How to install IntelliJ IDEA and JavaFX

1. Download and install IntelliJ IDEA, community edition, here:
   https://www.jetbrains.com/idea/

2. Open IntelliJ IDEA and create a new Java project. Choose the default SDK installed on your PC (if you can't see any SDK versions while setting up the project, it means that Java SDK is not installed on your PC. If this is the case, download Oracle Java SDK here: https://www.oracle.com/java/technologies/javase-downloads.html).
   If the SDK is version 8 – 10, everything should work. In most cases the SDK is 11 or higher, and some additional steps are are required (described in 4). Before that, however, do 3.

3. Create a new class Main for your project. To do so, right-click on the scr folder appearing in the left column of IntelliJ, under the name of the project (ignore the .idea and out folders). Delete what is written by deafult in the class Main, and paste the following (example from https://github.com/openjfx/samples/blob/master/HelloFX/CLI/hellofx/HelloFX.java):

   ```
   import javafx.application.Application;
   import javafx.scene.Scene;
   import javafx.scene.control.Label;
   import javafx.scene.layout.StackPane;
   import javafx.stage.Stage;

   public class Main extends Application {
   @Override
   public void start(Stage stage) {
   String javaVersion = System.getProperty("java.version");
   String javafxVersion = System.getProperty("javafx.version");
   Label l = new Label("Hello, JavaFX " + javafxVersion + ", running on Java " + javaVersion
   + ".");
   Scene scene = new Scene(new StackPane(l), 640, 480);
   stage.setScene(scene);
   stage.show();
   }
   public static void main(String[] args) {
   launch();
   }
   }
   ```

   If your SDK is 8 – 10, you can just run the program, by clicking the green arrow at the top right of the screen, or by selecting in the menu Run>Run>Main. If the SDK is 11, do the steps described in 4.

4. For SDK 11, you need to manually download JavaFX and "tell" IntelliJ where to find the files. To do so:

   a) Download openjfx here: https://openjfx.io/ and unpack the file. You can unpack the file where you want in your PC, but keep in mind the location where you unpack it (you need to be able to find the folder for the next steps). You should end up with an unzipped folder called "javafx-sdk-11.0.2", or something similar.

b) In IntelliJ, open the menu File > Project Structure, go in Libraries, click on the icon + on top left, and choose New Project Library Java. Find the openjfx folder ("javafx-sdk-11.0.2") and select it, and then select its lib subfolder. Apply the changes.

c) Try to run the program by clicking the green arrow at the top right of the screen, or by or by selecting in the menu Run>Run>Main. An error will show up, and this is normal.

d) Open the menu Run > Edit Configurations. In the field VM Options add the following line, replacing PATH_TO_OPENJFX with the path to the openjfx folder ("javafx-sdk-11.0.2" or similar) on *your* PC:

--module-path PATH_TO_OPENJFX/lib
--add-modules=javafx.controls,javafx.fxml

Example: On Windows, with the openjfx folder located in the Desktop, in folder AUP, write something like:

--module-path C:\Users\matteo\Desktop\AUP\javafx-sdk-11.0.2\lib
--add-modules=javafx.controls,javafx.fxml

e) Run the program, as described in c). Everything should work now.