

# An Introduction to IntelliJ

## IntelliJ IDE for Java Developers

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Produced     Dr. Siobhán Drohan  
by:            Mr. Colm Dunphy  
                  Mr. Diarmuid O'Connor  
                  Dr. Frank Walsh



Waterford Institute *of* Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Department of Computing and Mathematics  
<http://www.wit.ie/>



" Most people talk about Java the language, and this may sound odd coming from me, but I could hardly care less. At the core of the Java ecosystem is the JVM. "

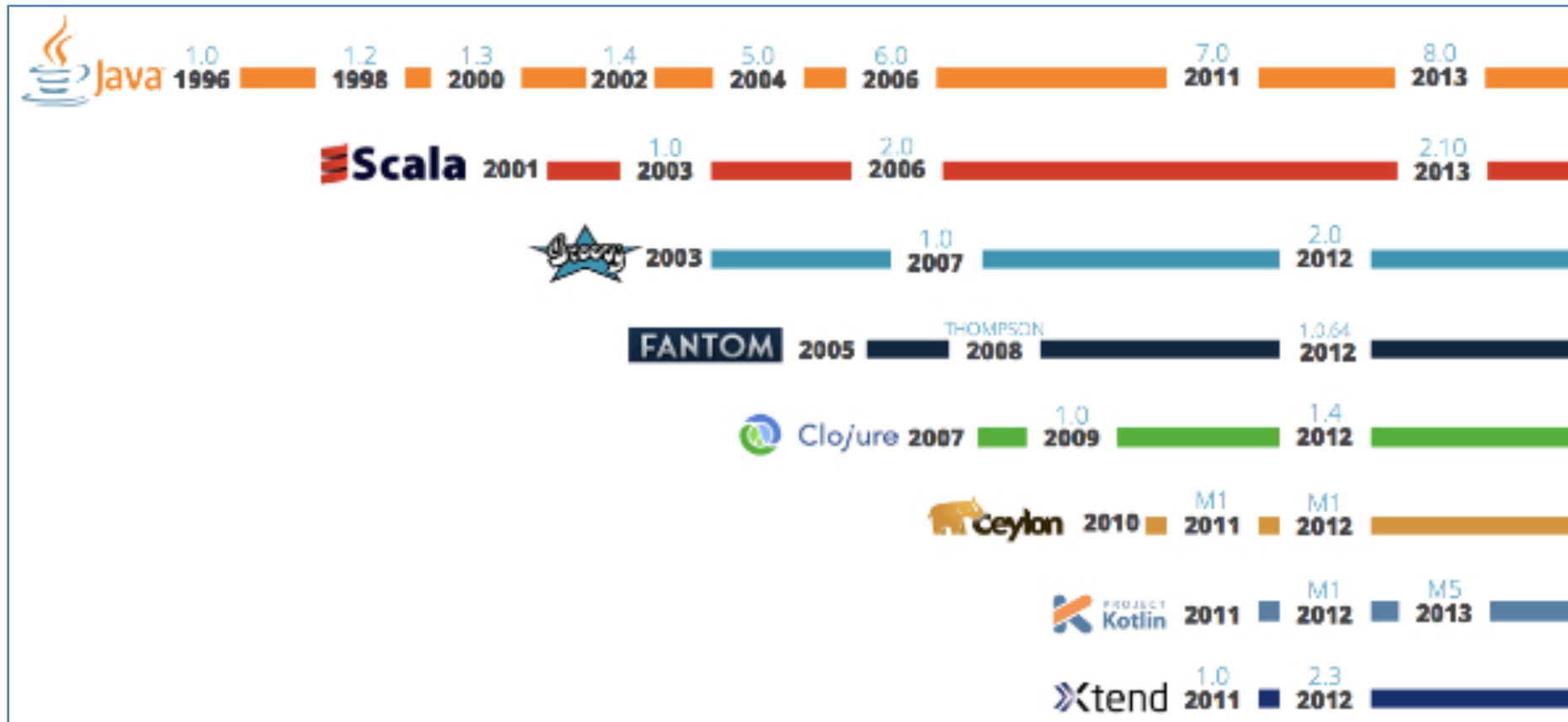
**James Gosling,**

Creator of the Java Programming Language(2011, TheServerSide)



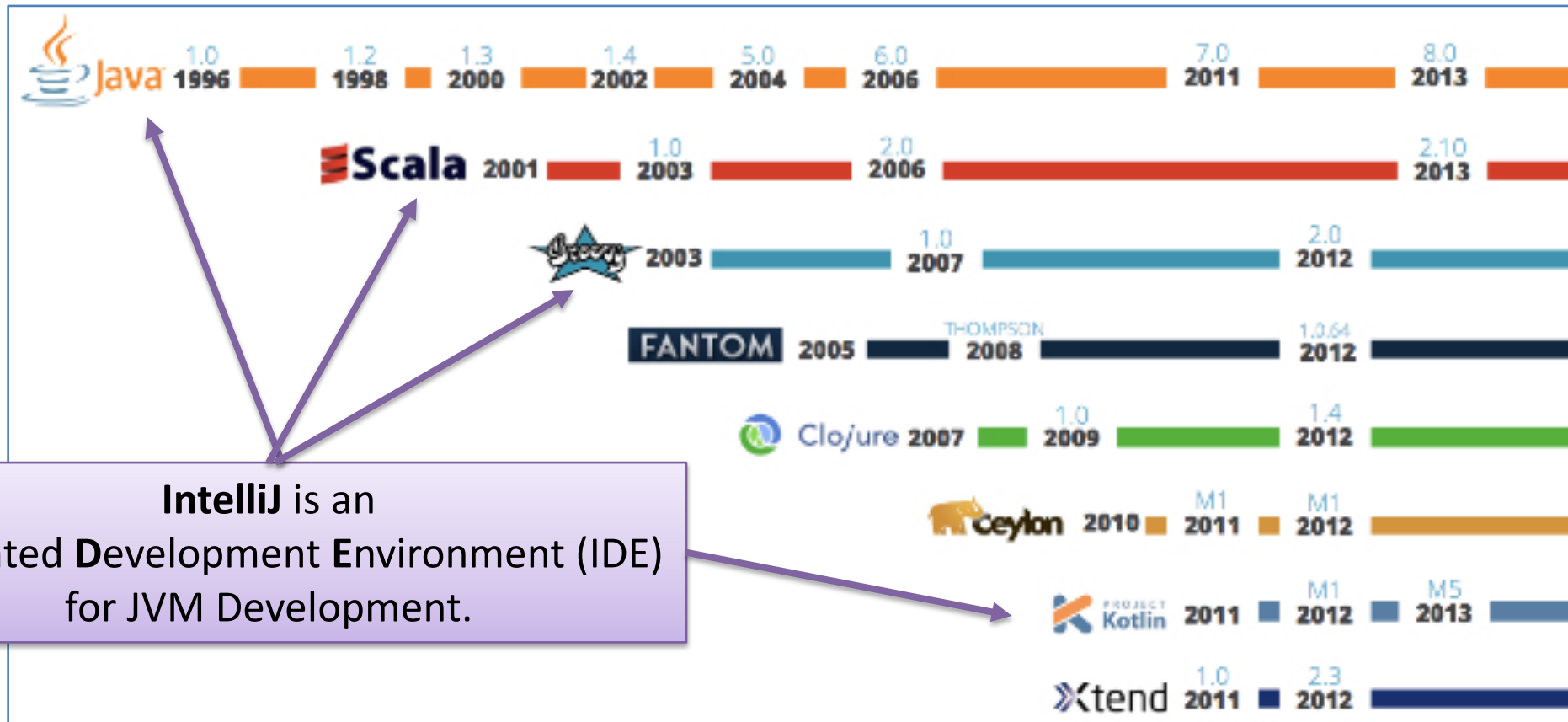
# JVM Language History

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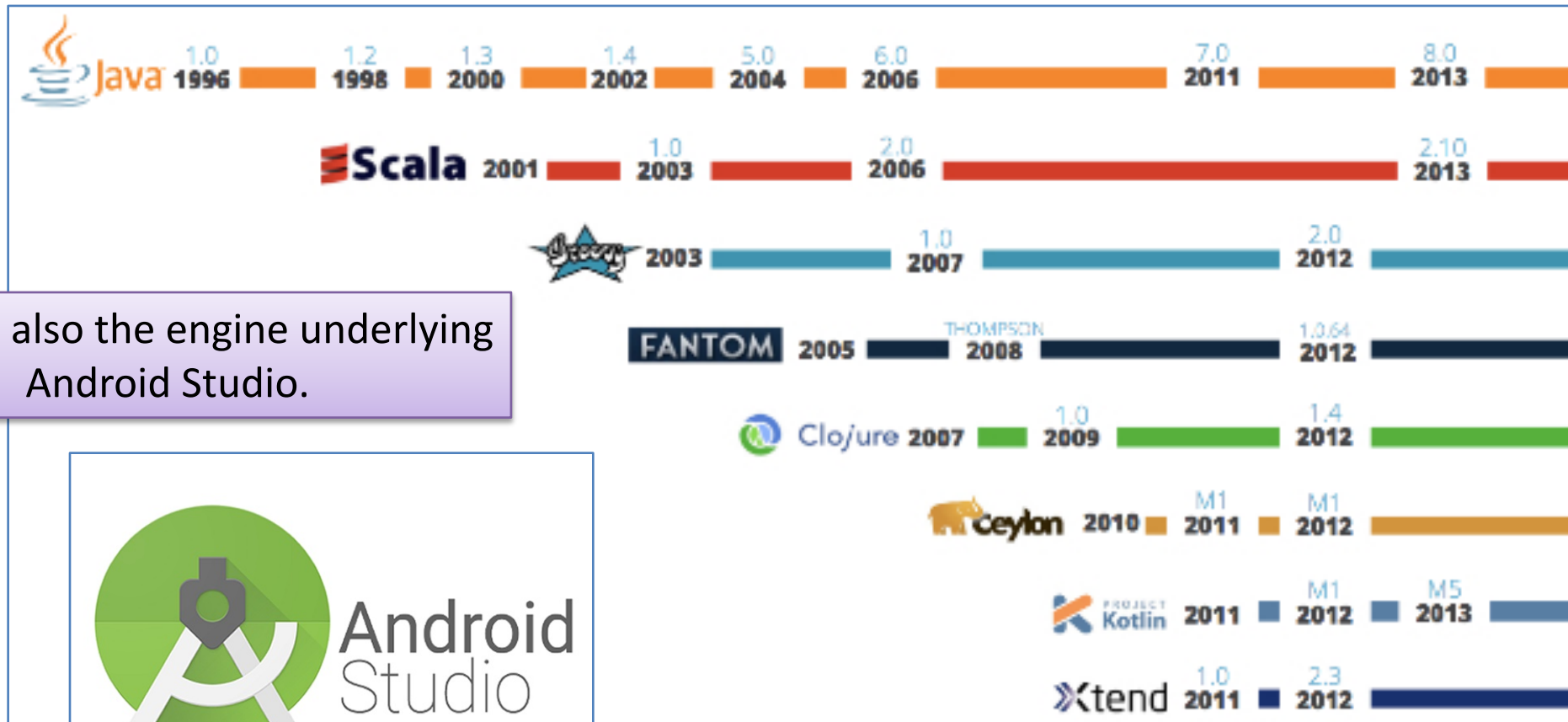
[Source](#)

# IntelliJ and the JVM

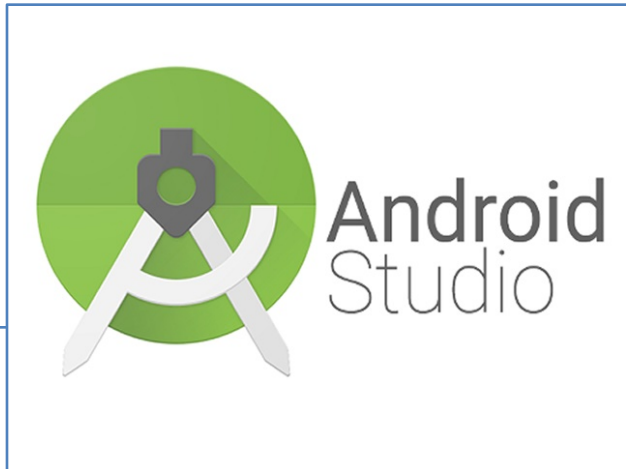


**IntelliJ** is an Integrated Development Environment (IDE) for JVM Development.

# IntelliJ and the JVM

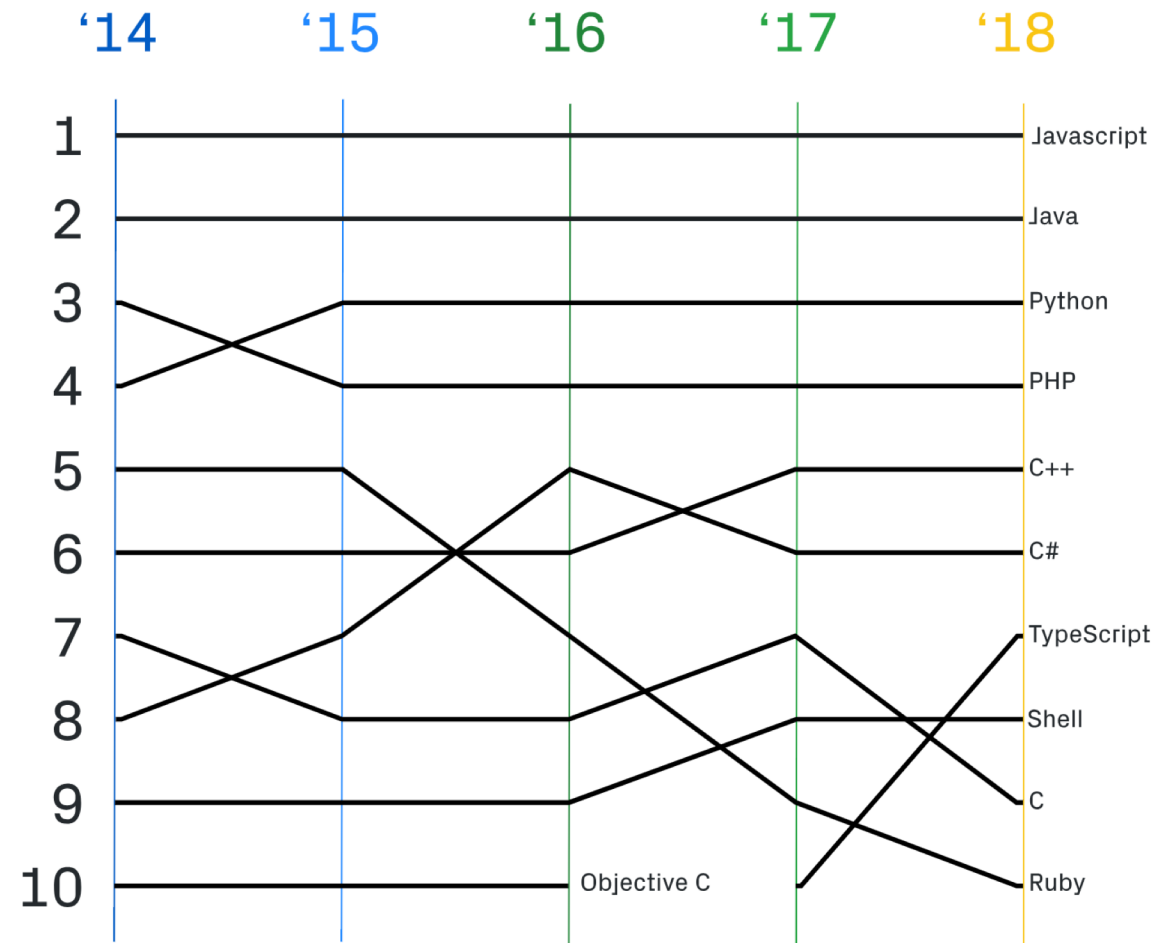


IntelliJ is also the engine underlying Android Studio.



