

SOFE 2710U Object Oriented Programming and Design

Tutorial: 1

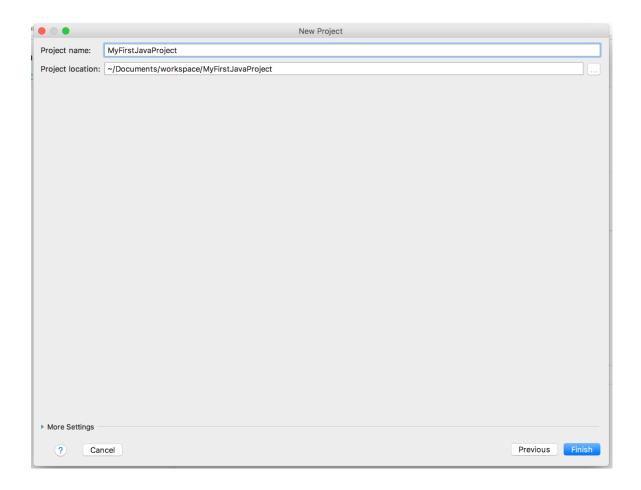
Creating a new Java project in IntelliJ

First thing, let's run IntelliJ and select Create New Project

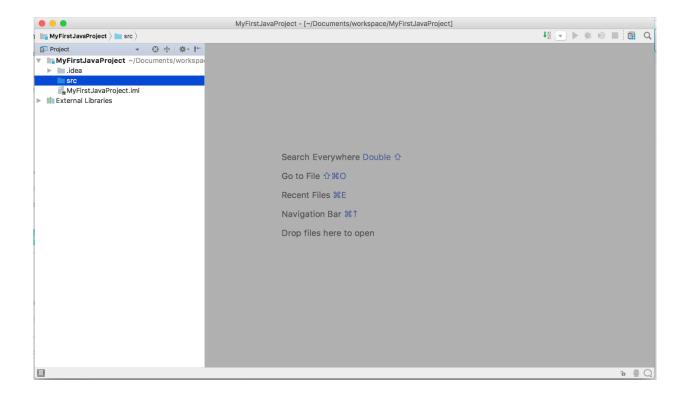


Then make sure the Project SDK has **java version 11 ("11.0.4")** selected there. If it's not in the menu options then make sure you have the latest Java JDK installed.

Use the default settings and move to the next screen, now give your new project a name, let's call it **MyFirstJavaProject**

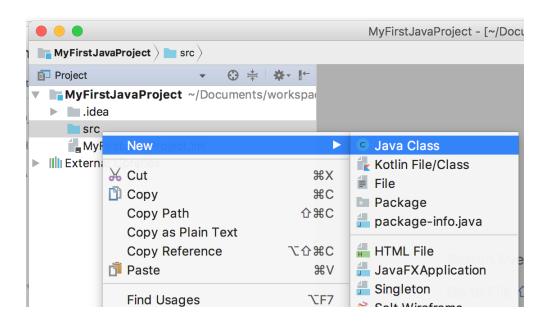


On the left side you can see the folder structure of the project, the most important folder of all is the **src** folder, inside we will keep all our Java files.

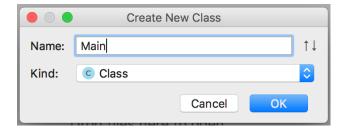


Creating a class in IntelliJ

Now to create our first class, right-click on this **src** folder and select **New** and then **Java Class**

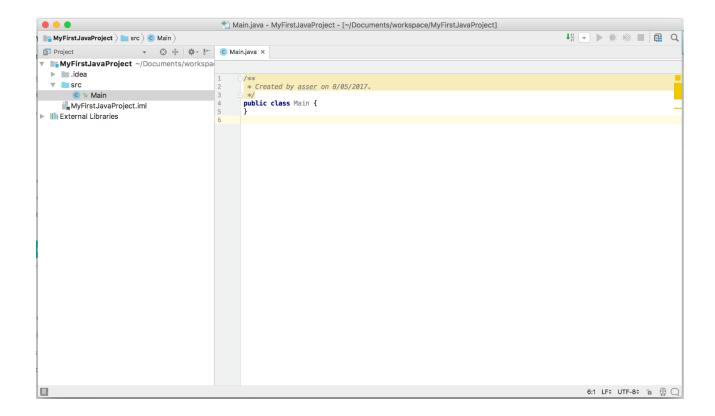


Give your class a name, let's call it Main since that will be our main class



We now have an actual class file inside our project.

You can see that IntelliJ has automatically created a file inside the **src** folder with the same name of the class **Main**.



Now that the class is created, we will add methods and fields to that class.

Create your first method

Add the main method to our Main class.

Open the Main class and inside the class curly bracket start typing the definition of the main method:

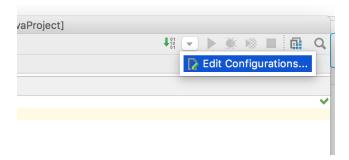
```
public static void main(String [] args) {
}
```

Then, inside the main method, print the message "Hello world!"

