a) Employee ID (3 digits number)
b) Employee Name
c) Date of Joining (Use Date/Time Control)
d) Salary





(Note: Use a label and text field to represent each info).

- When user click **Add** button, it will save the employee record in a list. Enter minimum 5 such employees. No duplicate ID allowed.

- Search button should be able to search an employee on the basis of ID or name. For search add a separate text field (for entering ID or name) and result should display message– **Employee Exists** or **Employee does not Exists**

- Display ALL button should display all the employees in a text area in a formatted way.

- Clear button removes all the records displayed in the text area