

Installing JavaFX in IntelliJ

This tutorial describes how to install and configure JavaFX as a library in IntelliJ and set it up to work with a new Java project.

Before going through the steps in this tutorial, make sure you have Java JDK 11 and the latest version of IntelliJ installed and working for Java programs that do not use JavaFX.

Download JavaFX

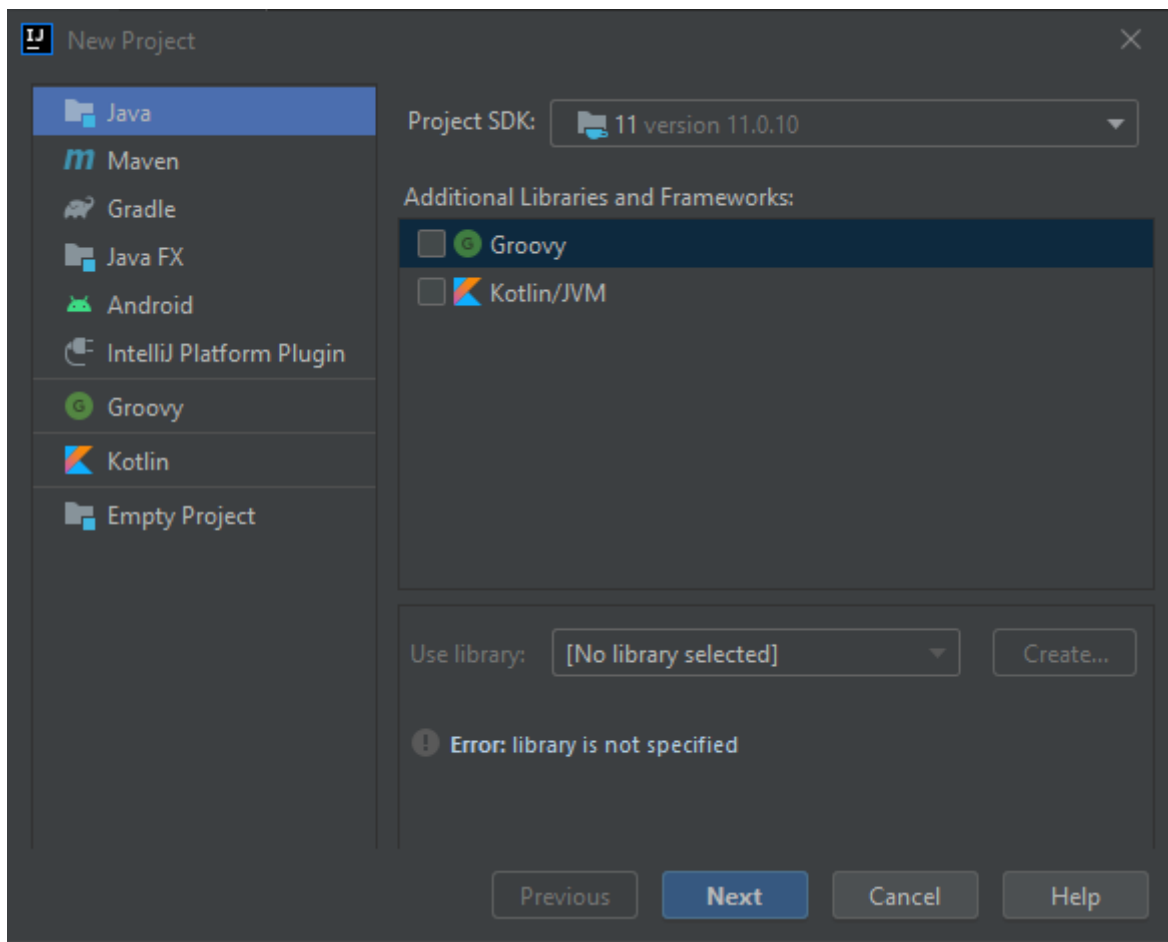
1. Go to <https://gluonhq.com/products/javafx/> [\(https://gluonhq.com/products/javafx/\)](https://gluonhq.com/products/javafx/) and download the SDK version for your platform (you'll only need the SDK, not the jmods).

Product	Public version	LTS version	Platform
JavaFX Windows SDK	11.0.2	11.0.10 More info	Windows
JavaFX Windows jmods	11.0.2	11.0.10 More info	Windows
JavaFX Mac OS X SDK	11.0.2	11.0.10 More info	Mac
JavaFX Mac OS X jmods	11.0.2	11.0.10 More info	Mac
JavaFX Linux SDK	11.0.2	11.0.10 More info	Linux
JavaFX Linux jmods	11.0.2	11.0.10 More info	Linux
JavaFX armv6hf SDK	11.0.2	11.0.10 More info	Embedded armv6hf
JavaFX Documentation	11.0.2	11.0.10 More info	Javadoc

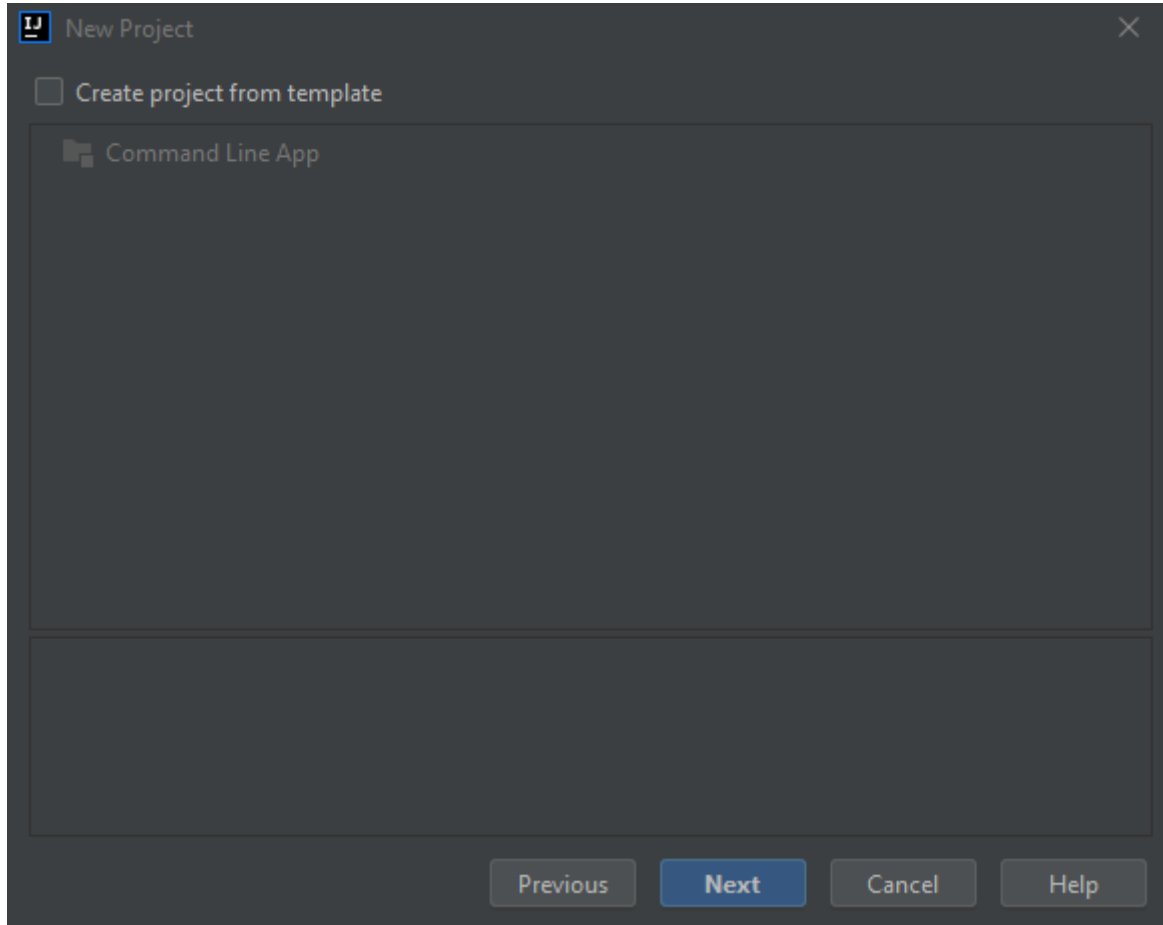
2. Extract the zip archive to a folder in your home directory. On my OSX machine, I extracted it into `/Users/florian/Applications/javafx-sdk-11.0.2/`. You will need this path later to set up JavaFX in IntelliJ.

Create a New Java Project

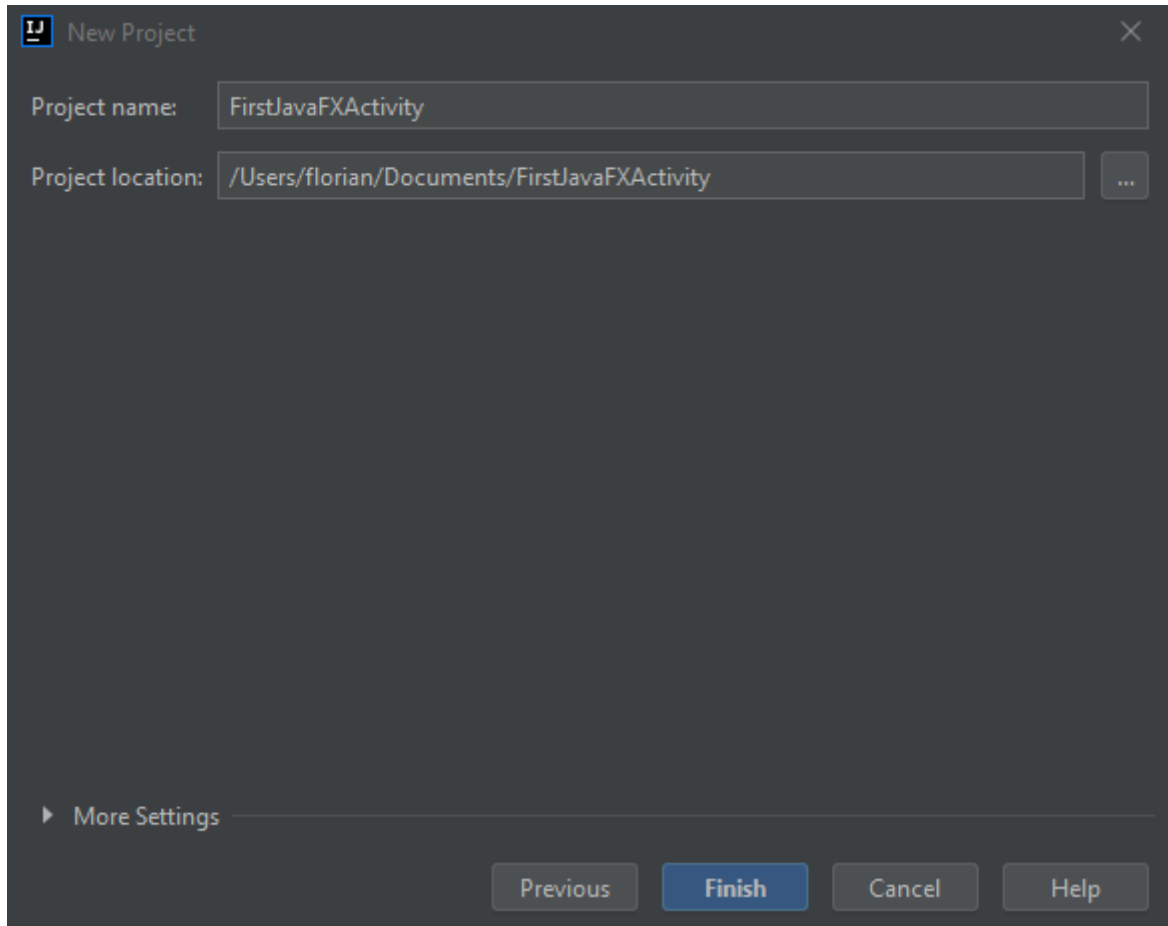
3. Navigate to **File -> New -> Project**. Then select **Java**, ensure **Project SDK** is **version 11** and deselect all **Libraries and Frameworks**. Click **Next**.



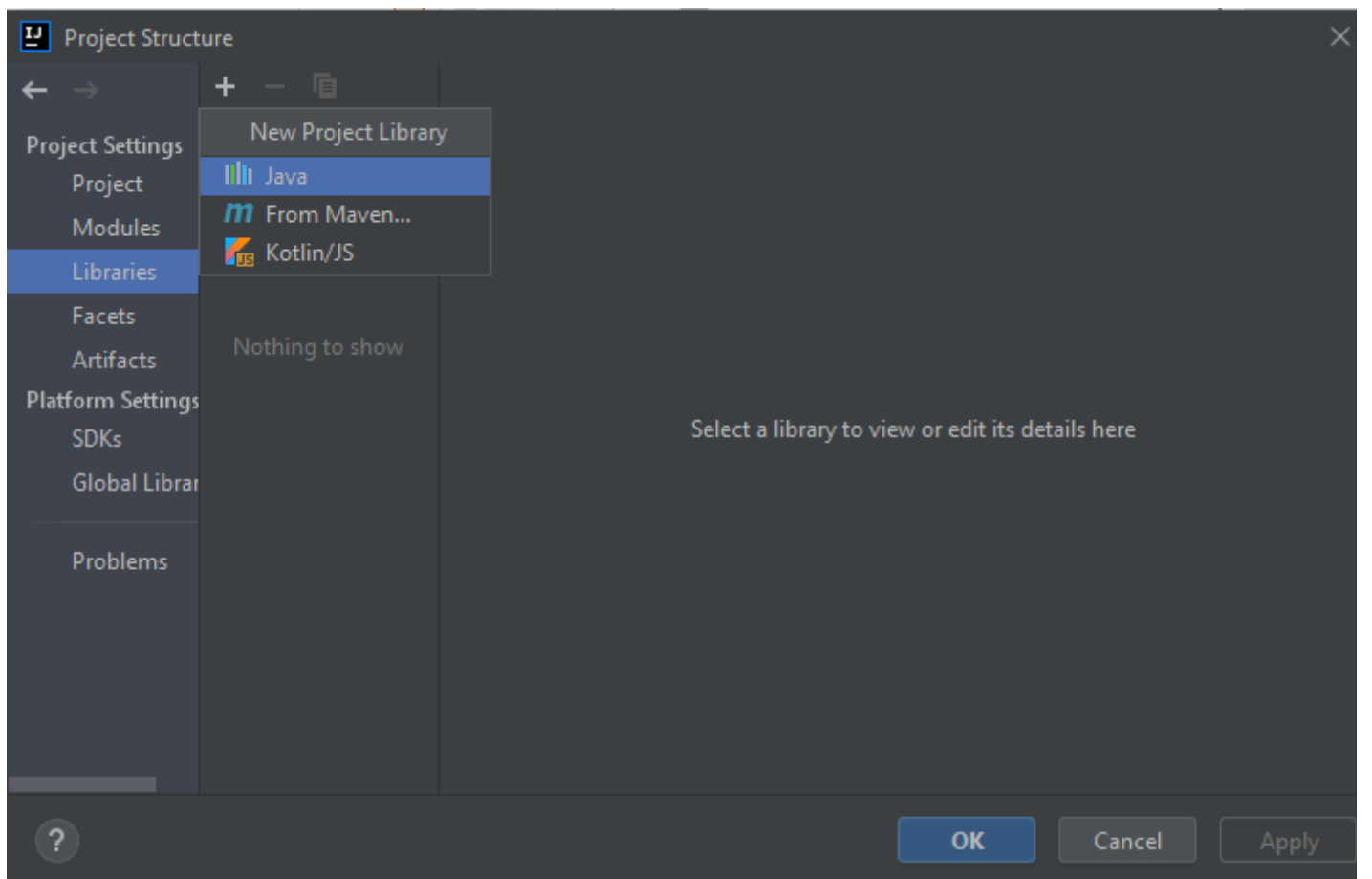
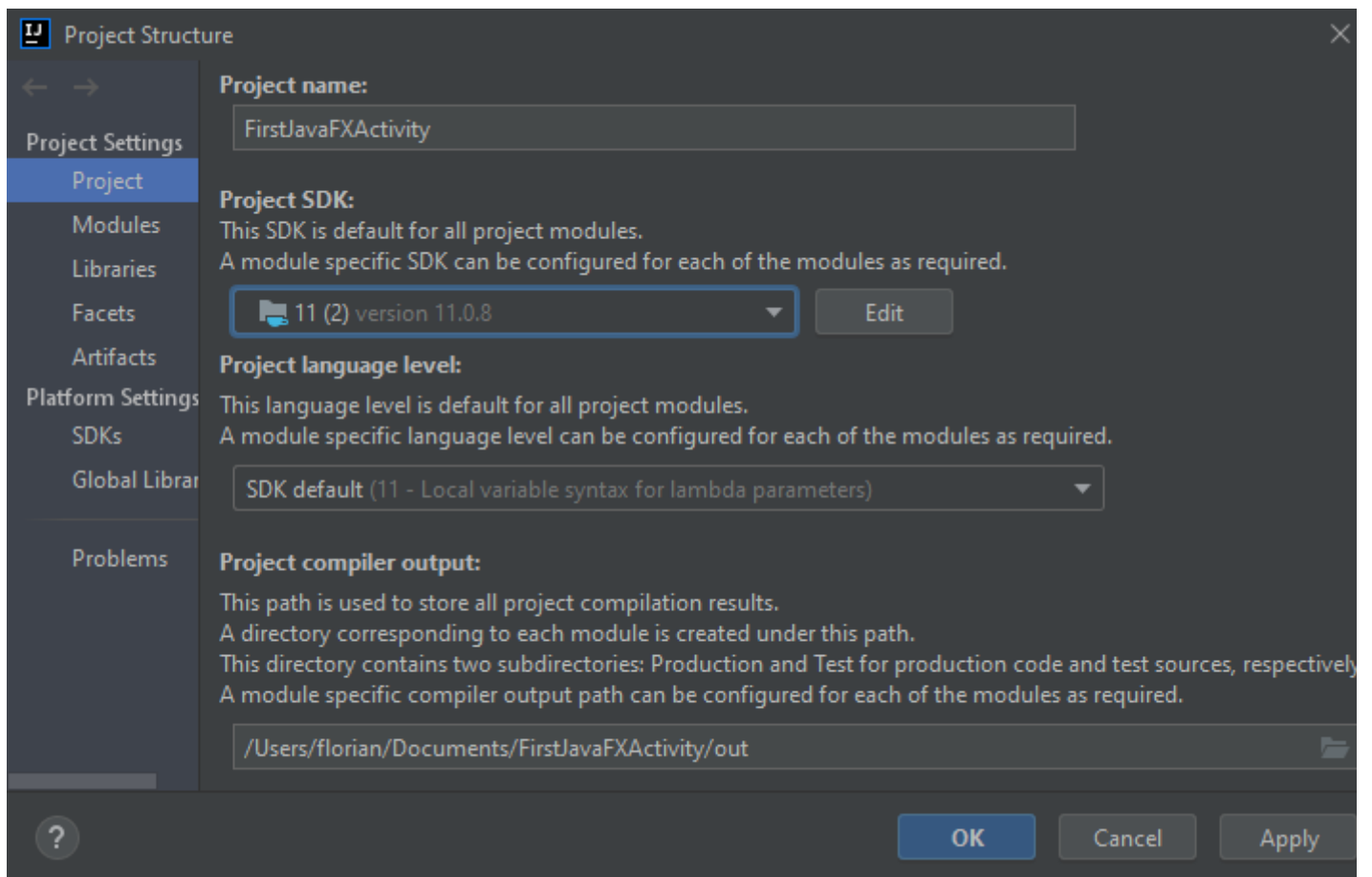
4. **Do not** select a project template and click **Next**.



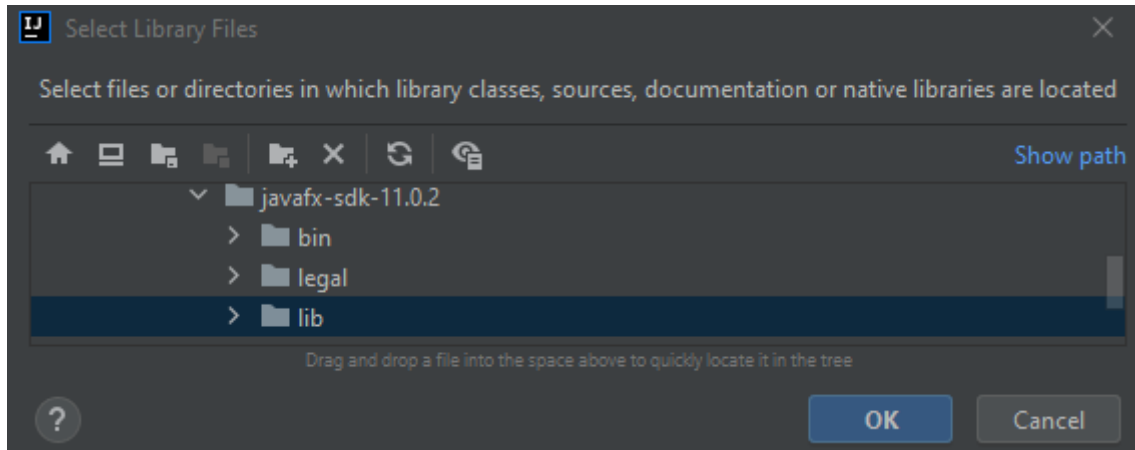
5. Provide a name for the project, such as **FirstJavaFXActivity** and click **Finish**.



6. Navigate to **File -> Project Structure**. Under **Project Settings -> Project**, ensure that the **Project SDK** is set to **11**. Under **Project Settings -> Libraries**, click **+** and then **Java**.



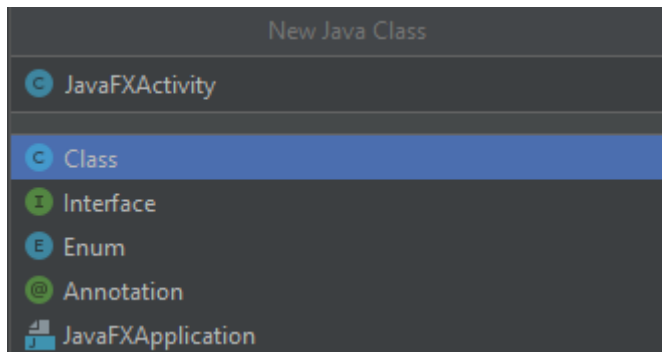
7. Go to the folder that you extracted the JavaFX archive into and navigate to the **lib** subdirectory. On my machine, the full path is `/Users/florian/Applications/javafx-sdk-11.0.2/lib/`. Select the **lib** subdirectory and click **OK**. Click **OK** again to add the Library.



8. Click **Apply** to save your changes and then **OK**.

Creating the Program Starter File

9. Right click on the **src** folder and navigate to **New -> Java Class** in the context menu. Type in the name **JavaFXActivity** and press Enter.



10. Copy the following starter code for the [First JavaFX Activity](https://canvas.wisc.edu/courses/244796/pages/12-first-javafx-activity) (<https://canvas.wisc.edu/courses/244796/pages/12-first-javafx-activity>) into the new class:

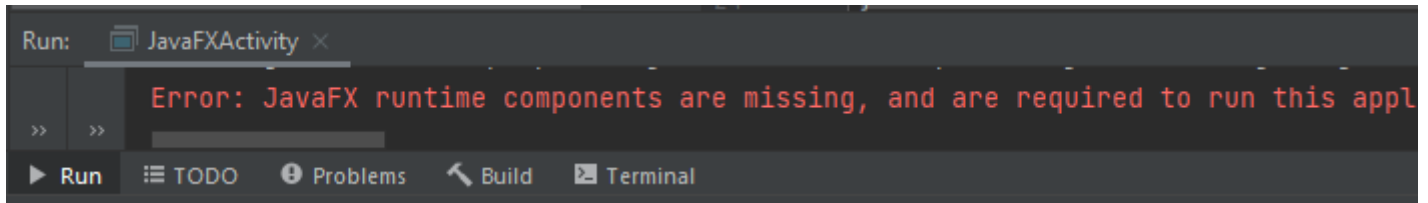
```
import javafx.application.Application;
import javafx.scene.Group;
import javafx.scene.Scene;
import javafx.stage.Stage;
// these imports are used for the First JavaFX Activity
import javafx.scene.control.Label;
import javafx.scene.shape.Circle;
import javafx.scene.shape.Polygon;

public class JavaFXActivity extends Application {
    @Override
    public void start(final Stage stage) {
        // update this method definition to complete the First JavaFX Activity
        Group group = new Group();
        Scene scene = new Scene(group, 320, 240);
        stage.setScene(scene);
        stage.show();
    }

    public static void main(String[] args) {
        Application.launch();
    }
}
```

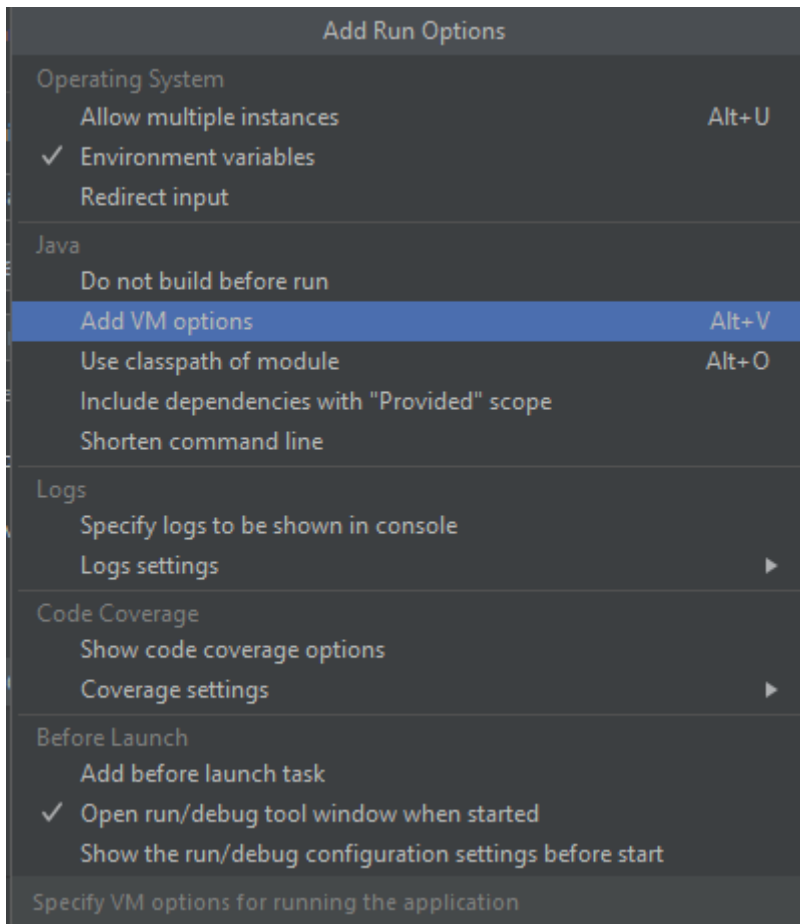
```
}  
}
```

11. When you now try to run the class you will see the following error:



Set Run Configurations

12. Navigate to **Run -> Edit Configurations**. Select **Modify options** and under **Java** select **VM Options**



13. In the new text box, copy the following line into the file (replace **/Users/florian/Applications/javafx-sdk-11.0.2/lib/** with the path on your machine):

```
--module-path /Users/florian/Applications/javafx-sdk-11.0.2/lib/ --add-modules javafx.controls,javafx.fxml
```

14. Now when you run, you should see an empty window pop up. Continue filling the window as part of the [First JavaFX Activity \(https://canvas.wisc.edu/courses/244796/pages/12-first-javafx-activity\)](https://canvas.wisc.edu/courses/244796/pages/12-first-javafx-activity)