# GitHub Most Popular Languages

- [octoverse](#)



## *Installing IntelliJ*

**BEFORE** you install IntelliJ  
Download and Install the **JDK** first using  
IE on windows or Safari on OSX!



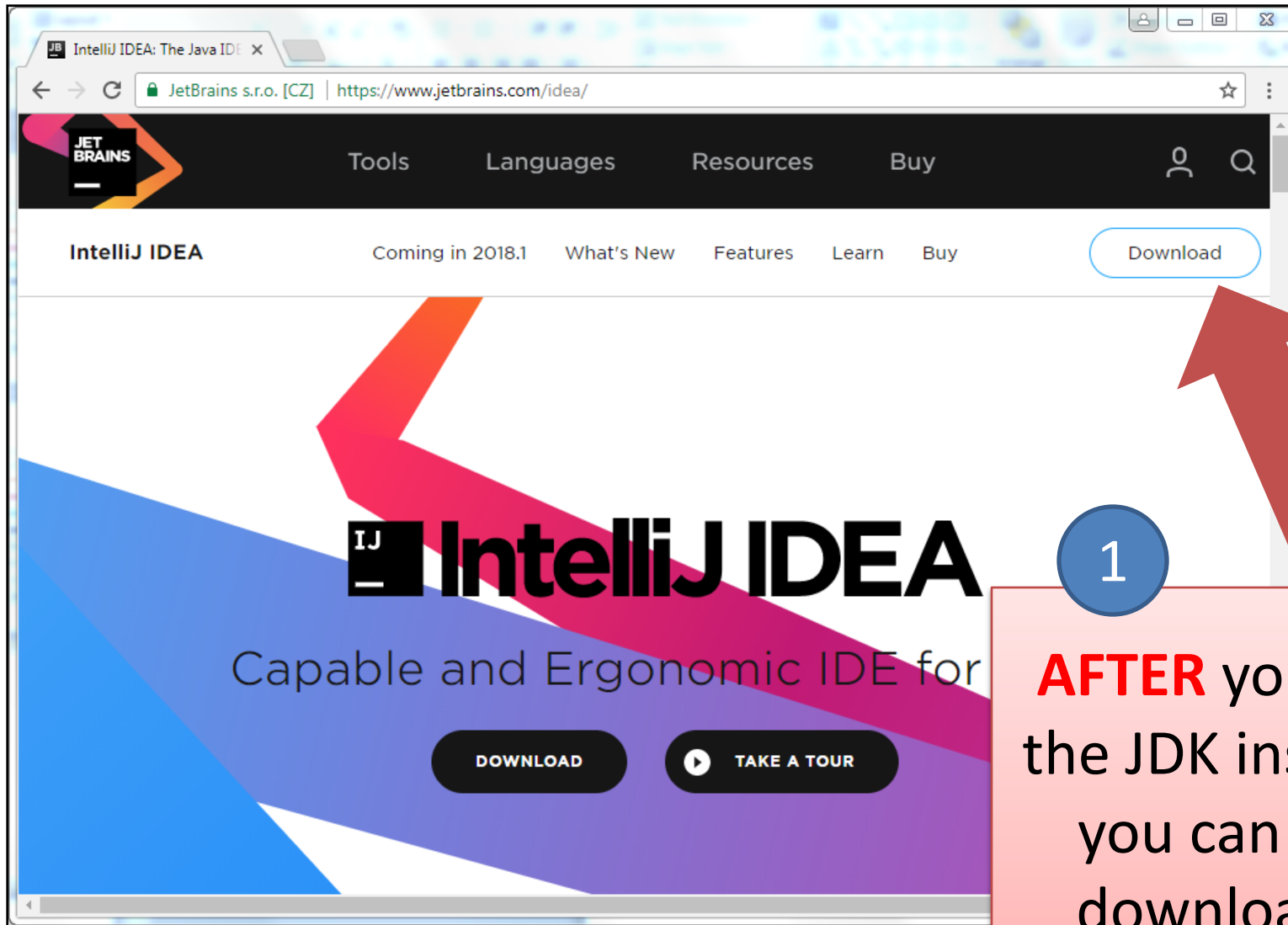
- 2 IntelliJ Editions:**
- **Community** (free) is a subset of
  - **Ultimate** (paid)



As a WIT student you can use **ULTIMATE**

The following slides show how to install Community Edition.

[Lab 07a](#) demonstrates similar steps to **install Ultimate instead**. Use Ultimate!



1

**AFTER** you have the JDK installed, you can start downloading IntelliJ.



Download IntelliJ IDEA: T x

JetBrains s.r.o. [CZ] | https://www.jetbrains.com/idea/download/#section=windows

Tools Languages Resources Buy

IntelliJ IDEA Coming in 2018.1 What's New Features Learn Buy [Download](#)



# Download IntelliJ IDEA

Windows macOS Linux

## Ultimate

Web, mobile and enterprise development

[Download](#) [.EXE](#)

Free trial

## Community

Java, Groovy, Scala and Android development

[Download](#) [.EXE](#)

Free, open-source

Version: 2017.3.4  
Build: 173.4548.28  
Released: January 30, 2018  
[Release notes](#)

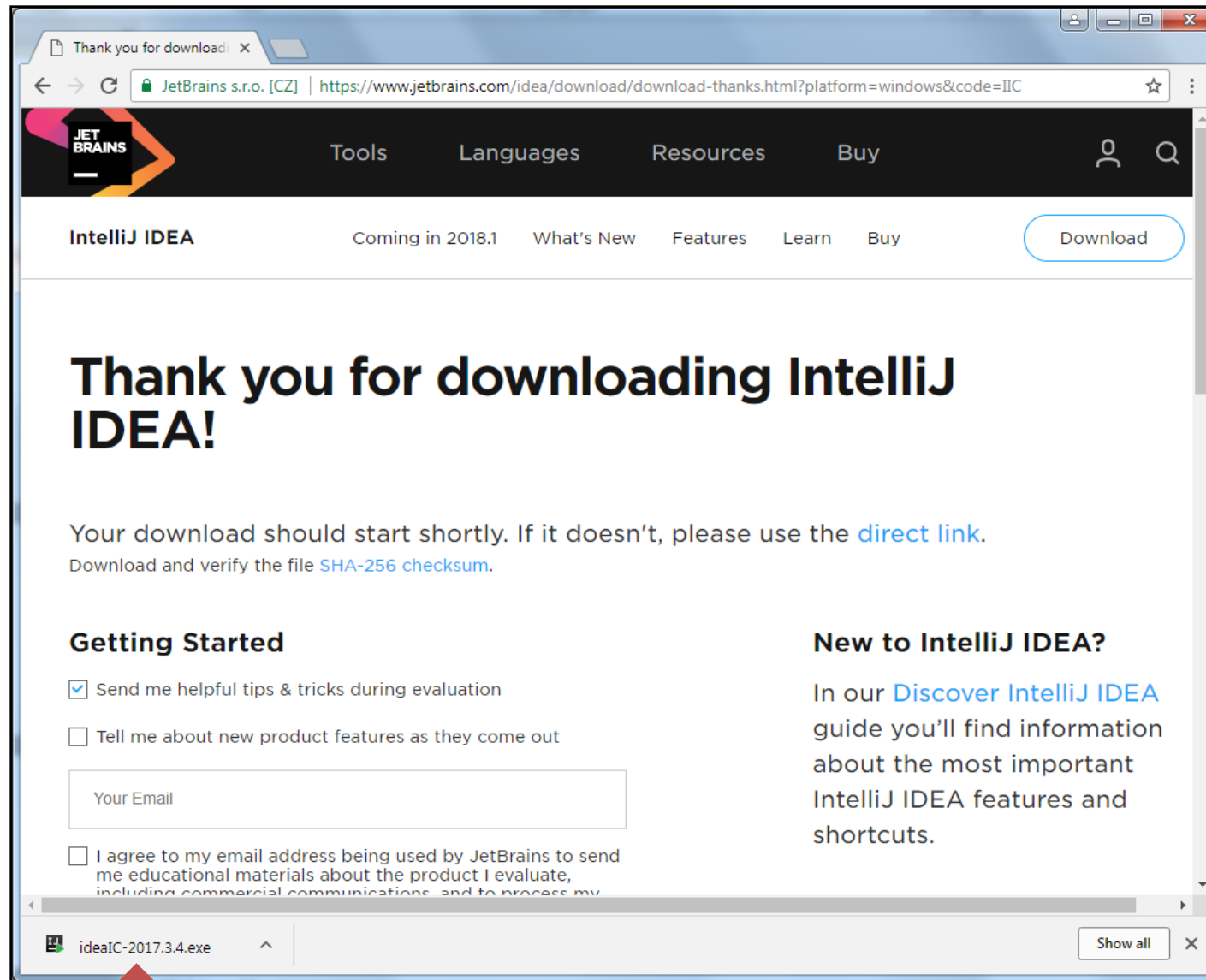
[System requirements](#)  
[Installation Instructions](#)  
[Previous versions](#)

License	Commercial	Open-source, Apache 2.0 <a href="#">?</a>
Java, Kotlin, Groovy, Scala	✓	✓
Android <a href="#">?</a>	✓	✓

2

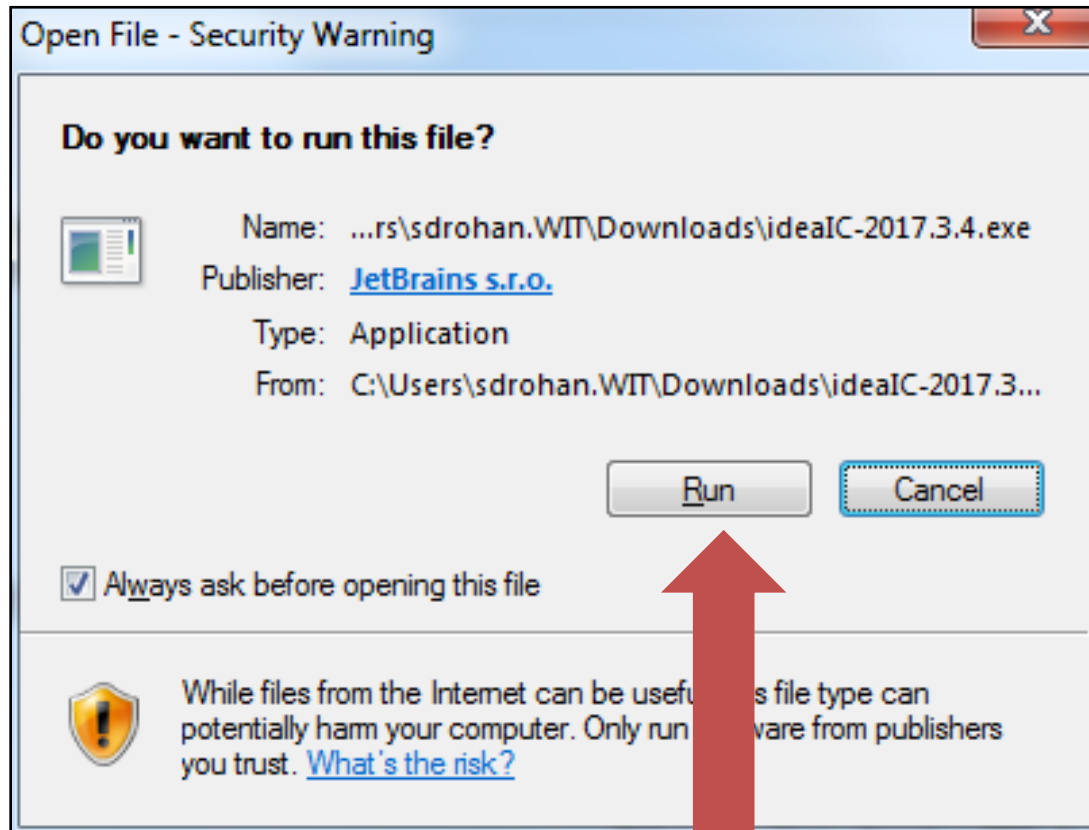
download (.exe)





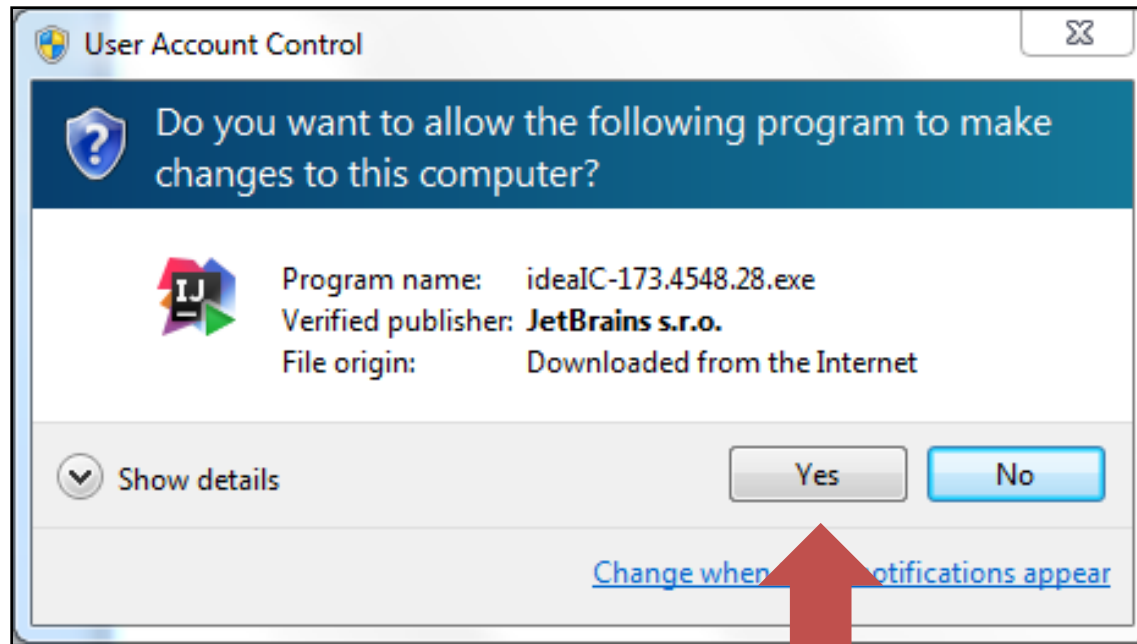
3

Click on the downloaded file to start the installation.



