Seneca College

Applied Arts & Technology

Workshop 1

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.*

- *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:

The first workshop lets the student practice about designing a simple JavaFx screen and its code behind.

Task:

Typically, banks offer car loans for periods ranging from one to eight years (12 to 96 months).
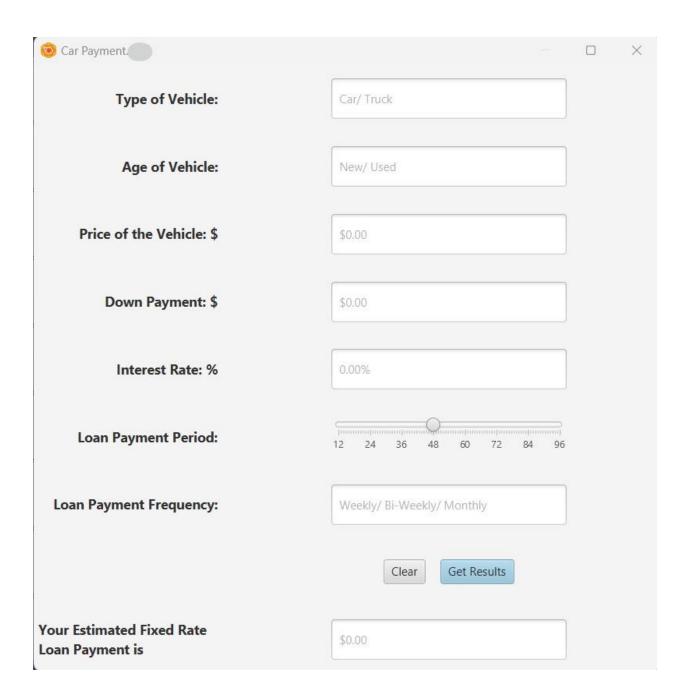
Borrowers repay the loans in weekly/ Bi-weekly/ monthly installments. The amount of each weekly/ Bi-weekly/ monthly payment is based on the length of the loan, the amount borrowed, down payment and the interest rate.

Create an app that allows the customer to enter the type of the vehicle, age of the vehicle, price of a car, the down-payment amount, the loan's monthly interest rate and the frequency.

Use a Slider control for the years of the car loan with a minimum value of 12 and a maximum value of 96 months. Each tick mark should designate a 12-month period (e.g., 12, 24, 48 etc. months options).

The app should display the loan's duration in months and the monthly payments, formatted as currency.

1. Create the following JavaFX user interface, making use of a HBox and GridPane layout.

Car Payment.

Type of Vehicle:	Car/ Truck
Age of Vehicle:	New/ Used
Price of the Vehicle: $	$0.00
Down Payment: $	$0.00
Interest Rate: %	0.00%

Loan Payment Period:

12   24   36   48   60   72   84   96

| Loan Payment Frequency: | Weekly/ Bi-Weekly/ Monthly |

Clear   Get Results

| Your Estimated Fixed Rate Loan Payment is | $0.00 |

- Implement the EventHandlers for both the clearButton and calculateButton.
- Implement the ChangeListener for the yearsSlider.
- Once the "Calculate" button is clicked the Monthly Payments should be displayed.

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.