JavaFX Instructions for Java 11 / 12

1. Download the JavaFX SDK, either Windows or MacOS X, from:
   https://gluonhq.com/products/javafx/
2. Unzip this into a directory that you'll remember for Step 5. I created a folder inside Java folder. Once unzipped, checkout the JAR files inside lib folder. You should see 8 of them.

Figure 1: JavaFX lib files

3. In Eclipse, create a project as usual. (I named it as GUIProject)
4. Right click on Project folder, go to **Build Path → Add External Archives**
5. Navigate to the path where you unzipped JavaFX and go to lib folder to see those 8 JARs. Select all 8 of them and include them to show up in the build path (Fig.2)
6. Now we will write a small JavaFX application. Create a package (I called in javafxtest). Inside, create a class named HelloWorld.java with code as shown below. If you do not see any compilation errors, it means that you got JavaFX into your build path correctly.
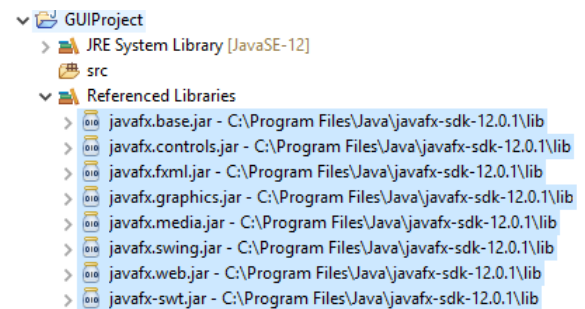

Figure 2: JavaFX in build path

```java
package javafxtest;
import javafx.application.Application;
import javafx.scene.Scene;
import javafx.scene.layout.BorderPane;
import javafx.scene.text.Text;
import javafx.stage.Stage;
public class HelloWord extends Application{
        @Override
        public void start(Stage arg0) throws Exception {
                BorderPane root = new BorderPane();
                Text message = new Text ("Hello World!");
                root.setCenter(message);
                Scene scene = new Scene(root, 100, 100);
                arg0.setScene(scene);
                arg0.show();
        }
        public static void main(String[] args) {
                launch(args);
        }
}
```

7. Now, run the file. You will see an error message on console.

Error: JavaFX runtime components are missing, and are required to run this application

8. Right click on HelloWorld.java in the left panel. Choose **Run As → Run Configurations**. Check the Project and Main class names (Fig 3). Then go to **Arguments** tab and type in the string shown below in **VM Arguments** box. (Fig 4). Note that the path name is of those 8 jar files from step 2.

--module-path="C:\Program Files\Java\javafx-sdk-11.0.2\lib" --add-modules javafx.controls,javafx.fxml
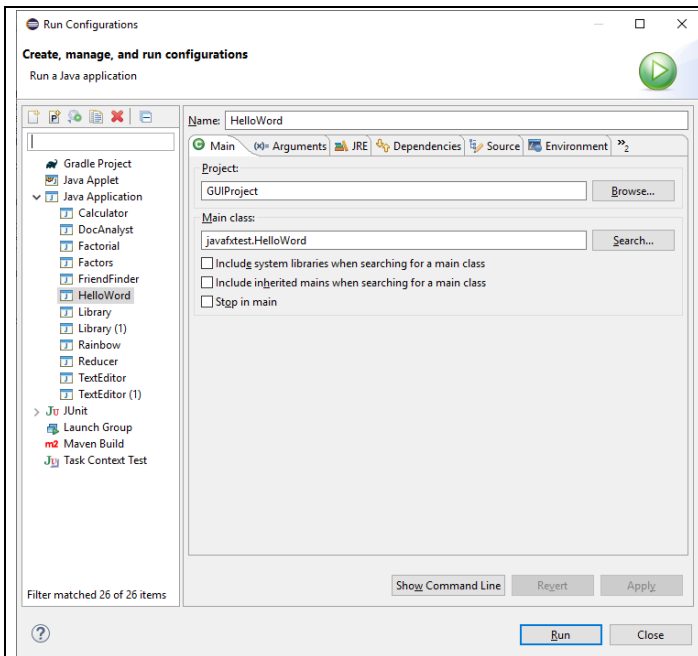

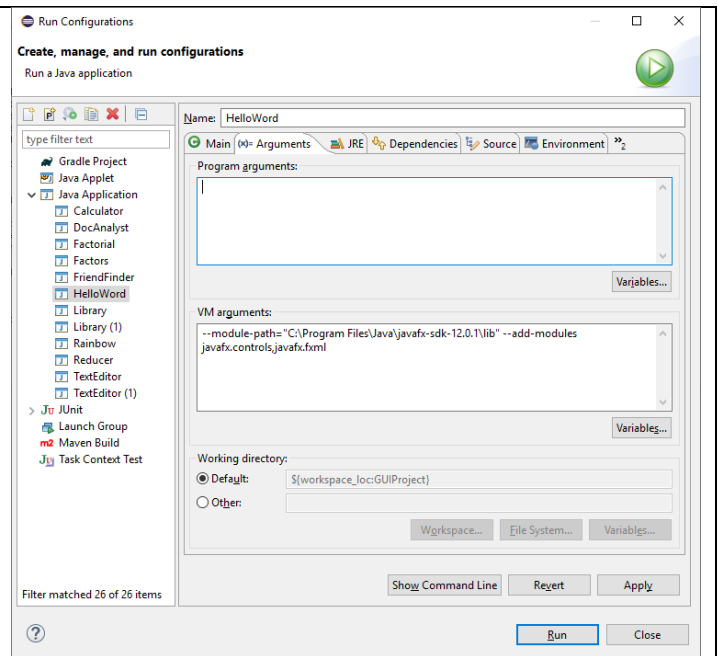Figure 3: Run configuration settings-1

Figure 4: Run configuration settings-2

9. Click Run. You should see a small window with Hello World! message.