4

If you are presented with a security warning, click **Run**.



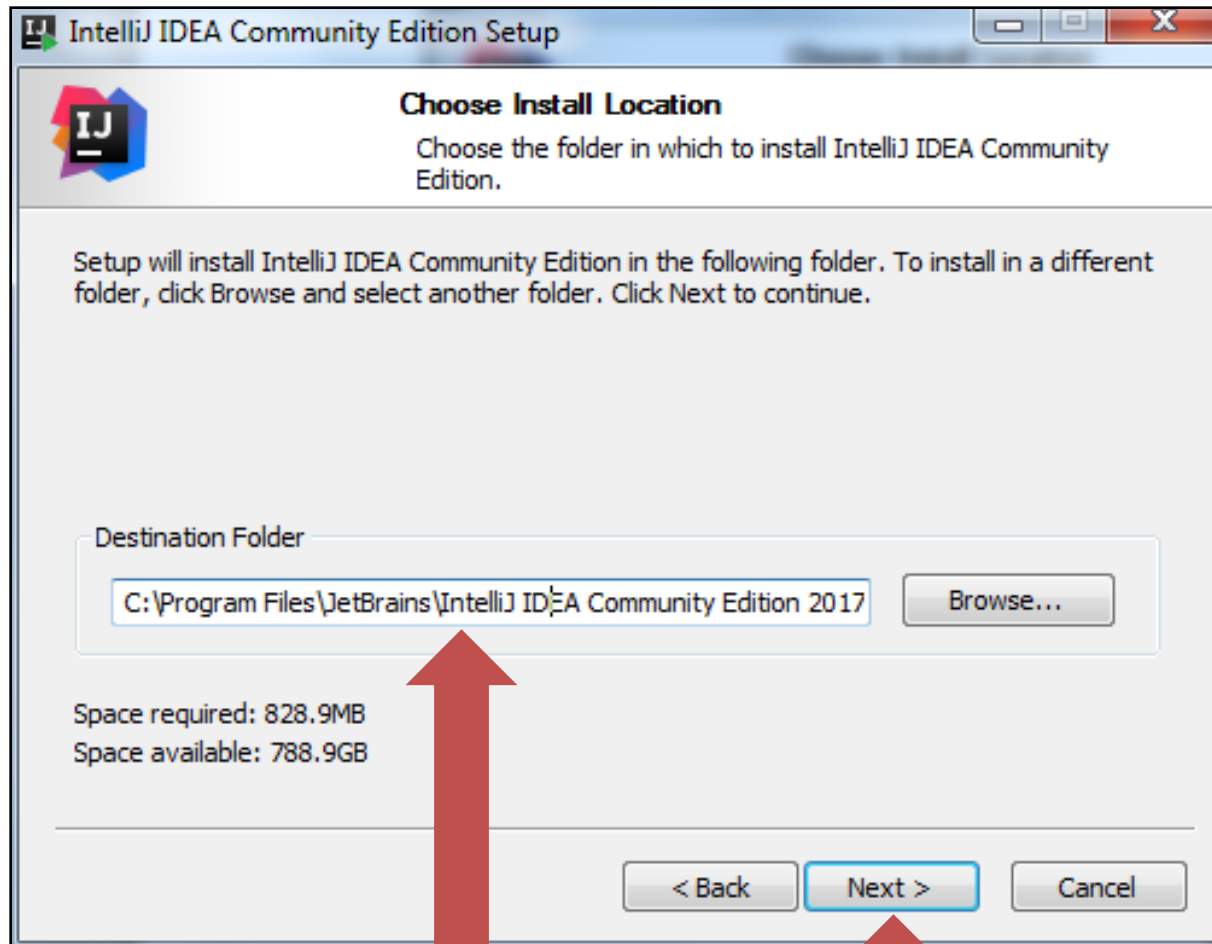
5

If you are presented with this warning, click **Yes**.



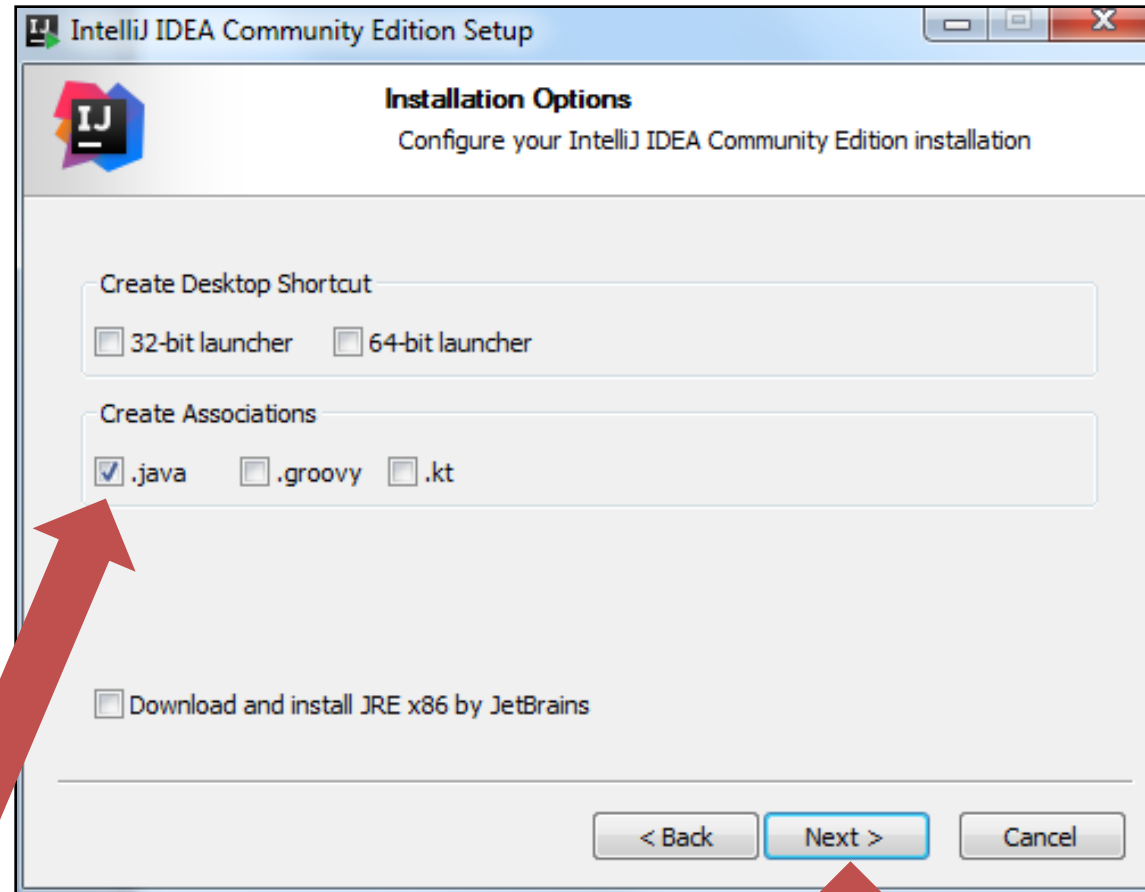
6

Click **Next** to continue...



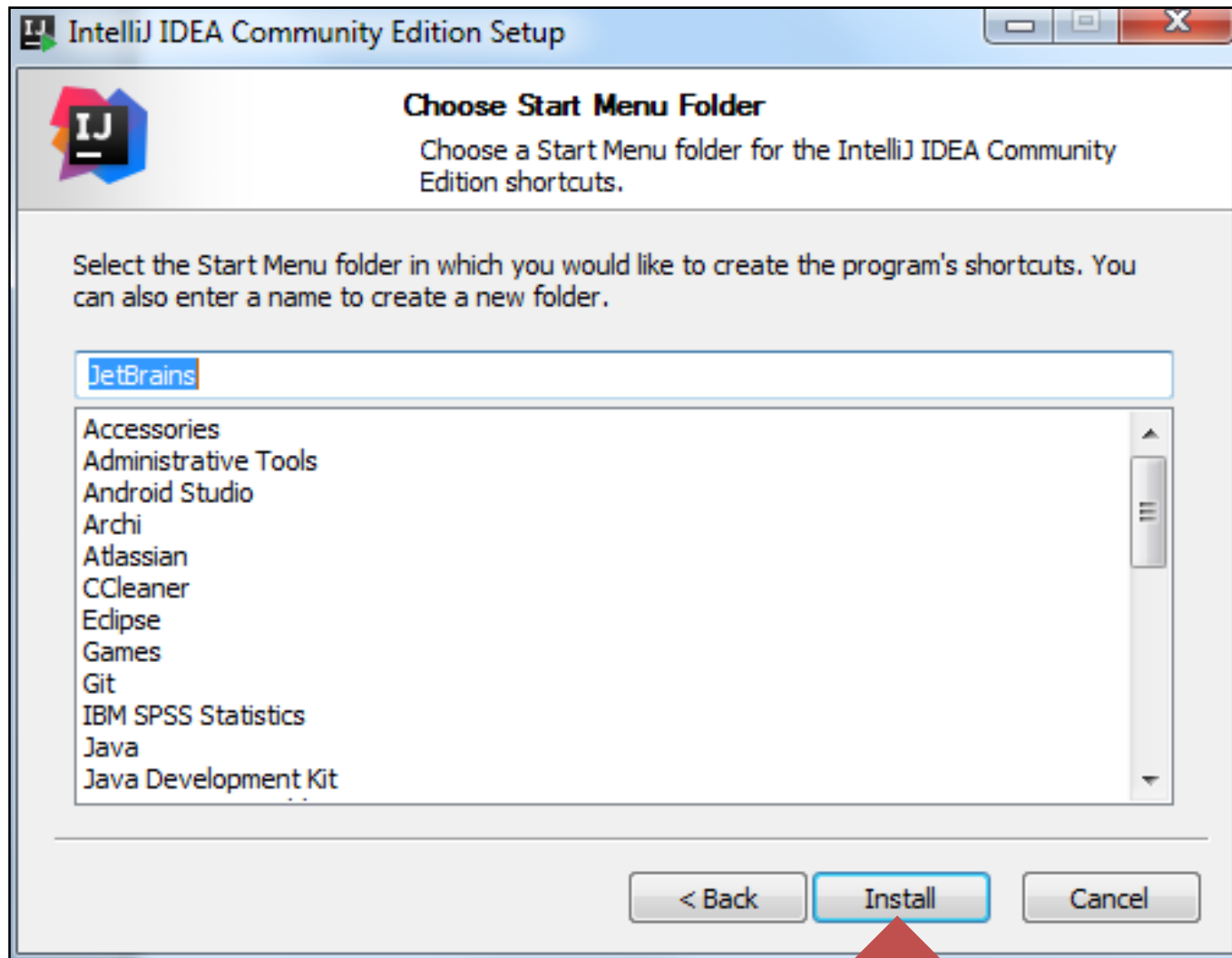
7

Accept the default destination folder (you can change this if you prefer) and click **Next**.



8

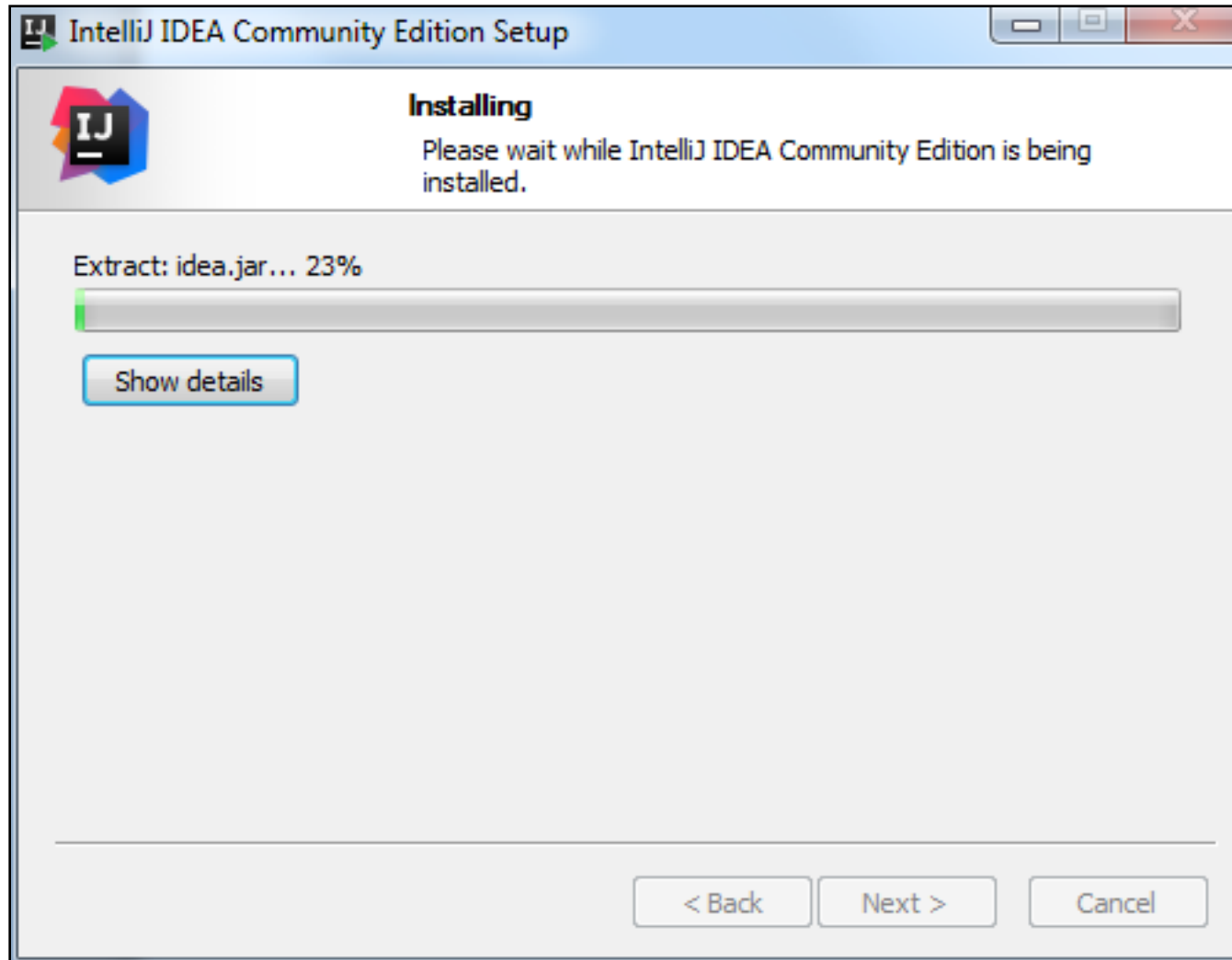
Tick the **.java** box to create a file association.  
Click the **Next** button.



9

Click **Install** to continue...





10

The installation is in progress...

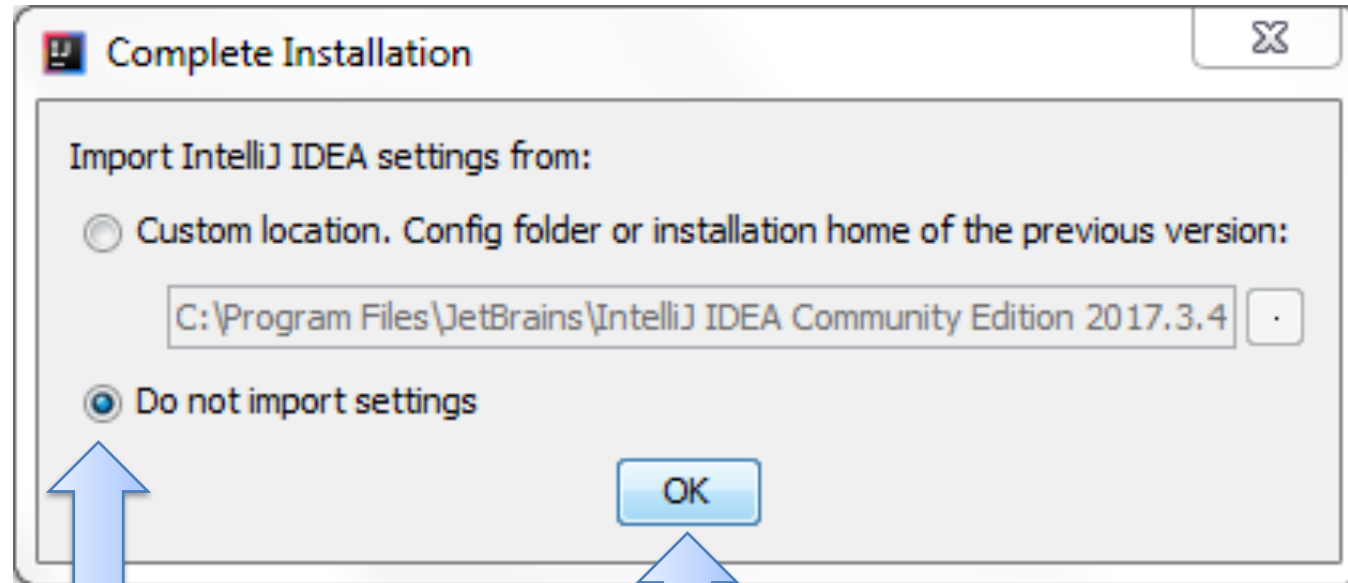


11

The installation is done...click the **Finish** button

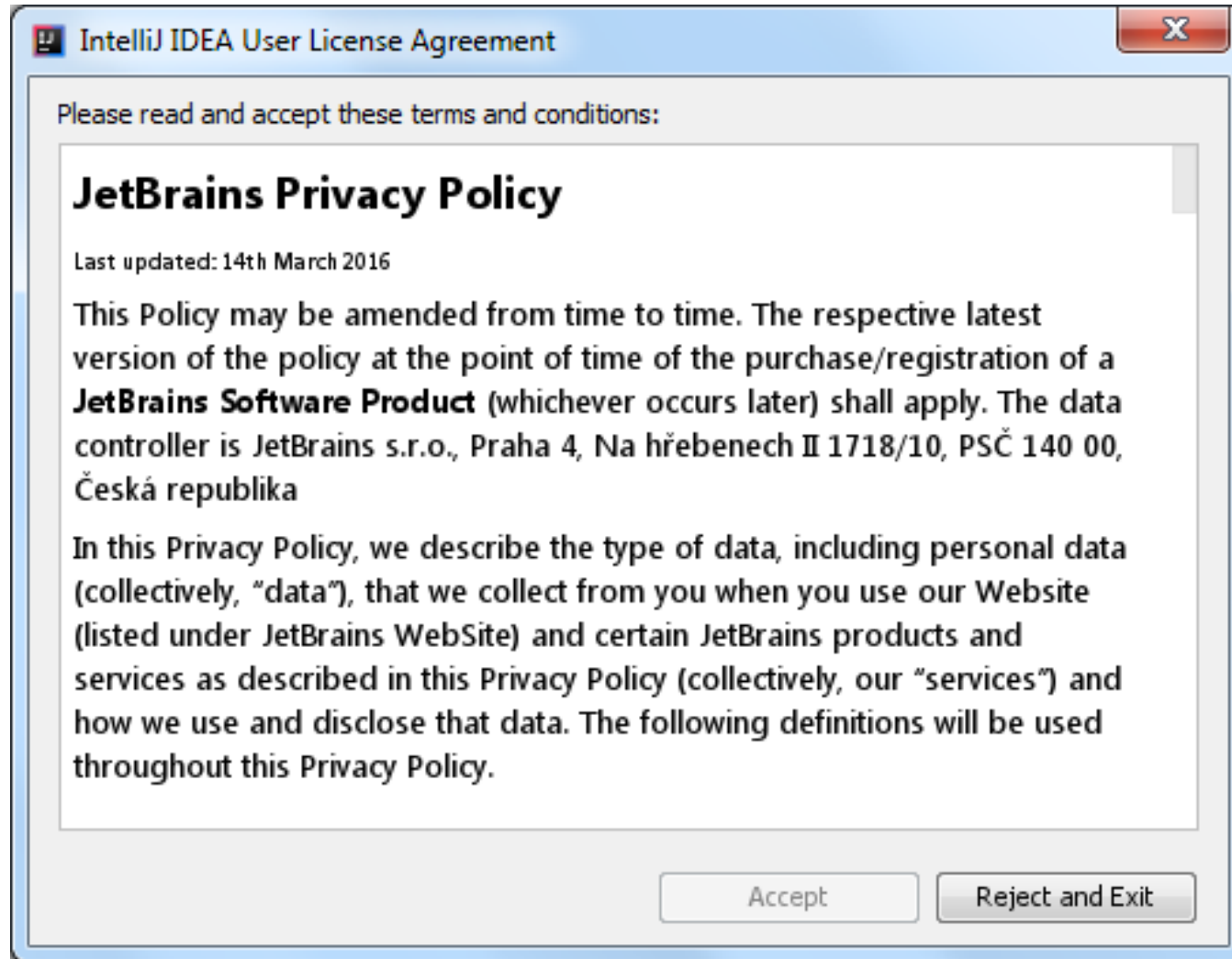
*Now that you have installed the  
JDK and IntelliJ,  
let's create and run our first  
project.*

*We will print **HelloWorld!** to the  
console.*



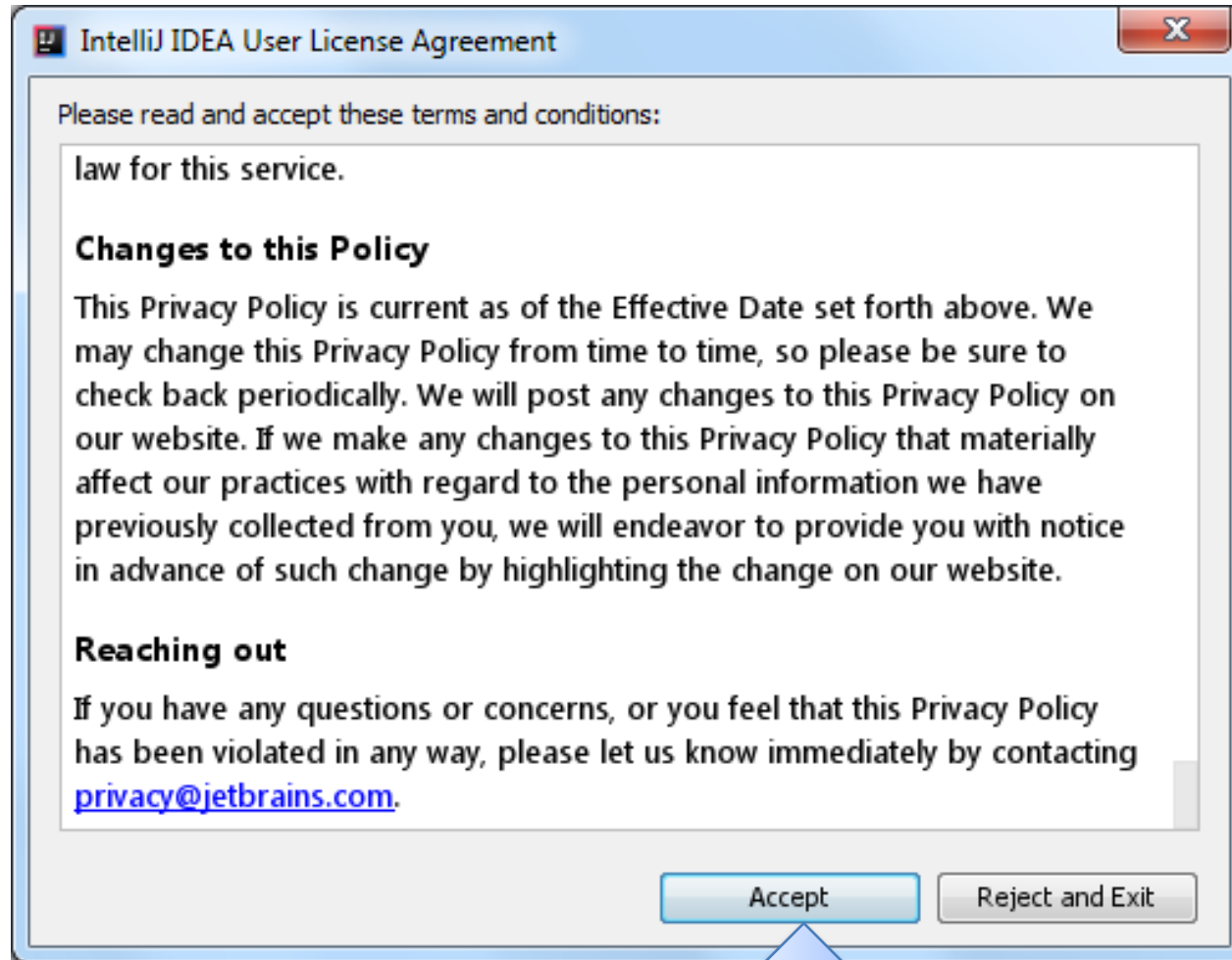
1

Appears when you first start IntelliJ.  
**Don't** import the settings. Click OK.



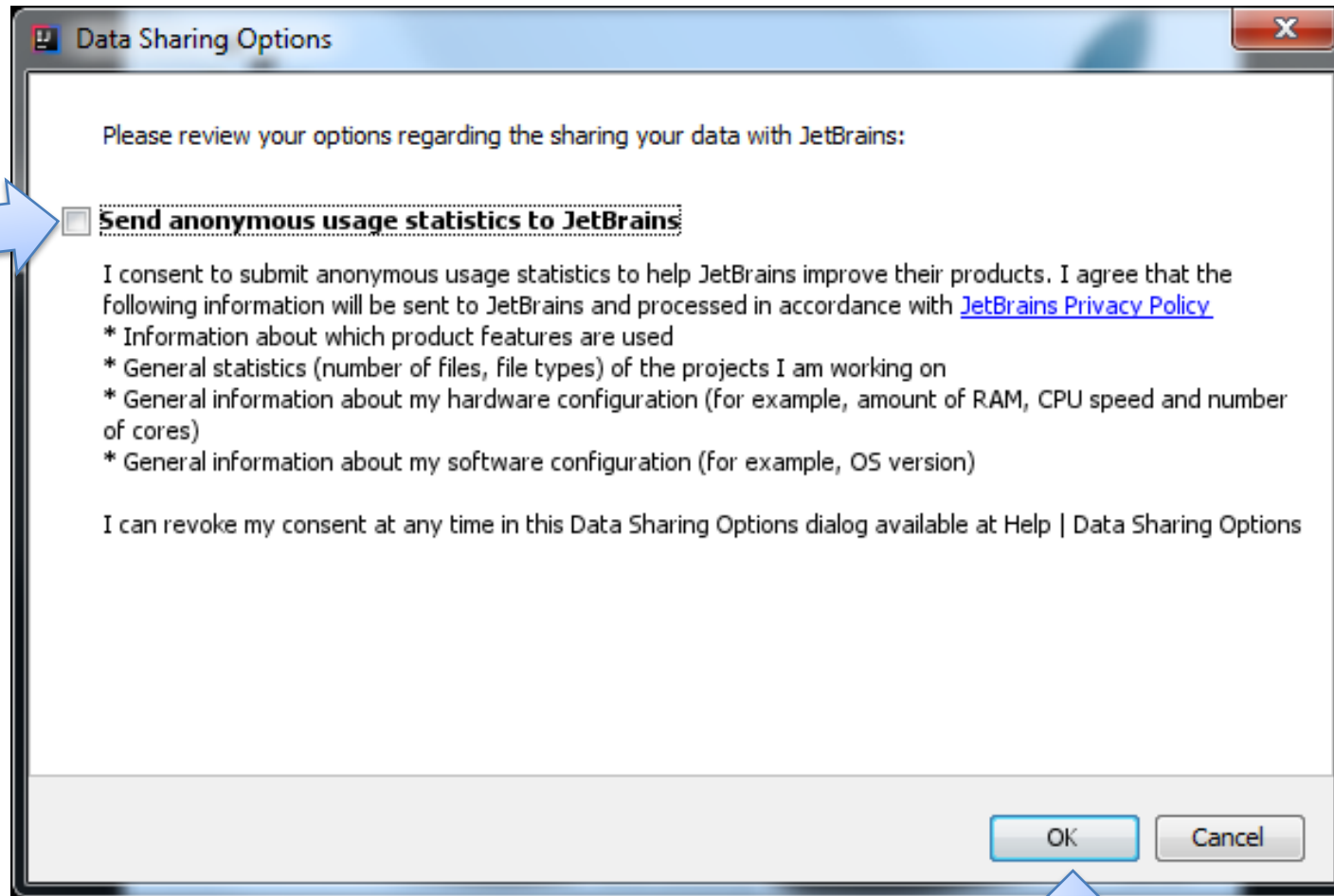
2

Scroll down to the end of the User Licence Agreement (ULA)...



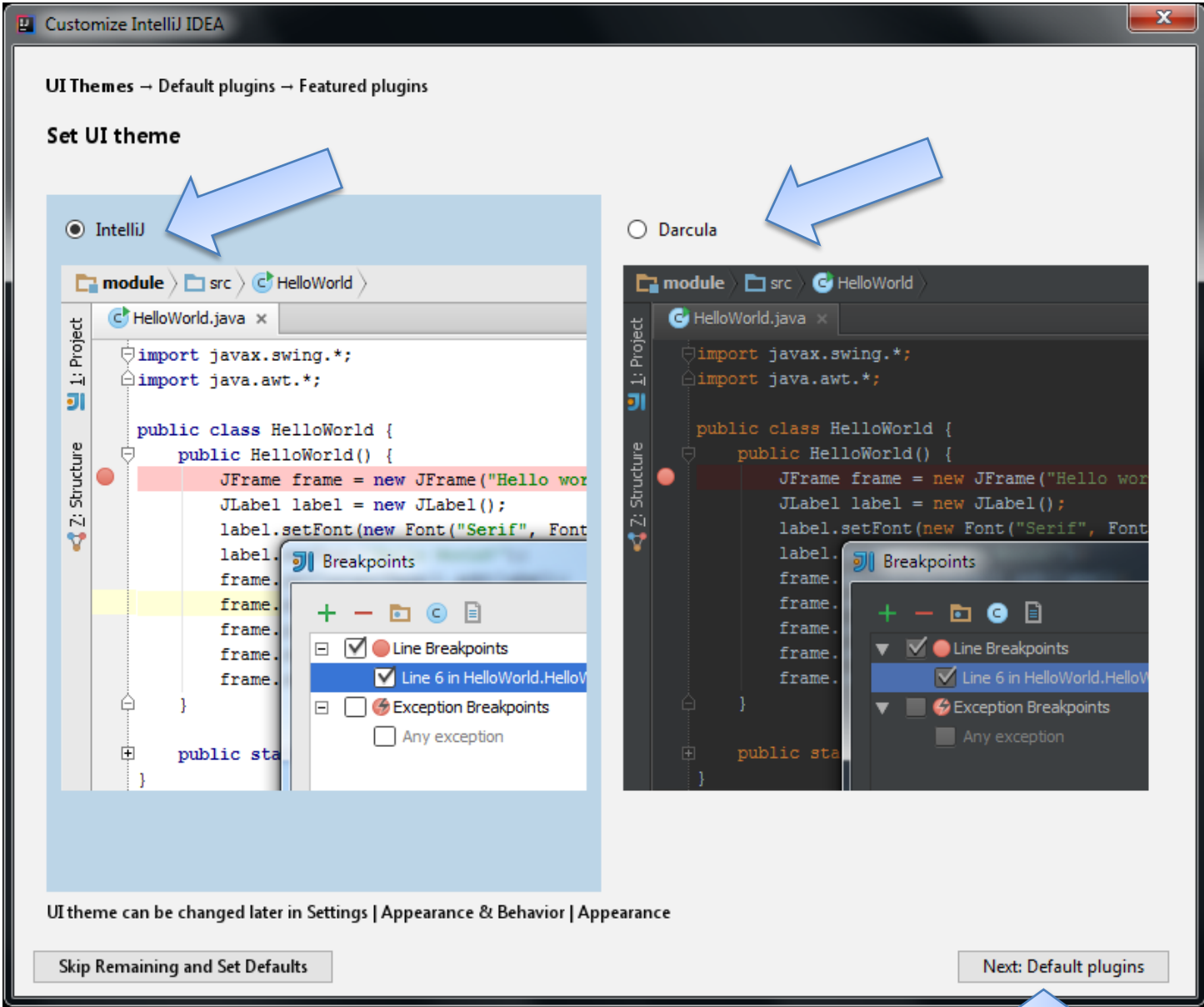
3

When the Accept button appears, click it.



4

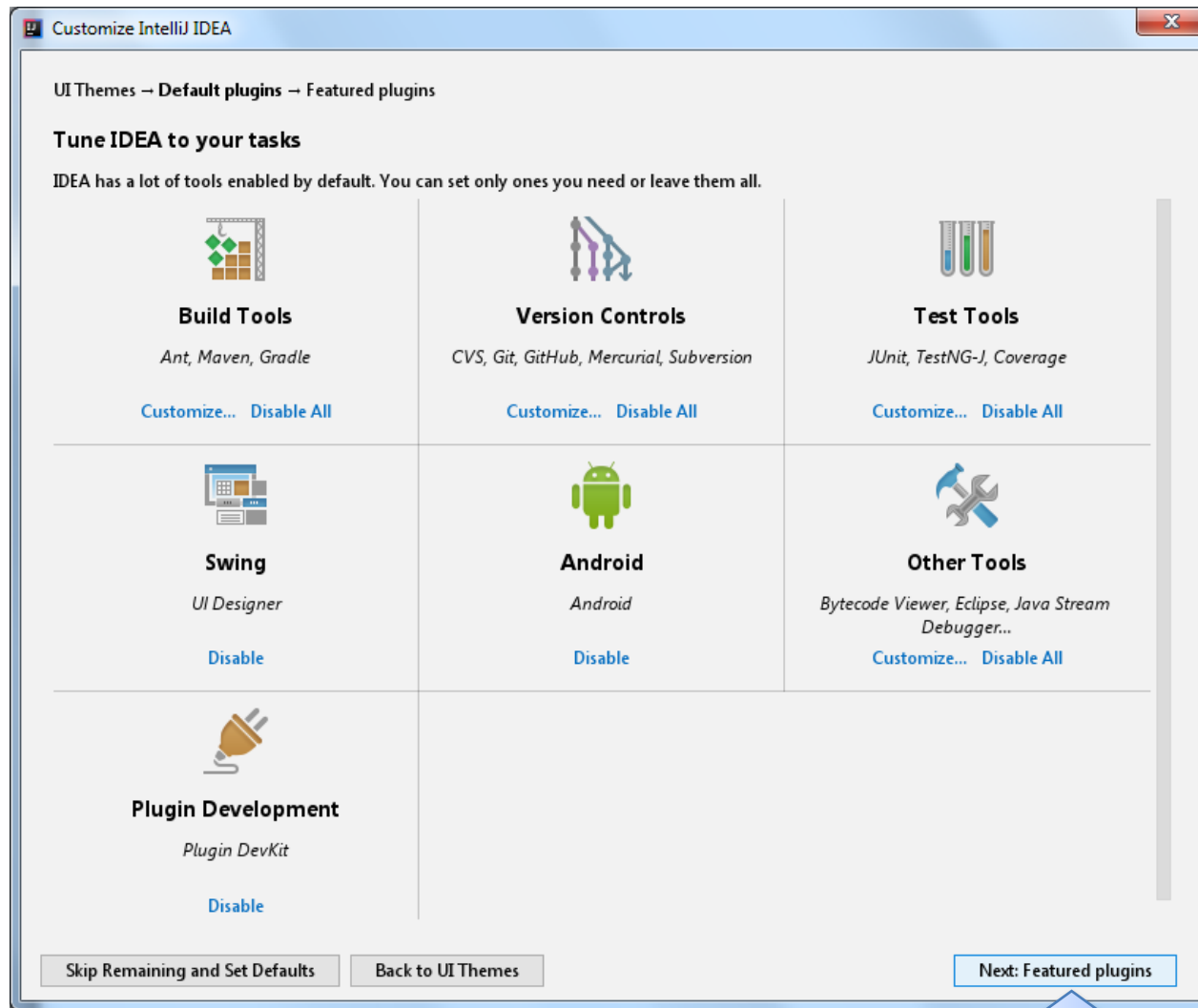
Decide if you want to share anonymous data with Jetbrains and click the OK button.



5

Choose your preferred theme and click Next.

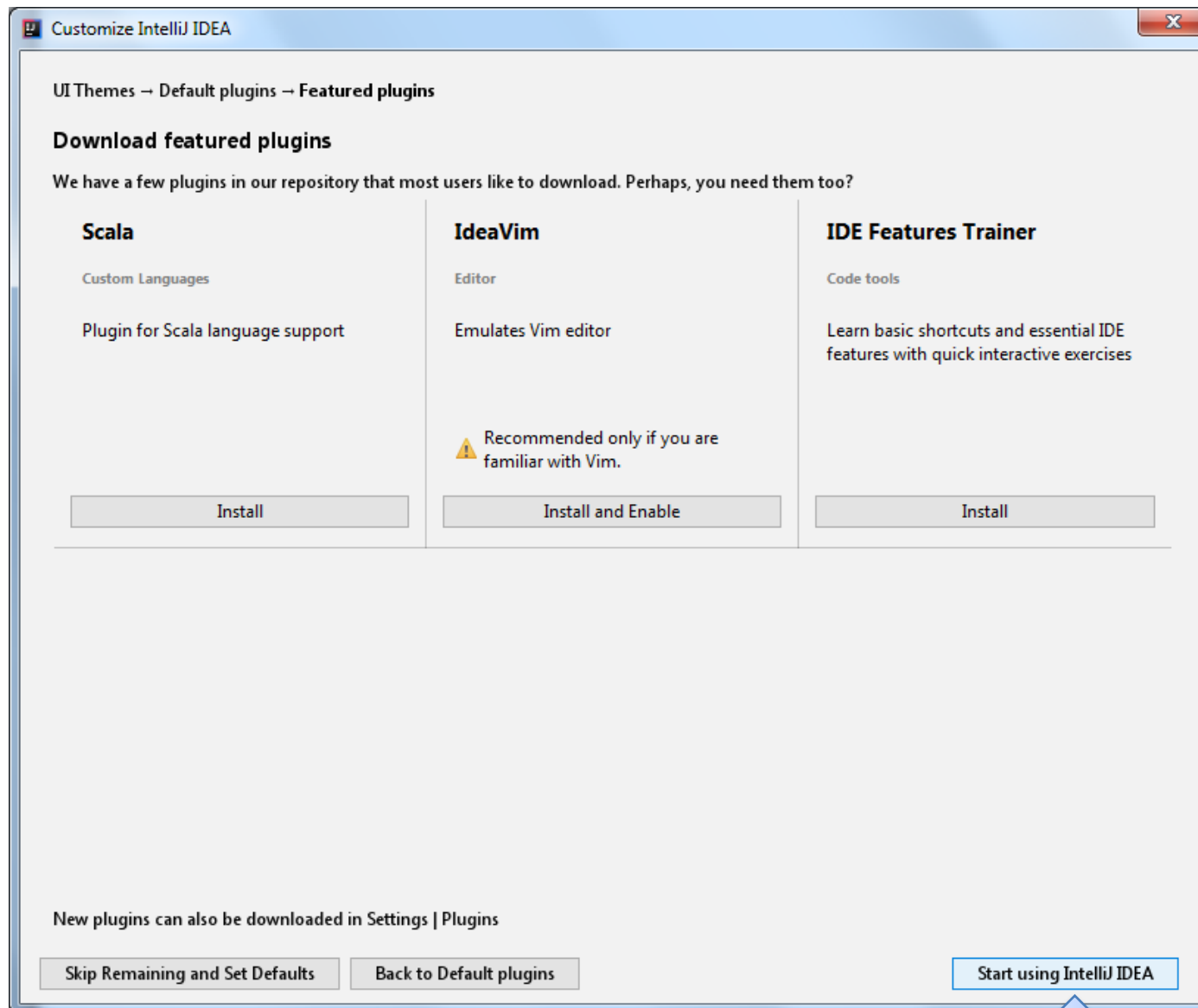




6

You will come across a lot of these plugins, in some form or other, during the course.

At the moment, we won't be using them, so click **Next**.



