# Setup for Project DEV Environment in Windows

## Download and install Java JDK

* Java JDK: <https://www.oracle.com/java/technologies/downloads/#jdk22-windows>

### Set up Java JDK environment variables

* **Open Environment Variables Settings:**
  + Right-click on This PC or Computer on your desktop or in File Explorer.
  + Select Properties.
  + Click on Advanced system settings.
  + In the System Properties window, click on the Environment Variables button.
* **Set JAVA\_HOME Variable:**
  + Under System variables, click on New.
  + For Variable name, enter JAVA\_HOME.
  + For Variable value, enter the path to your JDK installation, e.g., C:\Program Files\Java\jdk-<version>.
  + Click OK.
* **Set PATH Variable:**
  + Find the Path variable under System variables, select it, and click on Edit.
  + Click on New and add the path to the bin directory of your JDK, e.g., C:\Program Files\Java\jdk-<version>\bin.
  + Click OK.

## Install JavaFX

### Download and install the JavaFX SDK

* from the website: <https://gluonhq.com/products/javafx/>
* Extract the downloaded file to a location on your system, for example, C:\Java\javafx-sdk-<version>.

### Set JavaFX environment variable

* **Set PATH\_TO\_FX Variable:**
  + Under System variables, click on New.
  + For Variable name, enter PATH\_TO\_FX.
  + For Variable value, enter the path to the lib directory of your JavaFX SDK, e.g., C:\Java\javafx-sdk-<version>\lib.
  + Click OK.

## Install IntelliJ IDEA

IntelliJ IDEA: <https://www.jetbrains.com/idea/download/?section=windows>

### Update IDE Settings (IntelliJ IDEA)

Depending on the IDE you're using, you'll need to configure it to use JavaFX. Here's a basic example for IntelliJ IDEA:

1. **Open IntelliJ IDEA and Your Project.**
2. **Open Project Structure:**
   * Go to File > Project Structure.
   * Under Project, set the Project SDK to your JDK.
3. **Configure Libraries:**
   * Under Modules, select your module and go to the Dependencies tab.
   * Click on the + button, select JARs or directories, and add the lib directory of your JavaFX SDK.
4. **Set VM Options (not needed but try for troubleshooting):**
   * Go to Run > Edit Configurations.
   * Select your main class and go to the Configuration tab.
   * In the VM options field, add:

--module-path $PATH\_TO\_FX --add-modules javafx.controls,javafx.fxml

* + Click OK.

## Install SceneBuilder

SceneBuilder: <https://gluonhq.com/products/scene-builder/>

1. **Open IntelliJ IDEA**
2. **Set SceneBuilder Location**
   * Go to File > Settings
   * Under Languages & Frameworks > JavaFX
   * Set Path to SceneBuilder, e.g., %USERPROFILE%\AppData\Local\SceneBuilder\SceneBuilder.exe
   * Click OK.

## Install MySQL Workbench