Installation process:

Download javafxsdk from: <https://openjfx.io/>

Then import the downloaded sdk folder lib to the library in the IDE.

import javafx.application.Application;  
import javafx.stage.Stage;  
  
public class Main extends Application {  
 public static void main(String[] args) {  
 *launch*(args);  
 }  
  
 @Override  
 public void start(Stage stage) throws Exception {  
 stage.show();  
 }  
}

put this code and run for once then

put this command in the Run->Edit configurations->Application->Main->modifyOptions->Add vm options->vm options->copy below command line and paste

--module-path "C:\Program Files\javafx-sdk-19\lib" --add-modules javafx.controls,javafx.fxml

Stages:

Stages are similar to jFrame in swing.

1. Stage
2. Scene
3. Scene-Graph

Stage: top layer container window of the application.

Scene: Scene is added to a stage it is a drawing panel for graphical content similar to jFrame

Scene-Graph: tree of nodes to hold and arrange the different components in the scene like buttons. Root node is required.

As our class inherits the application class the application class is the parent class and the our class is the child class so launch is a static method in the application class so it can be used. And behind the scenes the start method is automatically called.

We can use Stage stageName=new Stage();

To create a new Stage;

Group root=new Group();  
Scene scene=new Scene(root);  
stage.setScene(scene);  
stage.show();

In the above code group is to create a root node it is a simple method to arrange all the nodes that will be in the scene.

Scene is to make a panel to ed in the stage

setScene is used to paste the scent in the stage

without scene this happens when you resize the window

