

Assignment 4

Hey! it was really a long journey that we successfully covered so far in this course. Initially we covered all the core java concepts and did a wonderful project by developing a game in JavaFX platform. Let's now polish our skills by doing some assignments.

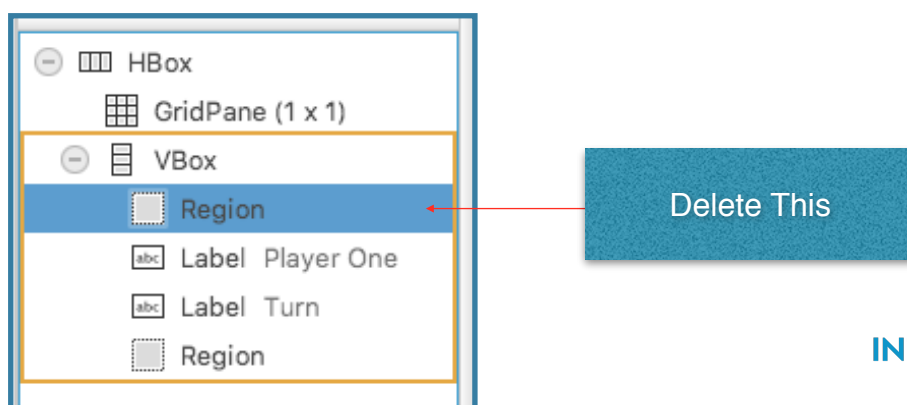
PROBLEM STATEMENT 1. Create JAR file for Temperature Converter Tool app that we initially created in this module.

PROBLEM STATEMENT 2. The Connect 4 game needs some improvement in terms of user experience. Currently, the app displays either PLAYER ONE or PLAYER TWO based on whose turn it is. So, you need to add two TextFields where users can enter their name and henceforth their names should be displayed in place of PLAYER ONE or PLAYER TWO text in `playerNameLabel` in the application.

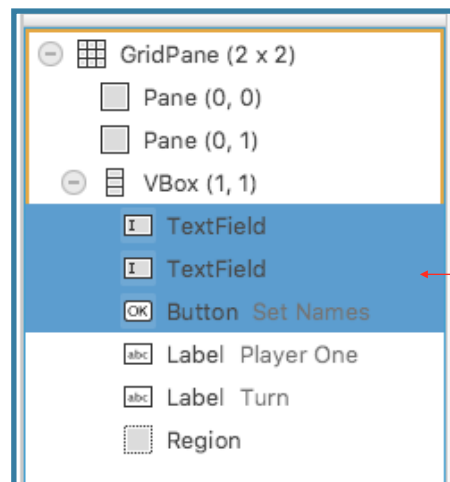
Approach for Problem Statement 1: To create the jar file of Temperature Converter Tool app follow the steps as shown for Connect 4 game. Once the jar file is created, submit it for review.

Approach for Problem Statement 2: Follow the following steps and complete the task

1. Go to [Scene Builder](#) of your [game.fxml](#), select the **Region** present in **VBox** and delete it. In place of Region we'll insert our TextFields and a Button.

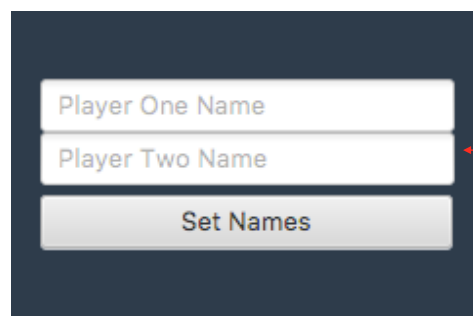


2. Once Region is deleted, in place of that add Two TextFields and a Button. Now your layout structure should look similar to this:



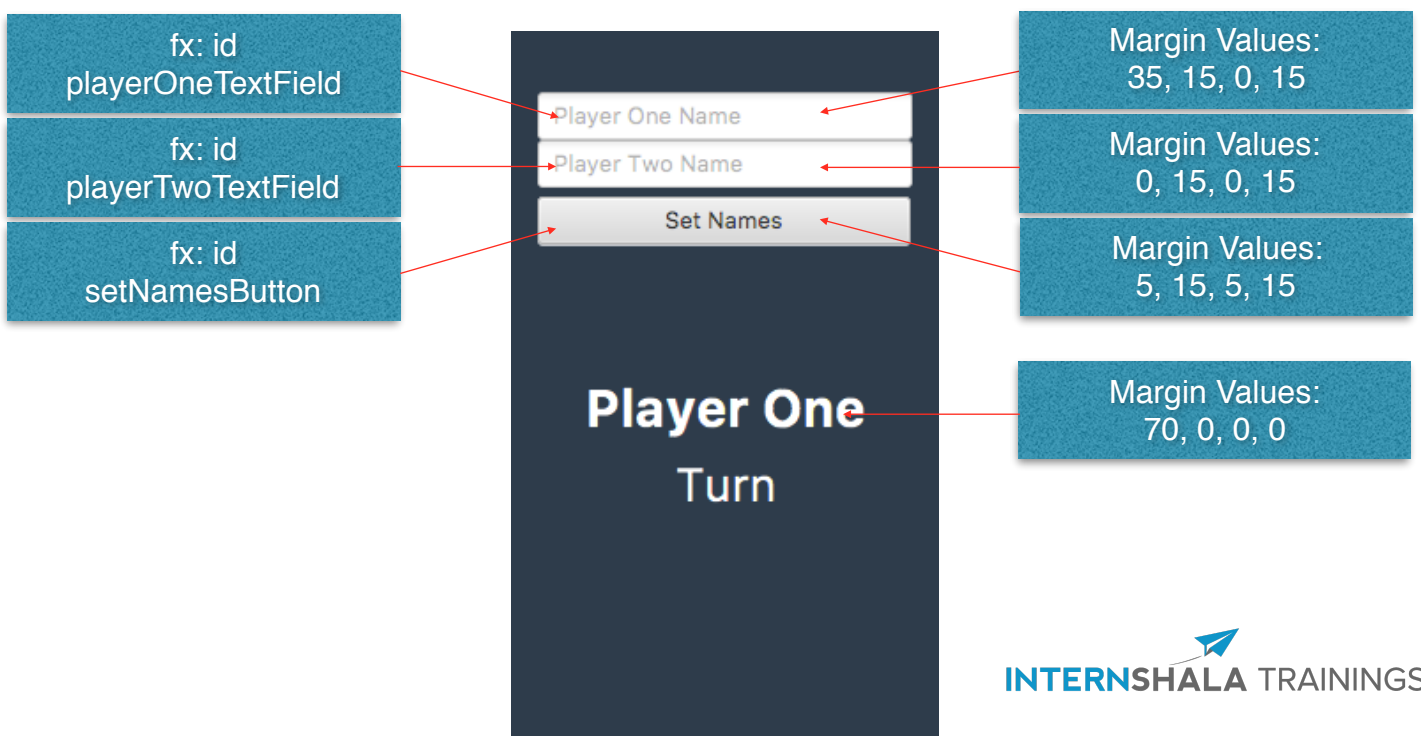
Two TextFields and a Button added

3. Modify the **properties** of the Two TextFields and the Button. Stretch the TextFields and Button so that they occupy the whole space from left to right within the VBox. Along with this modify the Prompt Text and the Button Text. They should appear like this:



Modify the Prompt Text for the TextFields and also modify the Button Text

4. Give the required **Margin** for TextFields, Button and also PLAYER ONE Label. You can use your own margin values or you can take help from the following image:



5. Finally, assign the `fx:id` to the Two TextFields and the Button as `playerOneTextField`, `playerTwoTextField` and `setNamesButton` respectively. In case of any confusion check the above mentioned image for help.

So far the things look perfect in our `game.fxml` file.

6. Now, let's come to `Controller.java` and declare all the Controls such as `playerOneTextField`, `playerTwoTextField` and `setNamesButton` with `@FXML` annotation. Make sure they all have `public` modifier. For example:

```
@FXML
public TextField playerOneTextField, playerTwoTextField;
```

7. Within the `createPlayground()` method use `setOnAction()` method to handle the click event of `setNamesButton`. When click event on the button is fired write your logic to set the user input names to the `String` variable of `PLAYER_ONE` and `PLAYER_TWO`.

```
setNamesButton.setOnAction(event -> {
    // Write your code here....
});
```

8. Run your app and test your code.

9. Export your Connect 4 jar file.

Final Deliverables:

1. Jar file of your Temperature Converter Tool app.
2. Jar file of your new Connect 4 app.
3. Final Connect 4 game source code.

Before you submit, make sure to zip all the above mentioned deliverables within a single folder.

Meanwhile we review your submitted assignment, proudly share the Jar file of Connect 4 game with your nears and dears.

Final Output:

