

CS 252a - JavaFX Lab Assignment (Wednesday) - 70 points

Create a JavaFX based application that will allow displaying and editing of multiple Java files (tabbed editor like gedit or notepad++). The application should be modelled based on MVC pattern. The application should have the following components:

- The Application must have a menu bar, with top level menu: File, Compile and Help.
 - Within File, it should have New, Open, Save, Save As, Close and Quit (1 point)
 - Open should launch a FileChooser that filters only *.java files (3 points)
 - The title of tab should be set to the name of file which has been opened in that tab. (1 point)
 - Close should close the current tab, in case there are edits, it should prompt the user to ask for saving the file. (5 points)
 - Save and Save As should save the current state into java file, if the file was created from New then clicking on Save must ask for name of file (similar to Save As). Save As should display FileChooser for saving into a new file. (5 points)
 - Clicking on Quit should quit the application, except in case where the data has been modified in any tab, in which case, it should prompt for saving the changes and carry out same function as Save for all the open tabs. (15 points)
 - Compile should run `javac` compiler on current file after saving it and should display Alert dialog indicating successful compilation (AlertType.INFORMATION) or should say compilation error occurred (AlertType.ERROR). (10 points)
 - Help must have sub-menu About, which should show your Name and IITK roll number in a Alert Dialog with type AlertType.INFORMATION. (5 points)
- The TabPane should load a Untitled file on initial launch (2 points).
- Each time File > New is selected, a new pane which loads a new Untitled file (suffix number to indicate n-th new file, for ex. Untitled 1, Untitled 2 so on..) (3 points)

Overall MVC structure, controller implementation and demonstration carries 20 points on discretion of TA.

Following tutorials might be helpful (Do NOT copy paste code from this):

http://docs.oracle.com/javafx/2/fxml_get_started/fxml_tutorial_intermediate.htm

<http://www.drdobbs.com/jvm/a-javafx-text-editor-part-1/240142297>

<http://www.drdobbs.com/jvm/a-javafx-file-editor-part-2/240142542>