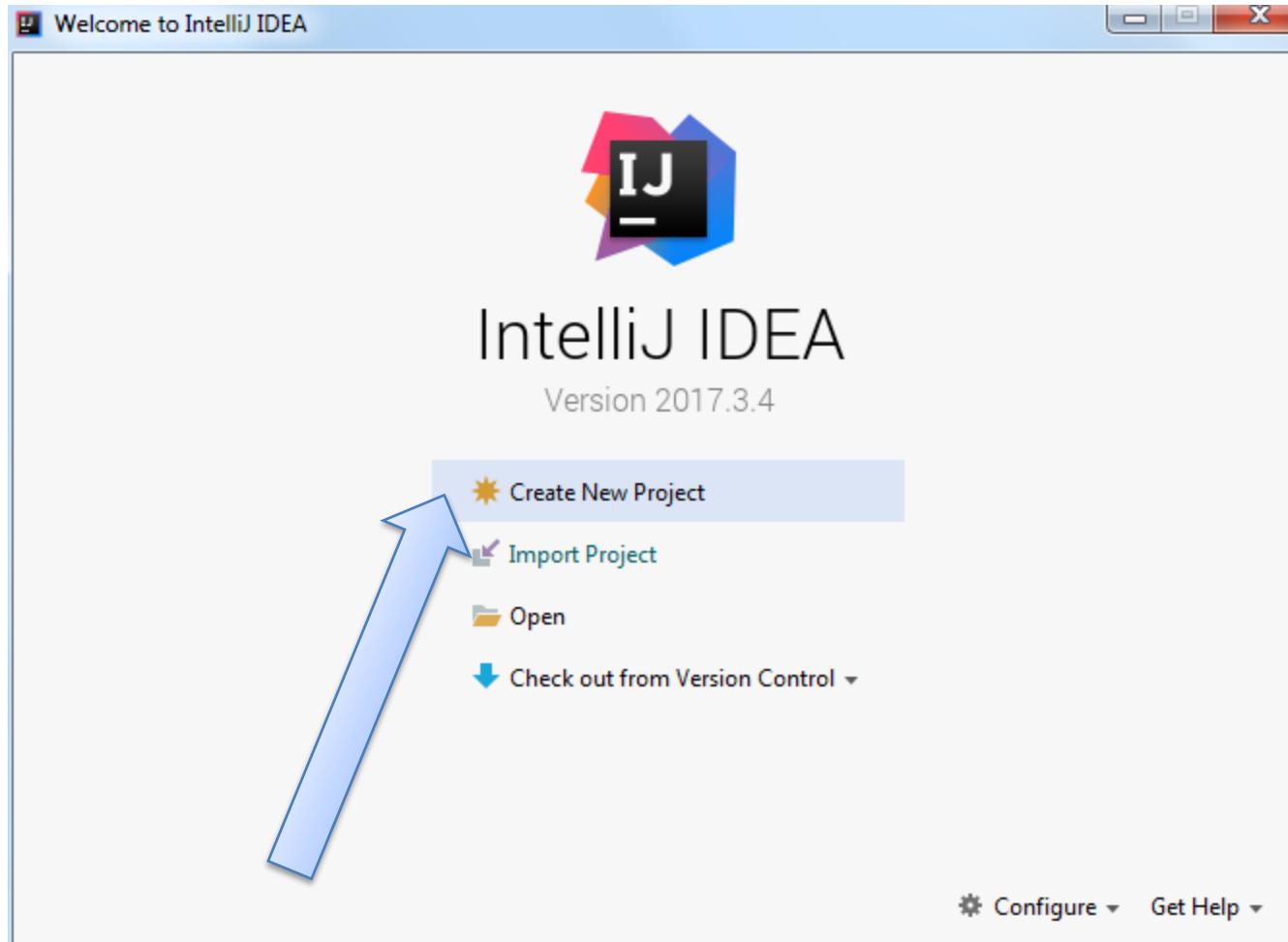
7

Same again here...we aren't using these plugins, so click Start...



8

You will see this splash screen and then...

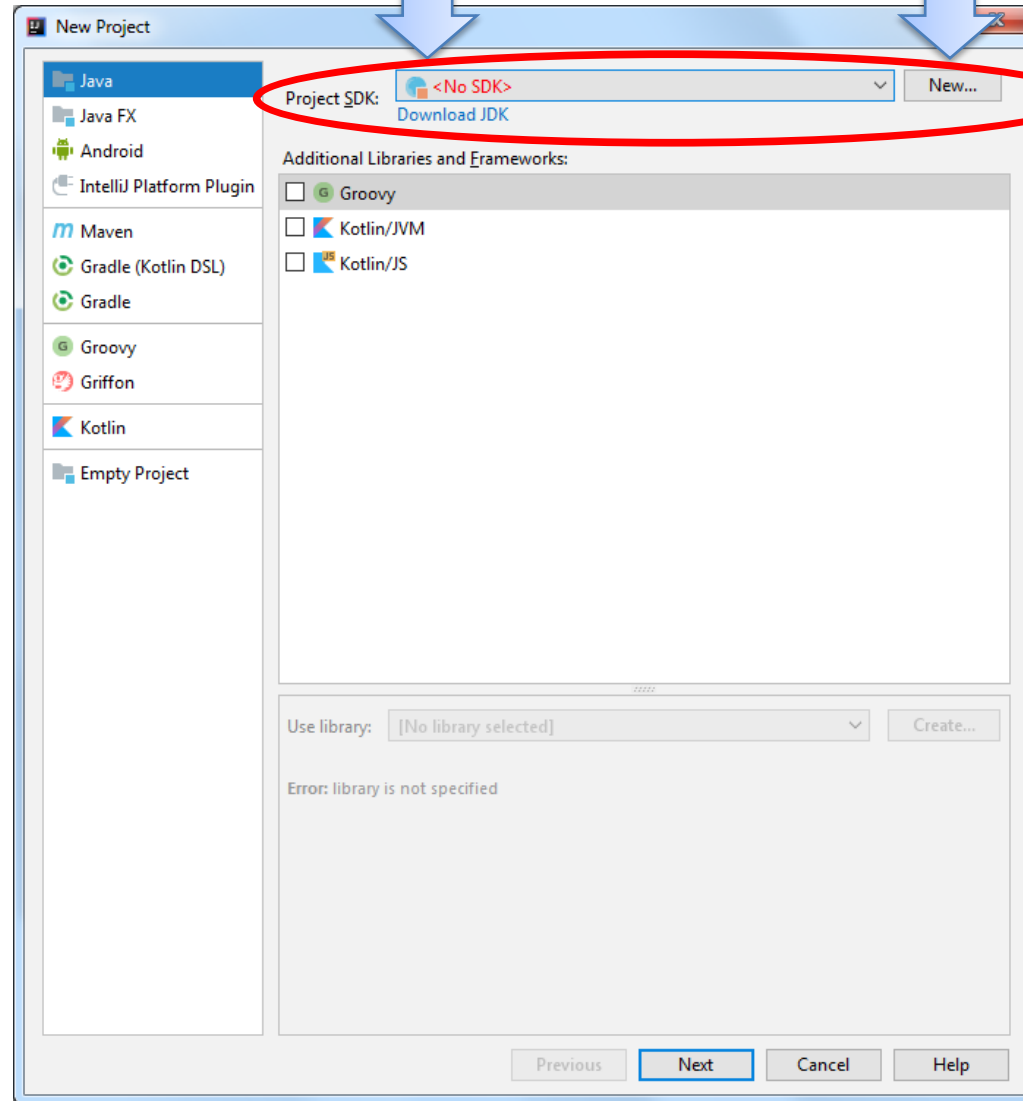


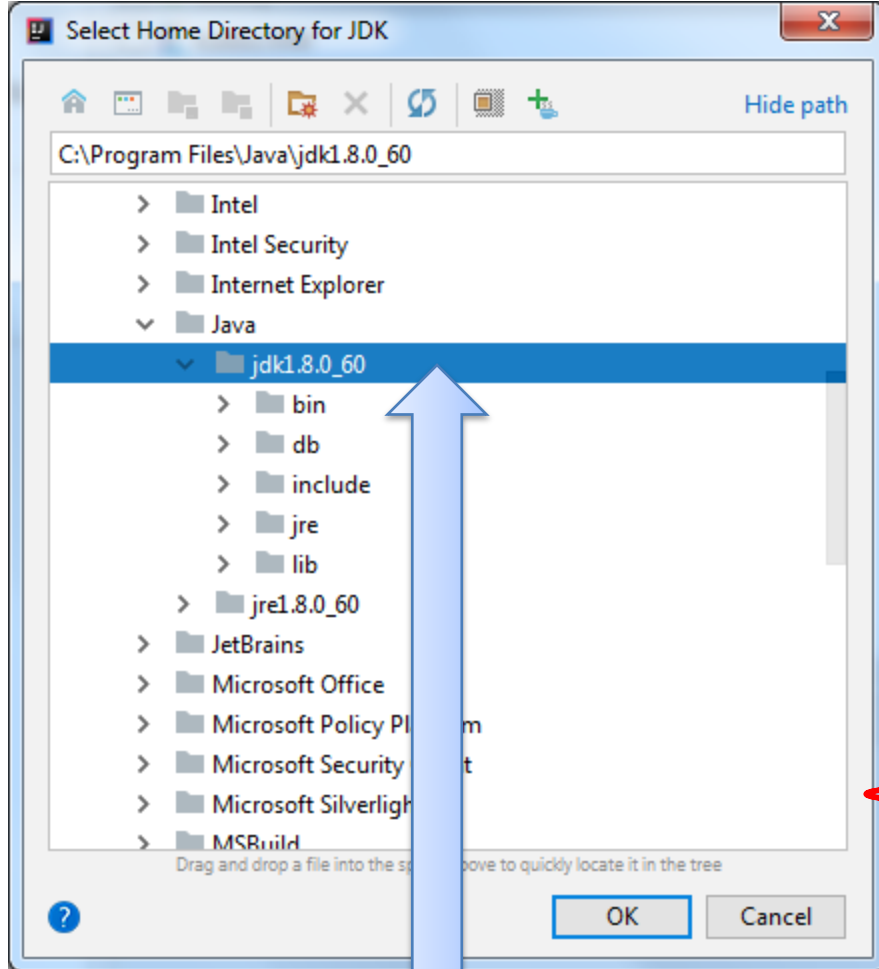
9

IntelliJ is now running...  
click on the **Create New Project** link

10

You may get this...no SDK. If so, click on the “New...” button





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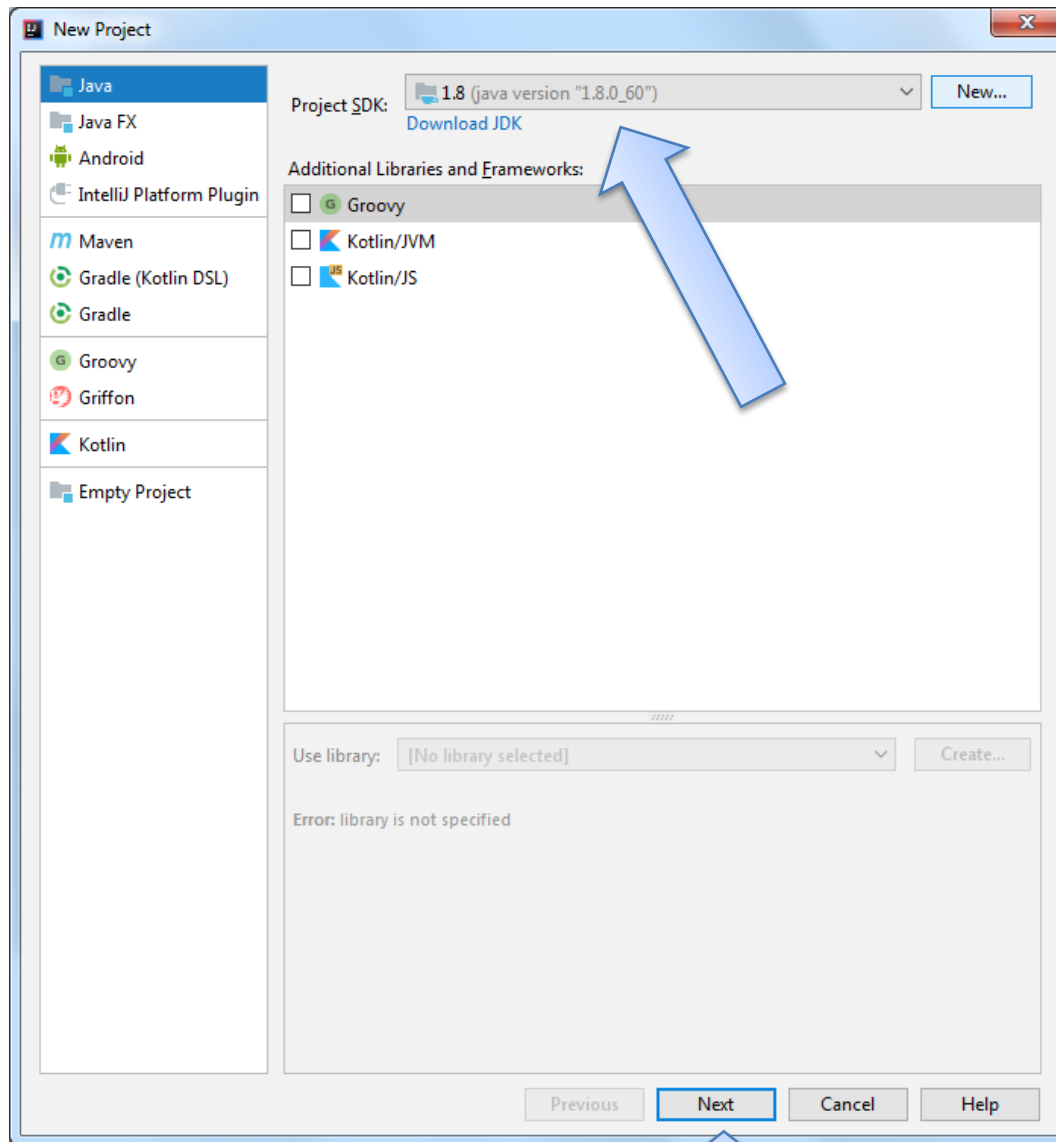
...and **locate** the version of java you previously installed. Click **Ok**

On OSX,  
run a terminal window  
and enter the following command

**Echo \$(/usr/libexec/java\_home**

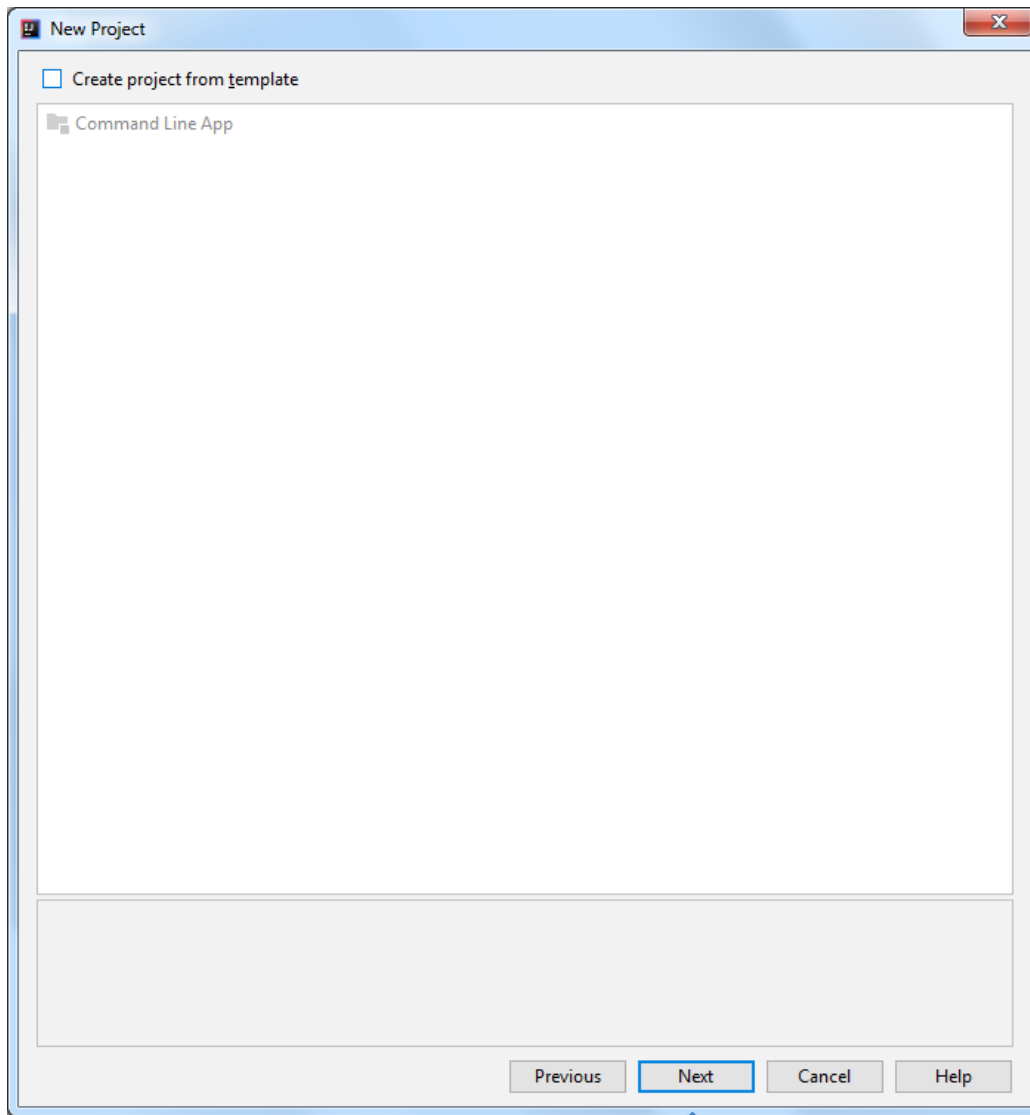
```
colmdunphy — -bash — 80x24
Last login: Sun Feb 18 15:47:12 on ttys000
[Colms-MacBook-Pro-i7-2:~ colmdunphy$ echo $(/usr/libexec/java_home)
/Library/Java/JavaVirtualMachines/jdk-9.0.4.jdk/Contents/Home
Colms-MacBook-Pro-17-2:~ colmdunphy$
```

(IntelliJ already comes with JDK v8 labelled 1.8)



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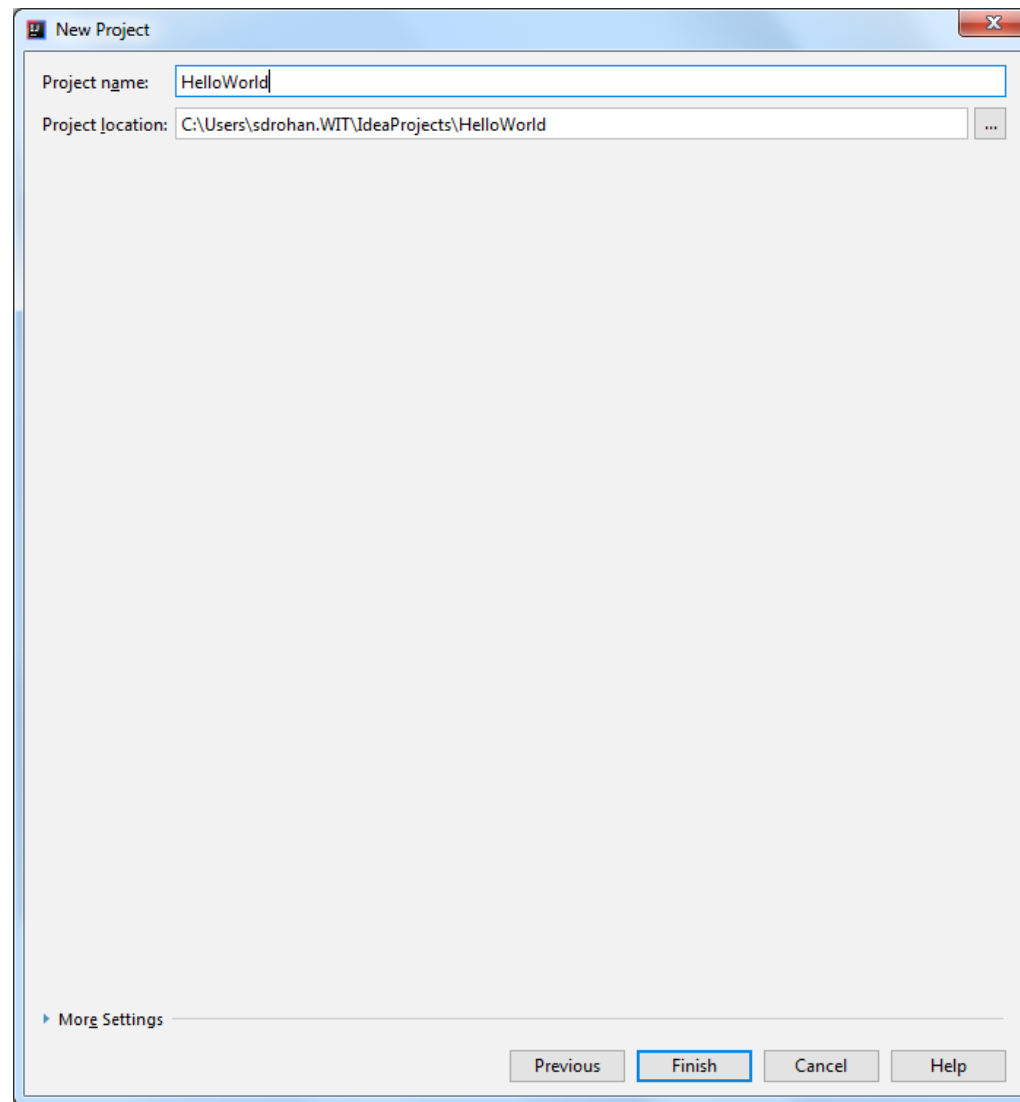
Now that Java is located, click Next.



13

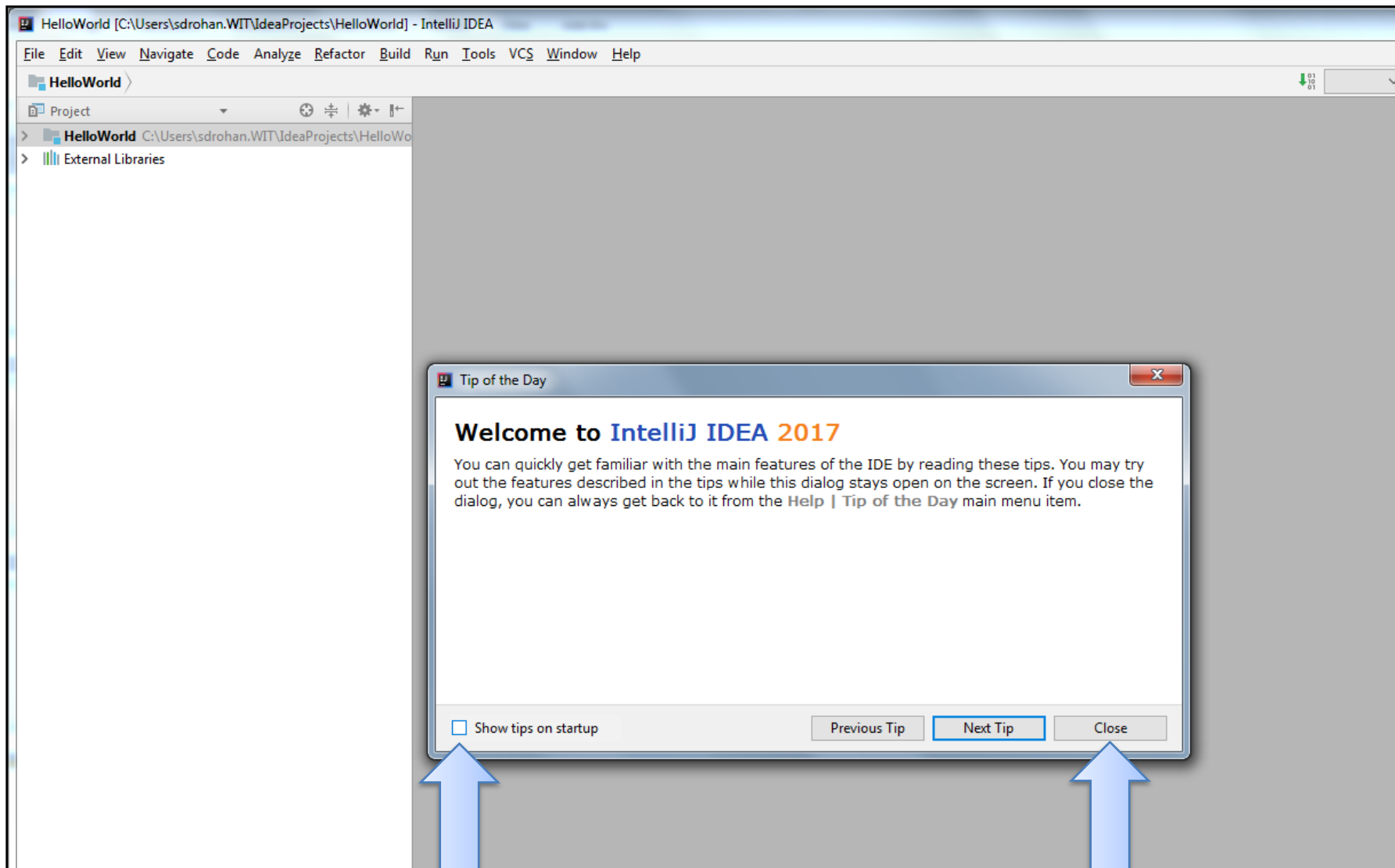
Accept the default settings by clicking Next





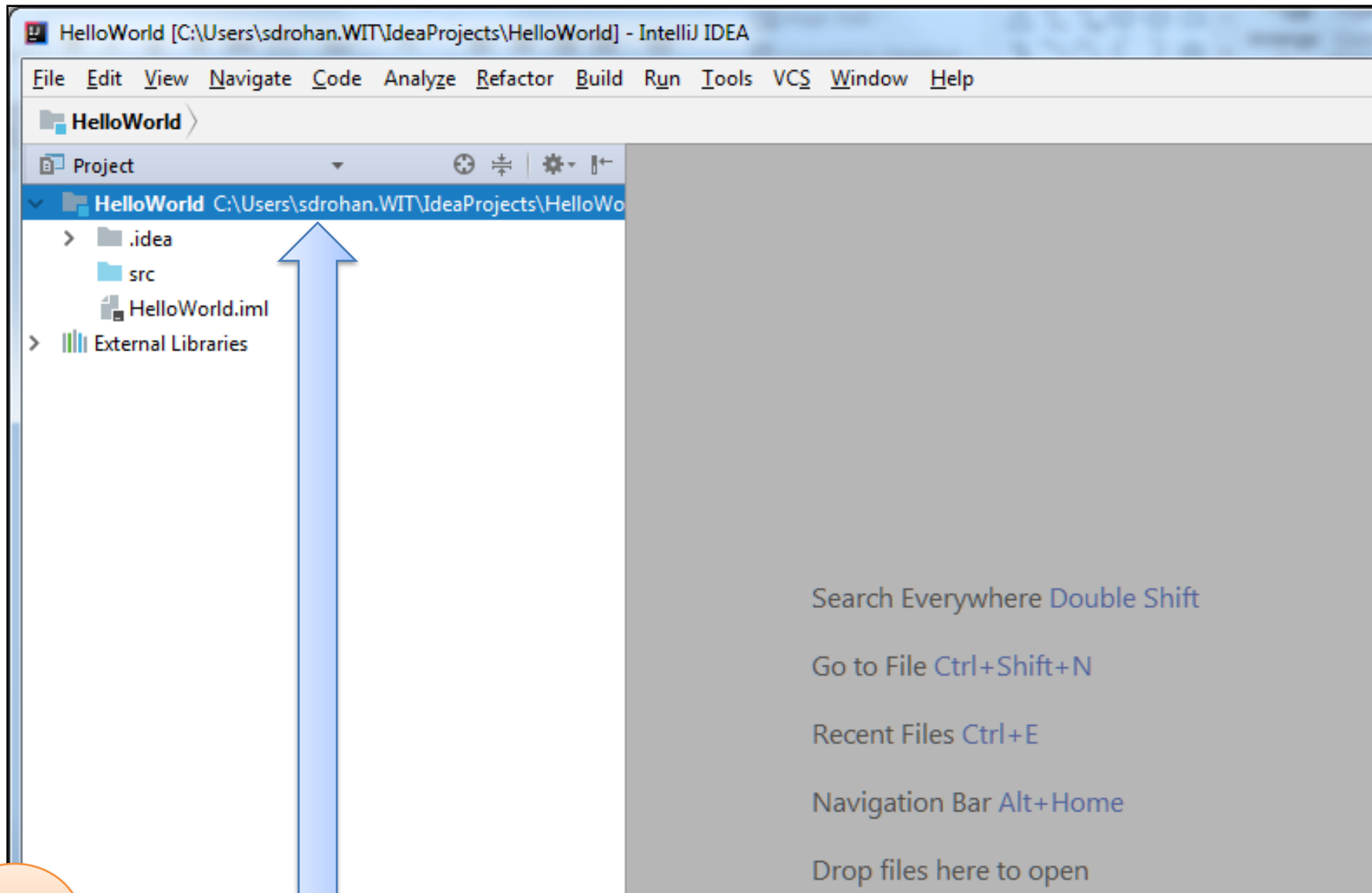
14

Enter project name (**HelloWorld**) and if you are happy with the default location, click Finish.



