

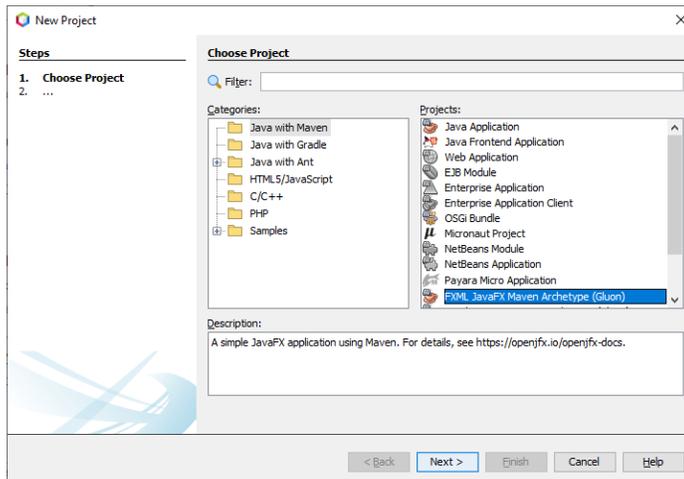
# Lab – JavaFX – Button TextField and Menu

## Overview

Write a JavaFX application that contains a button, text field, and menu. It will have event handlers in the controller to handle user actions. This application should use FXML to create the GUI.

## Create Project

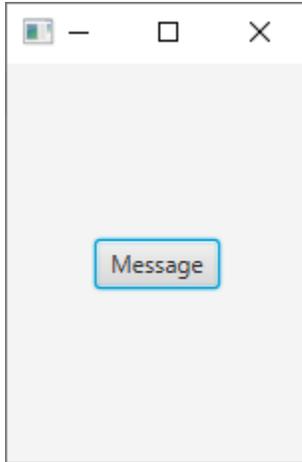
1. Create a new FXML project. Choose FXML JavaFX Maven Archetype (Gluon). Here is a screenshot:



## Add Button

1. Update the primary.fxml GUI file.
  - a. Remove the Label and Button controls that are given by default.
  - b. Add a button to the VBox. Set the text on the button to "Message".
  - c. Add an event handler for the Message button that prints "I love Java" on the console.
2. Run program. Press the button and make sure the message shows up in the console.

Here is what the window should look like:

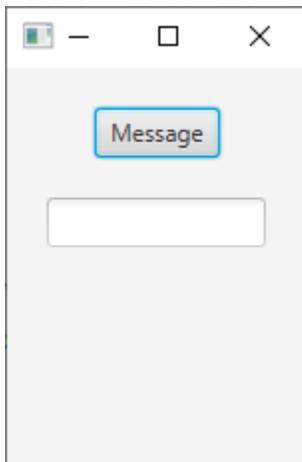


## ***Show Message from a TextField***

Add a TextField to the window. When the button is pressed it should get whatever text the user types into the TextField and display it in the console. Here is what you should do:

- Drag and drop a TextField on to the window (below the Message button).
- Set the fx:id of the TextField to textFieldMessage.
- Add a private member variable for the TextField to the PrimaryController class. Make sure it has the @FXML annotation.
- Update the message button event handler to get the text from the TextField and print it on the console.

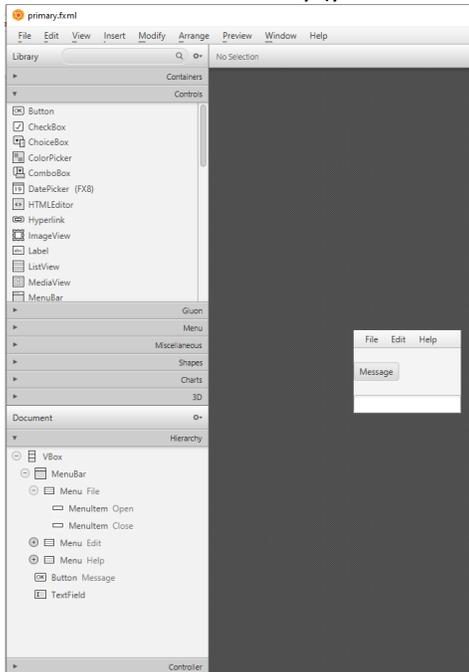
Here is what it should look like:



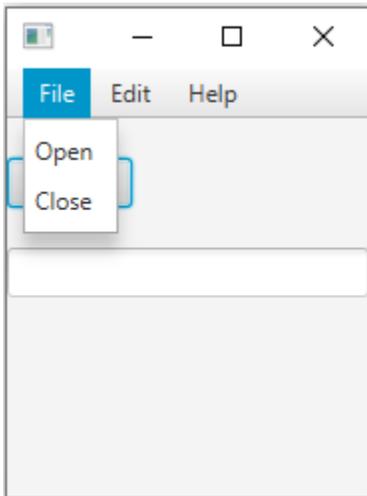
## ***Add a MenuBar and a MenuItem***

1. Add a MenuBar to the top of the VBox.
2. Set the VBox alignment to TOP LEFT (alignment is in Properties section for a VBox).
3. Set the top, left bottom and right padding to 0 (padding is in Layout section for a VBox).

4. Add a MenuItem to the File menu. Do this in Scene Builder by going to the Document Hierarchy section in the bottom left section of the window. Expand the MenuBar and File menu in the hierarchy. Drag a new MenuItem from the Menu section on left. Drop the MenuItem under the File menu in the hierarchy (you are adding a new menu item to the File menu).



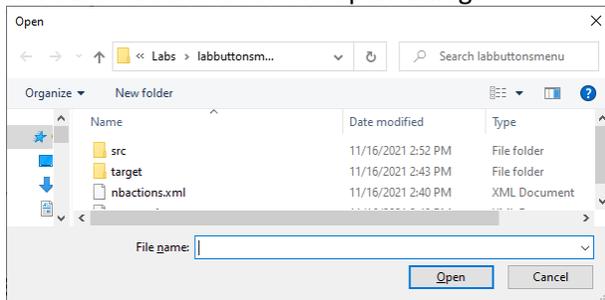
5. Set the text on the new MenuItem to Open.
6. Add an event handler for the Open menu item to the PrimaryController class. It should print "Open menu item pressed" in the console.



## ***Part 4 – Get Filename Using a FileChooser***

Update the Open menu item event handler so that it displays a FileChooser to the user. It should get the filename from the user and display it in the console using a print statement.

Here is a screenshot of the Open dialog:



## ***Part 5 – Read Data from File and Put in Window***

- Create a new file named message.txt in NetBeans. Put a one-line message in the file. For example, “I love Java!!!”.
- Update the Open menu item event handler to do the following:
  - Open a Scanner to the user selected file.
  - Read one line from the file and put it in a local string variable.
  - Take the string from the local variable and put in the textFieldMessage TextField.

Here is a screenshot after choosing File|Open and selecting the message.txt file from the FileChooser:

