

# Practice Assignment: W08\_10-19

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## CISC 3120 Section ER6 Design and Implementation of Software Applications I

This exercise helps you review Cascading Style Sheets, FXML, and the Model-View-Controller design. The instructor wrote a simple calculator application called `JavaFXCalculator`. You may browse the code on Github via the following URL,

<https://github.com/CISC3120/sampleprograms/blob/master/JavaFXCalculator/>

The application at present does not work. To fix the application, you will complete the following tasks.

1. Copy the `JavaFXCalculator` project to your `weekly practice` repository.
2. Read the code and understand the design of the application.
3. The controller is written, but it is not linked with the view written in FXML. You will revise the FXML directly or using the `JavaFX Scene Builder 2.0` to add the controller `MainSceneController` to the view.
4. The “=” key in the main scene should be handled by the `processEqualKey` method in the controller. Revise both the controller and the FXML file so that the “=” key is handled by the method. You may edit FXML file directly or use the `JavaFX Scene Builder 2.0`.
5. A stylesheet is written, but not used. Apply the stylesheet to the `mainscene`.
6. The font on the buttons are very small. Double its size.
7. In the main scene, the style of `TextField` comes from the root style. Add a style for the `TextField`, and the style is selected by a type selector.
8. Finally, write a comment in `JavaFXCalculatorApp.java` to describe the dependency relationship of the model, the view, and the controller, to answer which class the model is, which the controller, and which the view, and to explain what the most important benefit of this design is.