LAB Assignment #5 – Java Fx Scenebuilder

Due Date: **Week 11**   **Marks/Weightage: 20/10%**

Purpose: The purpose of this Lab assignment is to:
  - Practice the use of building GUI application using JavaFx

References: Read the course's text book "Java How to program, 11th edition Early Objects", **chapter 12** 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 project **through drop box link on e-Centennial**. You must start and name your Eclipse workspace according to the following rule:

FirstName_LastName _COMP228_ SectionNumber_Labnumber

For Example: **John_Smith _COMP228_Sec001_Lab05**

Each exercise should be placed in a separate project named *exercise1*, *exercise2*, etc.
You should have a package name as follows:

FirstName_LastName_Exercise01 and so on…

Submit your assignment in a **zip file** that is named according to the following rule:

FirstName_LastName _COMP228_ SectionNumber_Labnumber

For Example: **John_Smith _COMP228_Sec001_Lab05**

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: You are required to be present during the in-class demonstration. Late submission will not be considered

Exercise 1:   *[30 marks]*

(**Car Payment Calculator App**) Typically, banks offer car loans for periods ranging from two to five years (24 to 60 months).

Borrowers repay the loans in monthly installments. The amount of each monthly payment is based on the length of the loan, the amount borrowed and the interest rate.

Create an app **using Java FX Scene Builder and Eclipse** that allows the customer to enter the price of a car, the down-payment amount and the loan's annual interest rate. The app should display the loan's duration in months and the monthly payments for two-, three-, four- and five-year loans.

The variety of options allows the user to easily compare repayment plans and choose the most appropriate.

Evaluation:

Functionality	
Correct implementation of classes (instance variable declarations, constructors, getter and setter methods etc.)	70%
Correct implementation of driver classes (declaring and creating objects, calling their methods, interacting with user, displaying results)	20%
Comments, correct naming of variables, methods, classes, etc.	5%
Friendly input/output	5%
Total	100%