

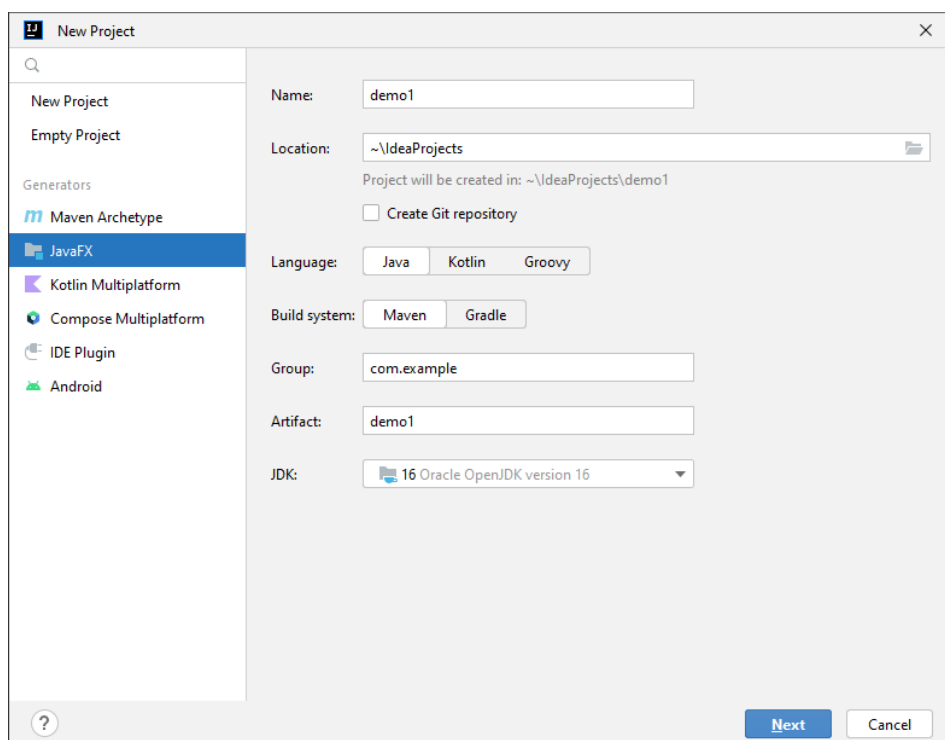
Lab – Java - JavaFX - TableView

Overview

Write a JavaFX application that uses a TableView. The TableView will display TV show data.

Create Project

1. Create a new JavaFX project.
 - Choose JavaFX on the left.
 - Choose Maven for the Build system.



Create TVShow Class

Create a class named TVShow. It should have the following member variables: name (String), id (int). Write get/set methods for all member variables.

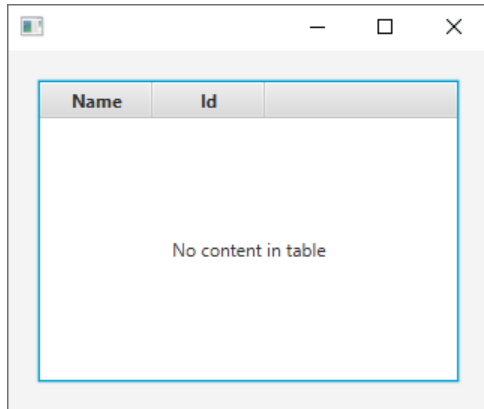
Add TableView to GUI

Update the primary.fxml GUI file.

1. Remove the Label and Button controls that are given by default.

2. Add a TableView to the VBox.
3. Set the fx:id of the TableView to tableViewShows.
4. Setup TableColumns in the TableView to display TV show data (columns should match the variables on the TVShow class).
 - a. Make sure to set the fx:id for each TableColumn.

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

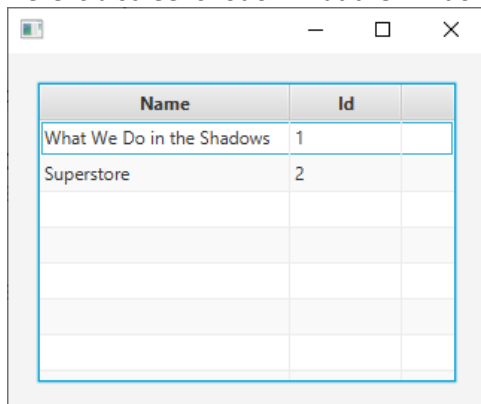


Populate TableView with Data

Update the PrimaryController class.

