

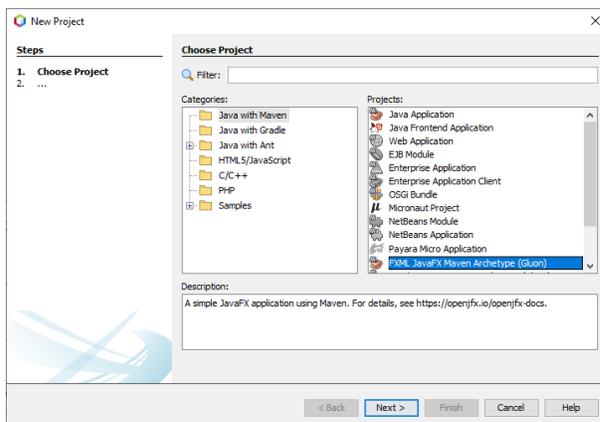
Lab – Java - JavaFX – Master Detail

Overview

Write a JavaFX application to show a master detail list.

Create Project

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



Employee Class

Create an Employee class. It should have member variables and get/set methods for first, last, and department.

Add ListView with Data

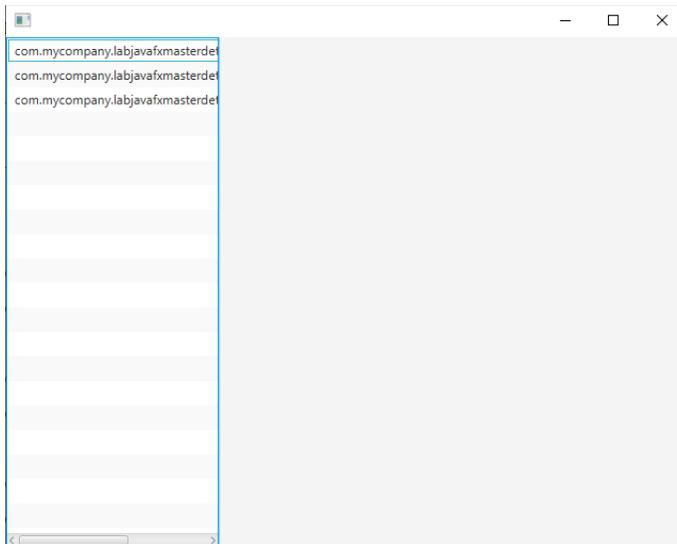
Update the primary.fxml GUI file.

- a. Remove all controls including the VBox
- b. Add a BorderPane as the root container for the window.
- c. Set the controller class on the BorderPane. In Scene Builder, go to the bottom left section of the window to the Controller section. Choose PrimaryController from the Controller class drop-down menu.
- d. Add a ListView to the left region of the BorderPane. When you drag the ListView on to the BorderPane Scene Builder will show you the different areas you can drop the control in.
- e. Set the fx:id on the ListView so it can be referred to in code.

Update the PrimaryController class.

- a. Add a private member variable for the ListView to the PrimaryController class. Make sure it has the @FXML annotation. Use Employee as the data type of items for the ListView.
- b. Add an initialize method with the following header: `public void initialize()`
- c. Add code to the initialize method that adds three instance of Employee to the ListView.

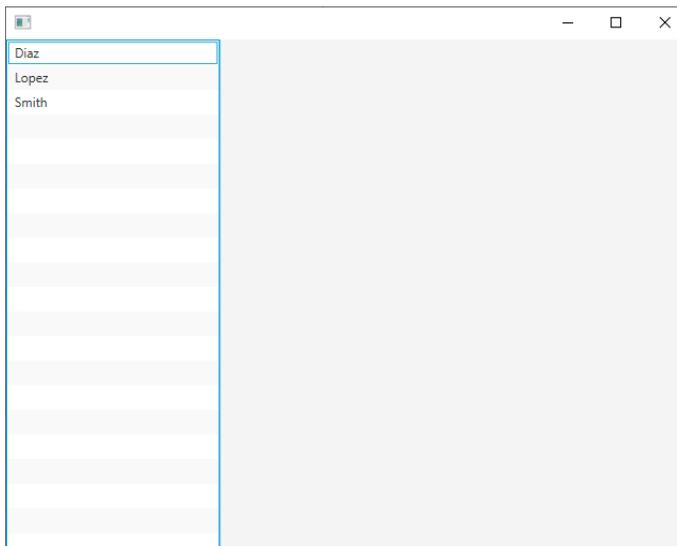
Here is a screenshot of what the window should look like:



Update Employee Class

Add a toString override to the Employee class. It should return the last name and nothing else. ListView calls toString to get the data to display from the Employee class instance. Overriding toString to return the last name will make it so that the last name is displayed in the ListView.

Here is a screenshot of what the window should look like:



Handle ListView Mouse Click

Add code to handle a mouse click on the ListView.

- Add an event handler method to the PrimaryController class (check slides for an example). The event handler should just print the last name of the employee that was clicked. Make sure to save the file in NetBeans when you are done.
- In Scene Builder, associate the event handler method you just wrote with the ListView. Go to the Code section and look for the On Mouse Clicked event (you will have to scroll down a little to find it).

Show Details of Selected ListView Item in the GUI

Update the GUI to show all employee data

- Add a VBox to the center region of the BorderPane
- Add Labels and TextFields for the first, last, and departments to the VBox.

Update the mouse click event handler

- Add code to the mouse click event handler to populate the first, last, and department TextFields.

Here is a screenshot of what the window should look like when clicking Smith in the ListView:

