

Description:

The third workshop lets the student practice about designing a simple JavaFx screen using Scene builder, making properties, bindings, and listeners.

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 layouts will be easy, or you can also use AnchorPane.
2. The view needs to show,
 - a. Type of Vehicle:
 - i. Car
 - ii. Truck
 - iii. Family Van
 - b. Age of Vehicle:
 - i. New
 - ii. Used
 - c. Price of the Vehicle.

- d. Down payment.
- e. Interest rate.
- f. Loan payment period: Should be a slider min value 12 month max 96 month. Slider ticks should be monthly.
- g. Loan payment frequency
 - i. Weekly
 - ii. Bi-weekly
 - iii. Monthly
- h. Your estimated fixed rate loan payment: Format in dollar amount. Should also print if the payment is monthly/ bi-weekly/ weekly depending on what user chose.
- i. Clear button.
- j. Calculate button.
- k. Saved rates button: upon pressing this the current rate should be saved in an appropriate data structure of your choice.
- l. Show saved rates button: upon clicking a new window/ dialog should open and display the saved rates as a ListView and upon selecting from the list should show the saved rate.

Note: save rate are only available as long as application is running upon closing the application it should clear all the rates and the list should be empty.

- Implement the EventHandlers for buttons.
- Implement the ChangeListener for the slider.

More discussion on design and solution will be done during the lab.