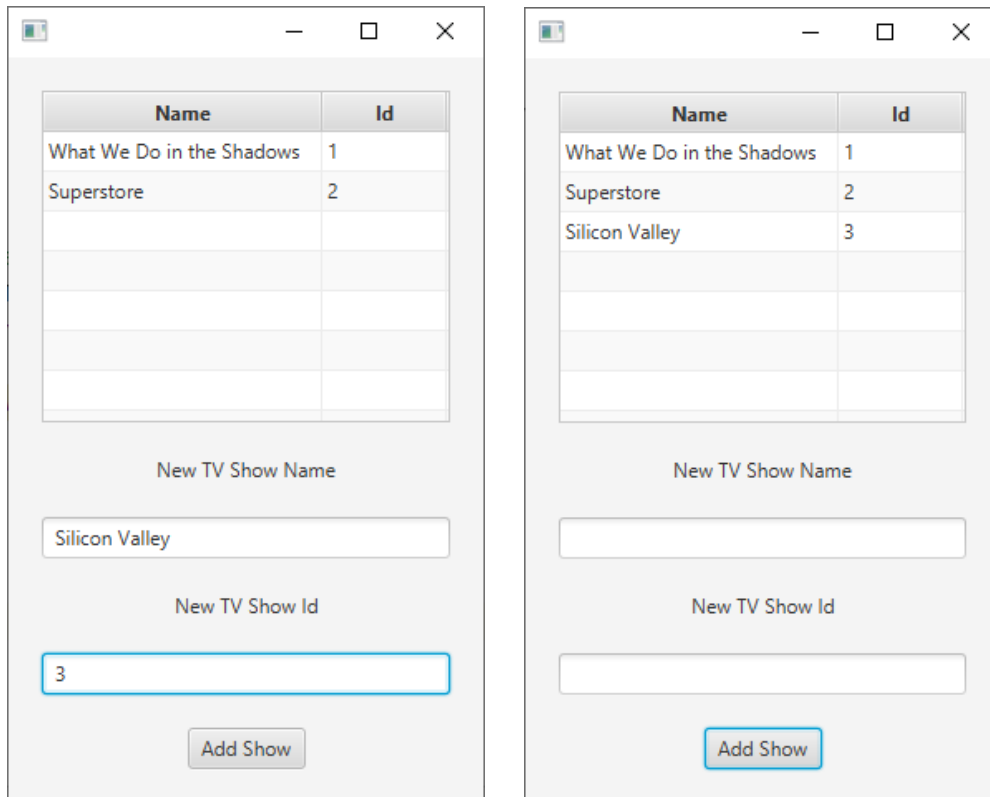
1. Add the necessary member variables to the PrimaryController class to enable using the TableView and TableColumns in code. Make sure they all have the @FXML annotation.
2. Add an initialize method with the following header: `public void initialize()`
3. Add code to associate TableColumns with member variables on the TVShow class. Add this code to the initialize method.
4. Add code to the initialize method that will create two instances of TVShow and add them to the TableView. Here is the data to add (name followed by id): ("What We Do in the Shadows", 1) and ("Superstore", 2).

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



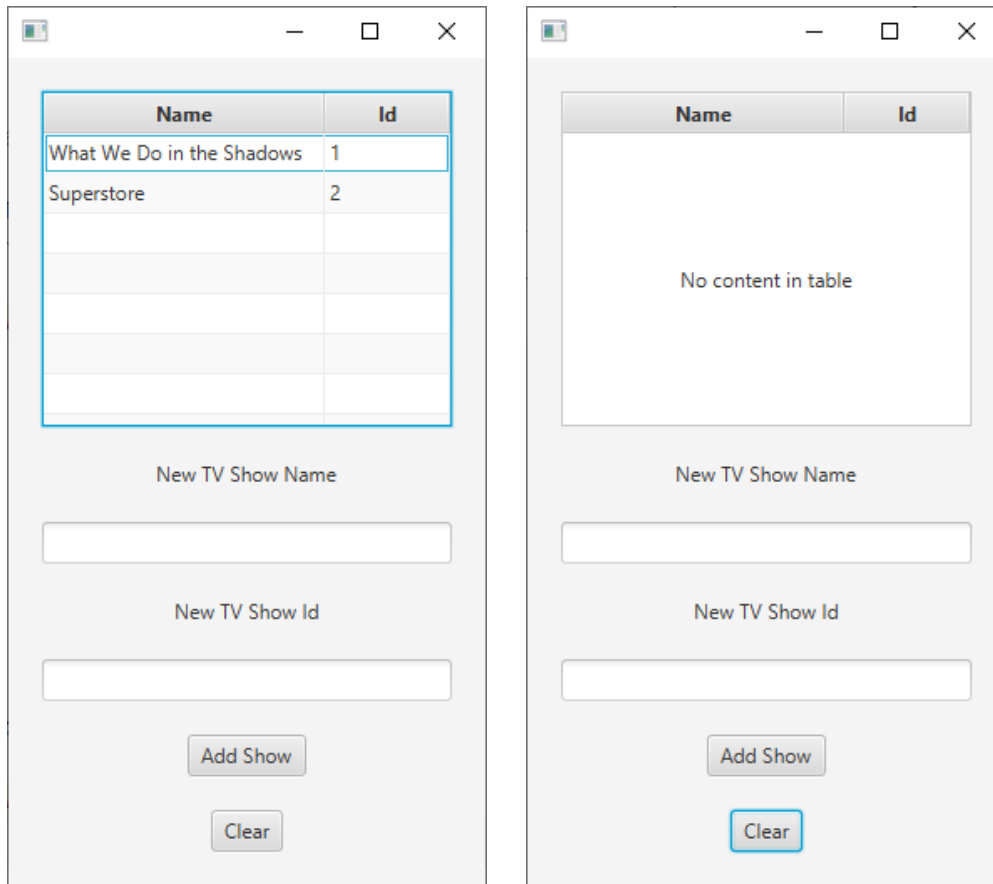
Allow Users to Add Shows

Update the GUI so that the user can add new shows to the list. You will need to add two Labels, two TextFields, and a Button to the GUI. When the user presses the Add Show button it should add the show data they typed in to the TableView. The TextFields should be cleared automatically after adding the new show to the TableView. Following are screenshots of what it should look like after adding “Silicon Valley”:



Part 3

Update the GUI so that the user can clear the TableView. Add a Clear button below the Add TV Show button. Following are screenshots before and after the Clear button is pressed:



Part 4

Add code to handle a TableView item selection. When a TableView item is selected it should print a message in the console window. Here is what should be displayed in the console window when Superstore is clicked:

Selected Item: TVShow{name='Superstore', id=2}