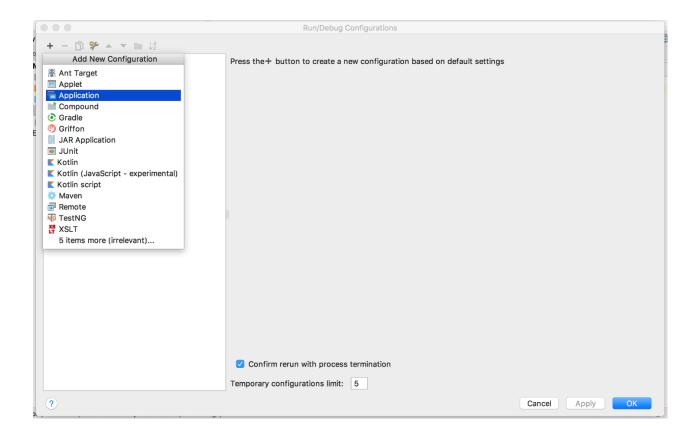
```
public static void main(String [] args) {
    System.out.println("Hello world!");
}
```

If the top right "run" button is not active, then you'll need to set up the configuration.

Click on the drop down menu button right next to the "run" button at the top right corner of your IDE, and then select **Edit Configuration**

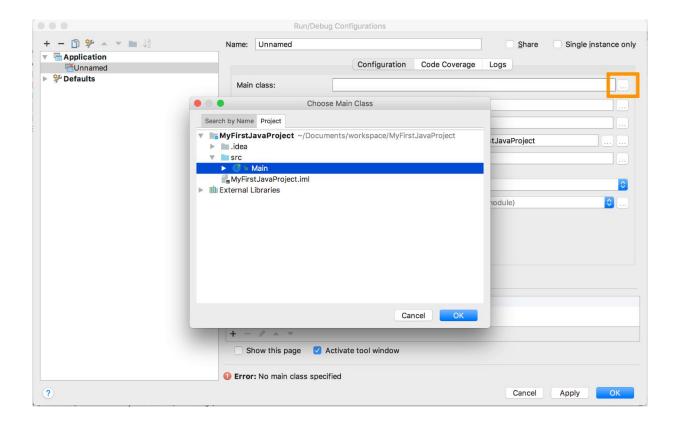


Then click on the + sign at the top left corner and select Application

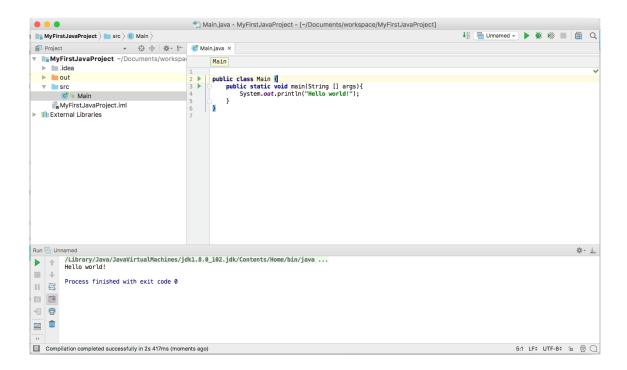


Then, you'll need to select the Main class that contains the main method for the IDE to know where to start.

To do so click on the three dots ... next to the Main class edit and then browse to the **Project** tab and select the **Main** class we just created.



Once you click OK and Apply your changes, the project is ready to run.



When you run the project you can see that it's first compiling the code and then it will run and show the output in the bottom panel. It will print the message "Hello World!"

1. Install IntelliJ

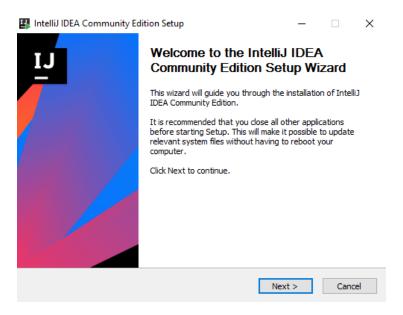
Download IntelliJ at https://www.jetbrains.com/idea/download/#section=windows
On this page, make sure the Windows version is selected, choose the free **Community version**, and click Download.

And you should see a downloading file pop up at the bottom of your screen. After the download finishes, click on it to open it and start the installation.

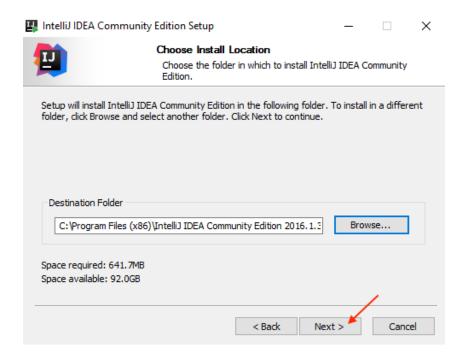
2. Setup Wizard and Installation Location

A pop-up window may appear that asks "Do you want to allow this app to make changes to your PC?" Select Yes and move on.

Next, you should see a Setup Wizard window appear, which will guide you through the installation process. Click Next here.

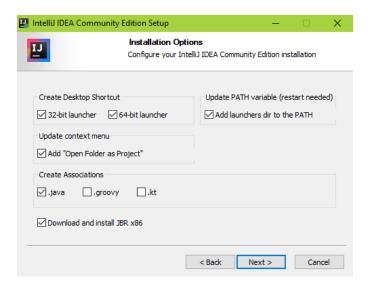


Then choose the destination folder for this installation. The setup wizard will pick a default location, and this should be the correct location in your computer's Program Files. Take note of this location, and click Next.



3. Choose Installation Options

Next are the installation options. These are optional, but to make IntelliJ easier to find and to make it your default Java text editor, you can choose to select that shortcuts be made, and that .java files will be opened using IntelliJ.



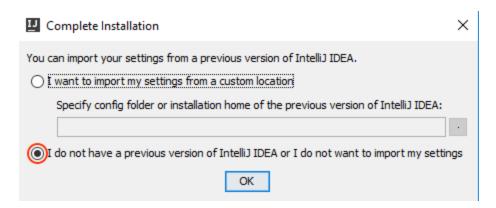
Then select the name for your shortcut if you've chosen to create one, and click Install.

Either choose to reboot now or reboot later, and click **Finish** to complete the installation.

5. Complete Installation

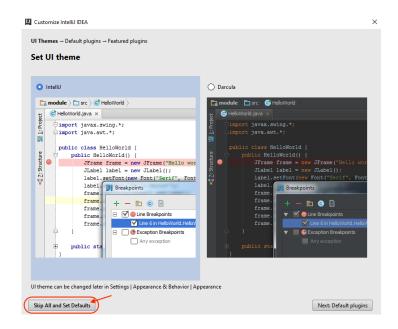
If you have not restarted the computer, you should manually restart the computer. Then click on the IntelliJ launcher on the desktop to start IntelliJ (it doesn't matter which launcher you use).

You'll be asked if you want to import settings from a previous version of IntelliJ. If this is your first version, choose *I* do not have a previous version of IntelliJ.. and click Okay.



You will also be asked to accept the JetBrains Privacy Policy, select I Agree.

You'll be asked to complete the installation by selecting if you want any custom user interface (UI) components for IntelliJ, and to use the default settings, you select **Skip All and Set Defaults.**

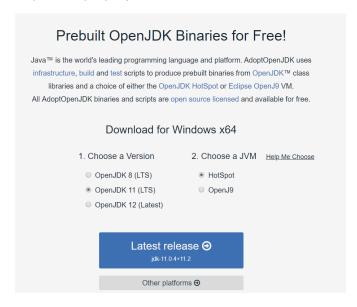


You should install JDK (Java Development Kit) version 11. If you already have JDK installed and it's version 8 or later, it should be fine to just use that.

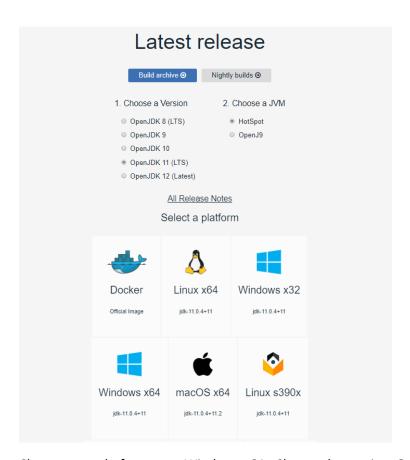
You can either install OpenJDK or Oracle JDK.

OpenJDK

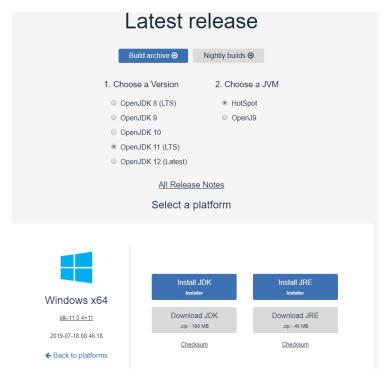
https://adoptopenjdk.net/



Choose the version, e.g., OpenJDK 11. Click "Latest release".



Choose your platform, e.g., Windows x64. Choose the version, OpenJDK 11.



Click "Install JDK".

Run the downloaded .msi installer file.

Oracle JDK

If you want JDK version 11, google "jdk 11" and click the first link.

https://www.oracle.com/technetwork/java/javase/downloads/jdk11-downloads-5066655.html

Download the one for your operating systems, e.g., for Windows, choose jdk-11.0.4-windows-x64_bin.exe.

