W. P. CAREY SCHOOL of BUSINESS
ARIZONA STATE UNIVERSITY

CIS 494 – Business Systems Development with Java – Spring 2015

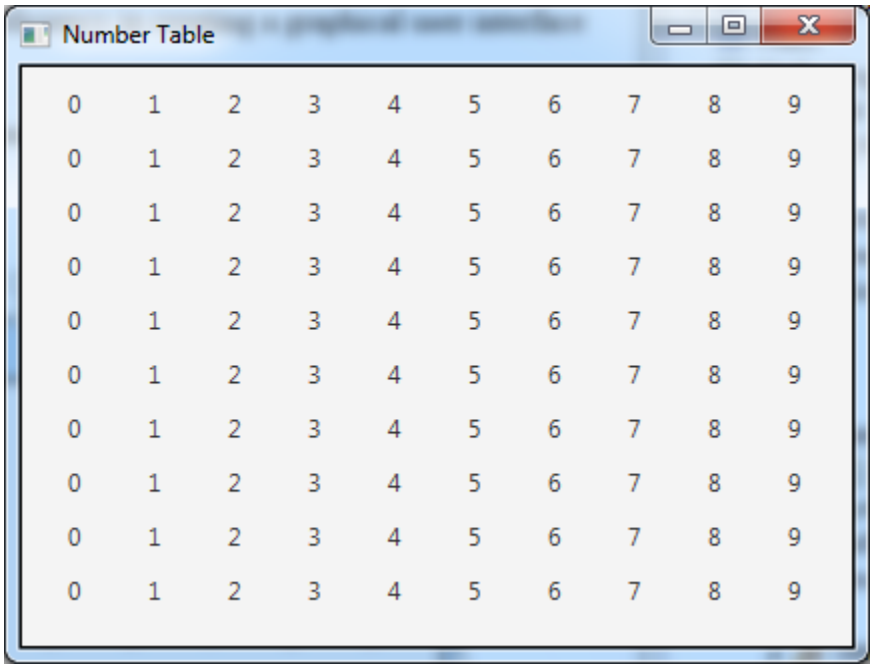
In-class Exercise 5: JavaFX

Due on Blackboard: Tonight, February 18 by 11:59 PM

The purpose of this exercise is to gain basic proficiency in creating a graphical user interface (GUI) using the JavaFX package in JDK 8.

Implement a basic table that shows an ordered number of rows and columns.

Sample Output



You can choose to implement this either using the GridPane or you can choose to use the HBox and VBox panes.

If you go with a GridPane:

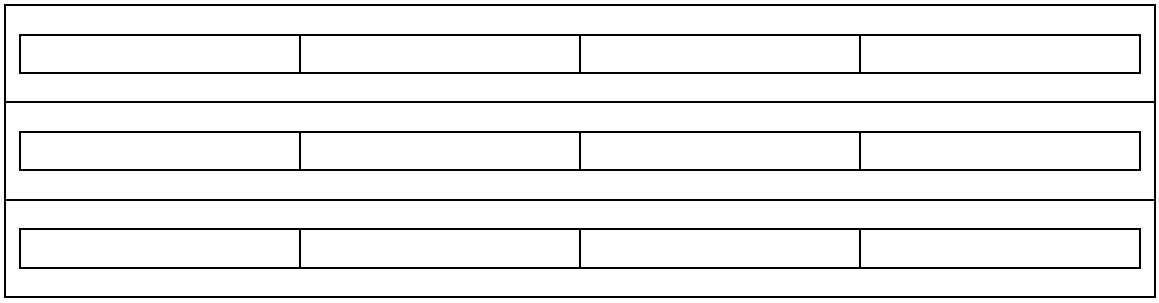
- Have a nested loop that loops through rows and columns.
- Within the innermost loop,
  - Create a new instance of a Label using the "new" keyword. Put in this label the number you want to show.

  - Add the Label to the GridPane. You will need to specify which column / row. Your column numbers should reset back to zero after 9. Then the row needs to increment by 1.

You may alternatively choose to go with creating a StackPane and adding the Label to the StackPane. Then you could add the StackPane to the GridPane.

If you go with HBox and VBox:

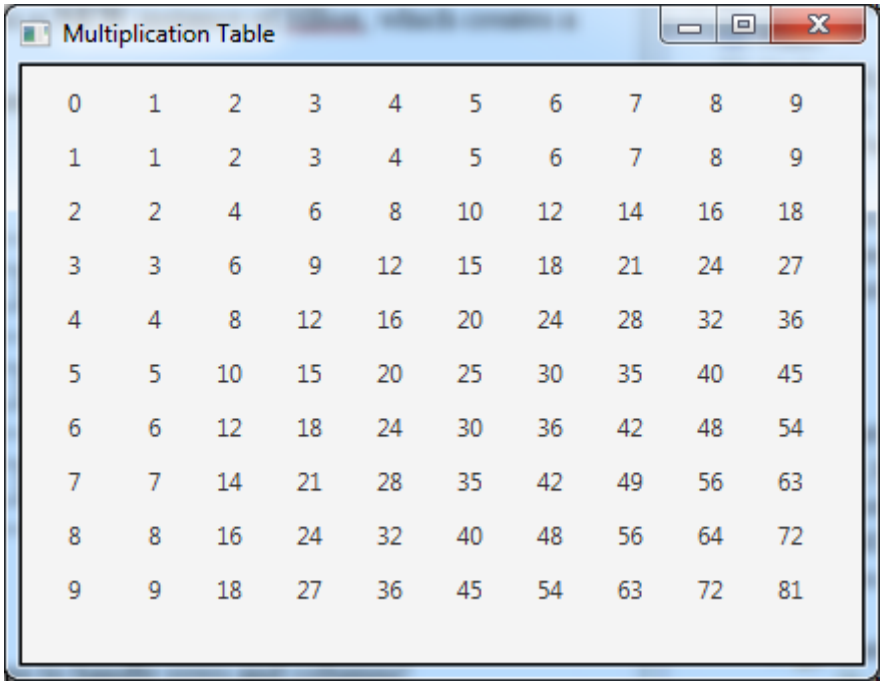
- You can create a Label and add Labels to a **NEW** instance of HBox, which creates a "row."
- All instances of HBox objects should then be added to an instance of VBox. There will be only one VBox.



Either of the approaches will require nested loops to handle rows and columns!

Challenge:

Create a multiplication table.



Submitting Files

Submission should be made using a zip file that contains the entire Eclipse project folder. You will need to ***zip the entire project folder***. The folder will automatically contain the class source files as well as the compiled .class files.

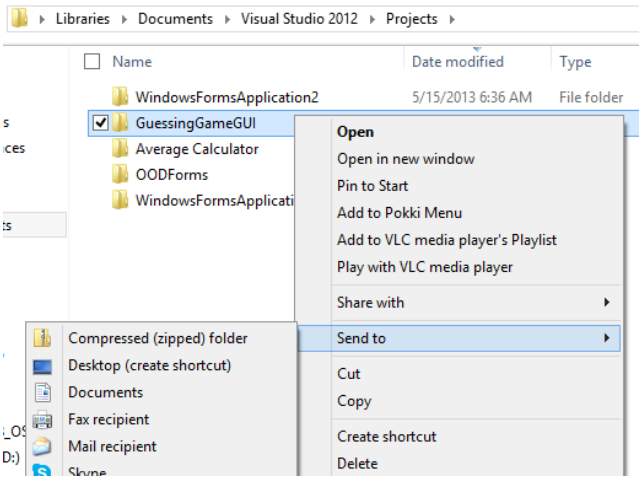
ZIP file should be named: **AX.zip or IC.zip**

> where X is the in-class assignment number, e.g., A1.zip is the submission file for Assignment 1 and IC1.zip is the submission file for InClass1.

Note: *The ZIP filename is independent of the Project name. Do not name your project A1.*

How to Properly ZIP and Submit Your Project Files:

- Go to the folder within {Eclipse Workspace}\
- ZIP the entire top-level folder for your project by right-clicking your project folder and selecting Send to | Compressed (zipped) folder.
- Finally, submit the ZIP file using the submission link on Blackboard by the due-date and time listed on the assignment. Upload the ZIP file.



Using built-in windows zip tools: http://windows.microsoft.com/en-us/windows/compress-uncompress-files-zip-files

Verify your files BEFORE and AFTER submission:

- Check for actual class files being present in the folder before you zip it.
- ***Ensure that you are not zipping a short-cut to the folder.***
- After zipping, check file size. A file size under 4K likely does not contain all the files.
- Unzip, extract all files, and verify you see actual files, not a solitary short-cut.
- Uncompress your zip file before submitting and verify that files are present.
- Make sure you have ***submitted*** your file and not just saved a draft on Blackboard. ***A blue clock indicates a submission in progress, i.e. a draft, not a submission. The draft is accessible only to you. You will get a ZERO if you only ever save a draft on Blackboard and never submit your files.***

- Download your zip file after submitting, uncompress, and again verify that your files are present. Test your files in Visual Studio after uncompressing.

This takes an extra couple of minutes. Please do it if your grade is important to you. If you do this, you will not end up submitting a bad file. If you submit an empty file, or one containing only a shortcut, or a bad zip file, or a bad project file, you will receive a score of zero and your only recourse will be to do the makeup assignment at the end of the semester.