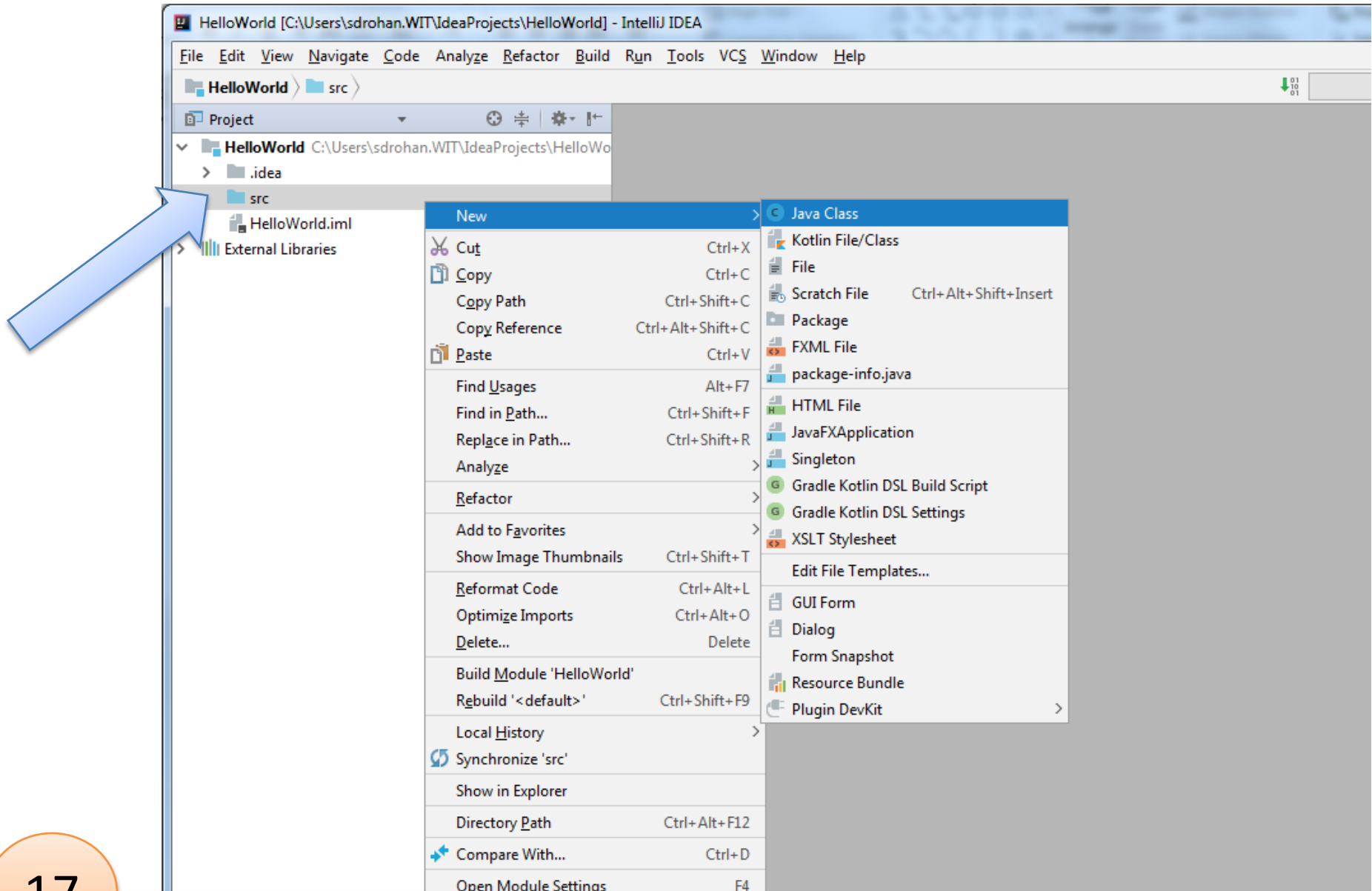
15

Decide whether you want to see tips each time you start IntelliJ. Then close the tip window.



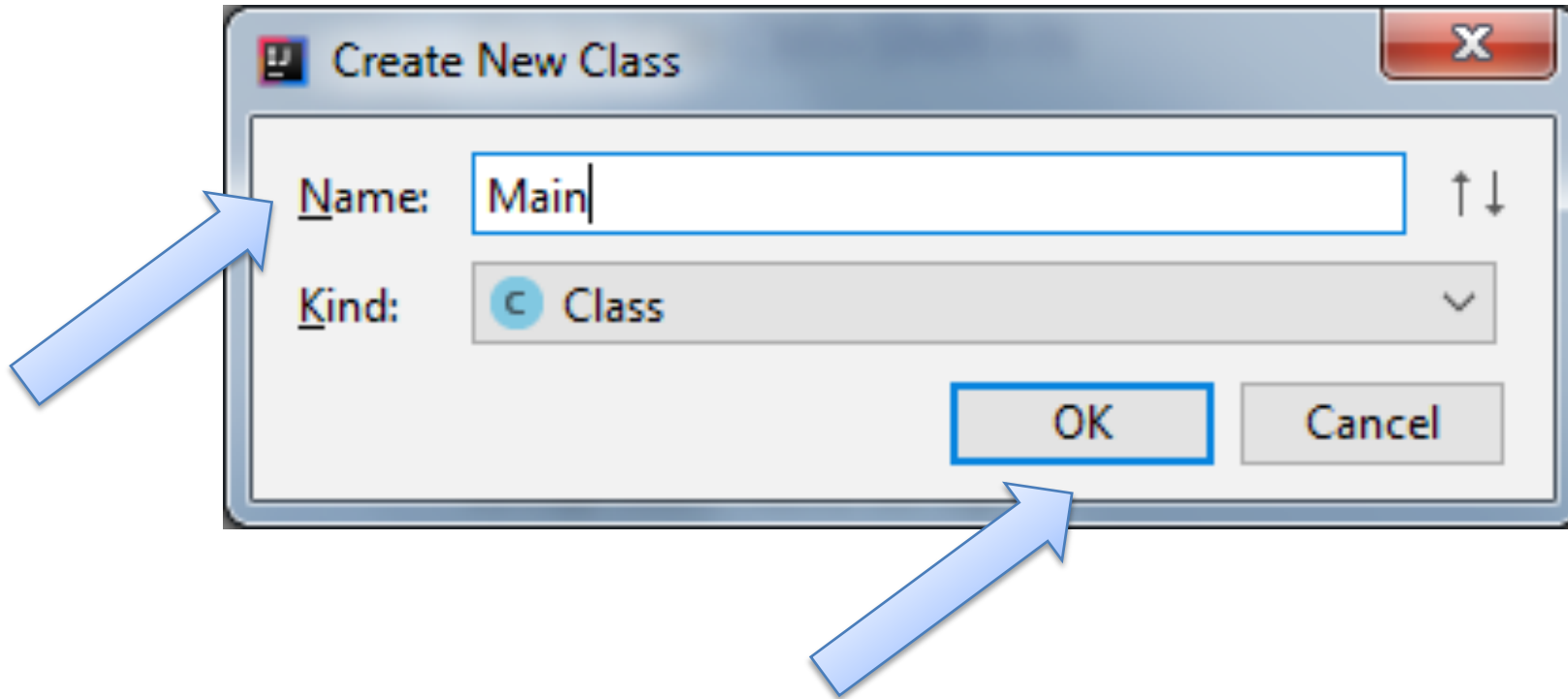
16

An empty HelloWorld project is created.



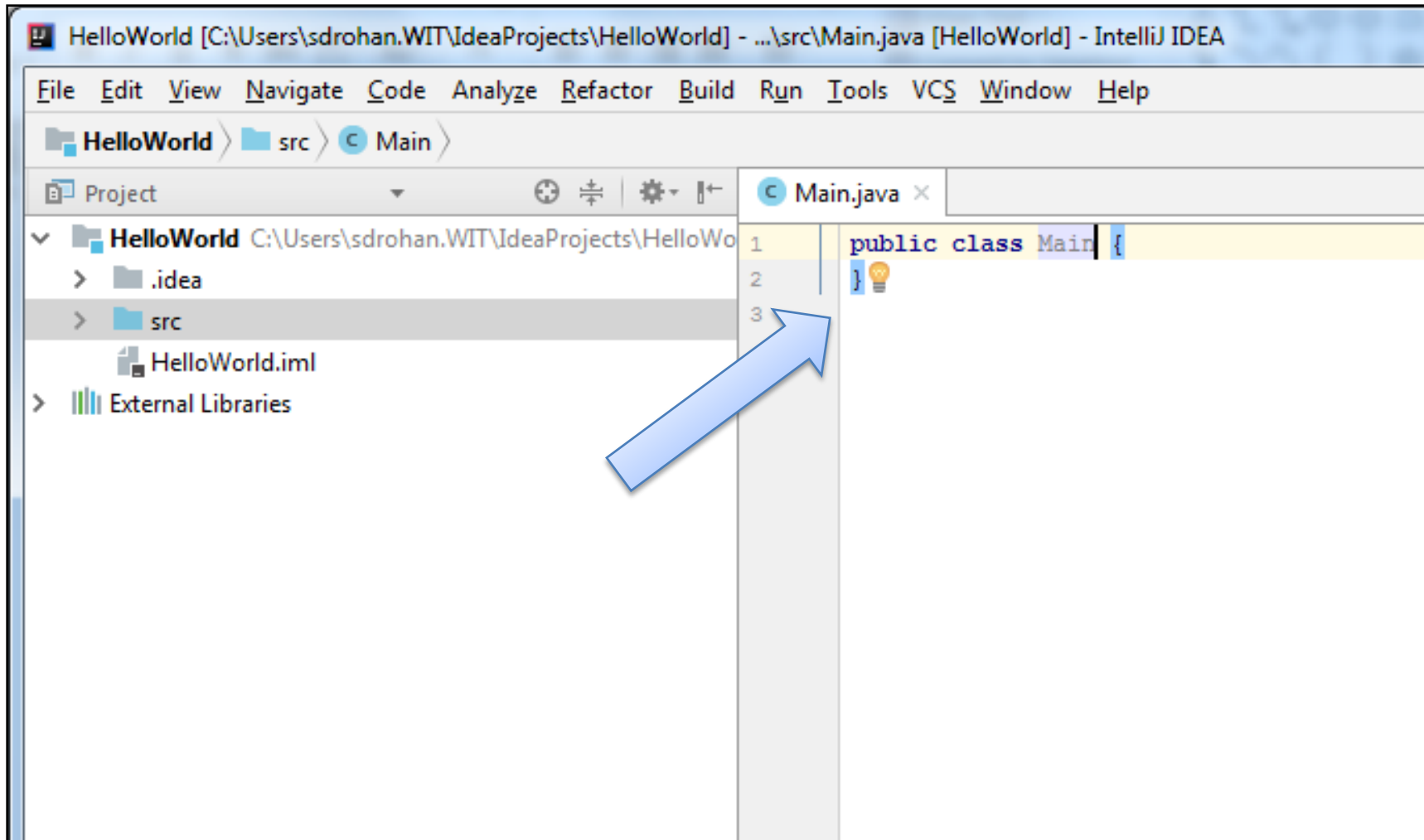
17

Right click on **src** folder....select **New** → **Java Class**



18

Enter the class name **Main** and click **OK**



19

A new **Main** class has been created.

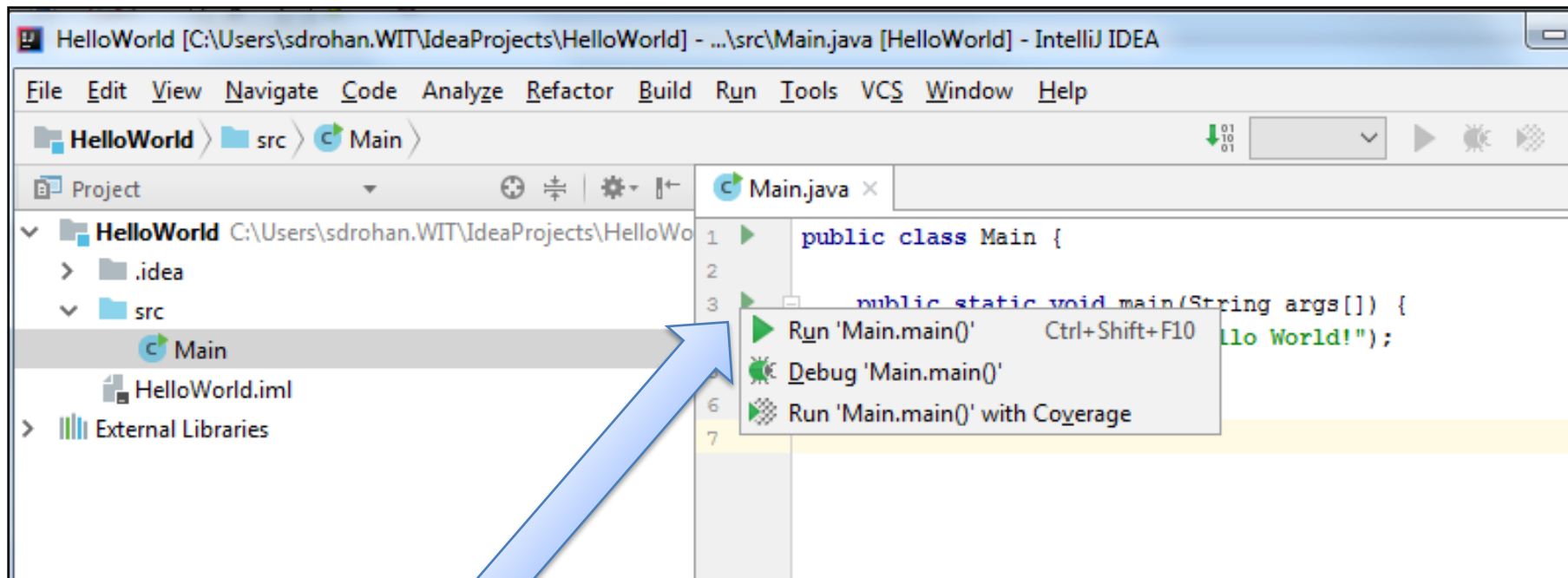
A screenshot of the IntelliJ IDEA IDE. The title bar shows the project name 'HelloWorld' and the file path 'C:\Users\sdrohan.WIT\IdeaProjects\HelloWorld - ...\src\Main.java [HelloWorld] - IntelliJ IDEA'. The menu bar includes File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, and Help. The breadcrumb navigation shows 'HelloWorld' > 'src' > 'Main'. The Project tool window on the left shows the project structure: 'HelloWorld' (C:\Users\sdrohan.WIT\IdeaProjects\HelloWo) containing '.idea', 'src', 'HelloWorld.iml', and 'External Libraries'. The 'src' folder is expanded. The Main.java editor shows the following code:

```
1 public class Main {
2
3     public static void main(String args[]) {
4         System.out.println("Hello World!");
5     }
6 }
7
```

The code is highlighted in yellow. A blue arrow points from the code block below to the 'main' method in the code.

20

Enter this code into the **Main** class.



21

Click on the green triangle beside the main method.  
Then select **Run 'Main.main()'**



IntelliJ IDEA window showing a Java project named "HelloWorld". The project structure includes a "src" folder containing a "Main" class. The code in "Main.java" is as follows:

```
1 public class Main {
2
3     public static void main(String args[]) {
4         System.out.println("Hello World!");
5     }
6 }
7
```

The Run console shows the execution of the program:

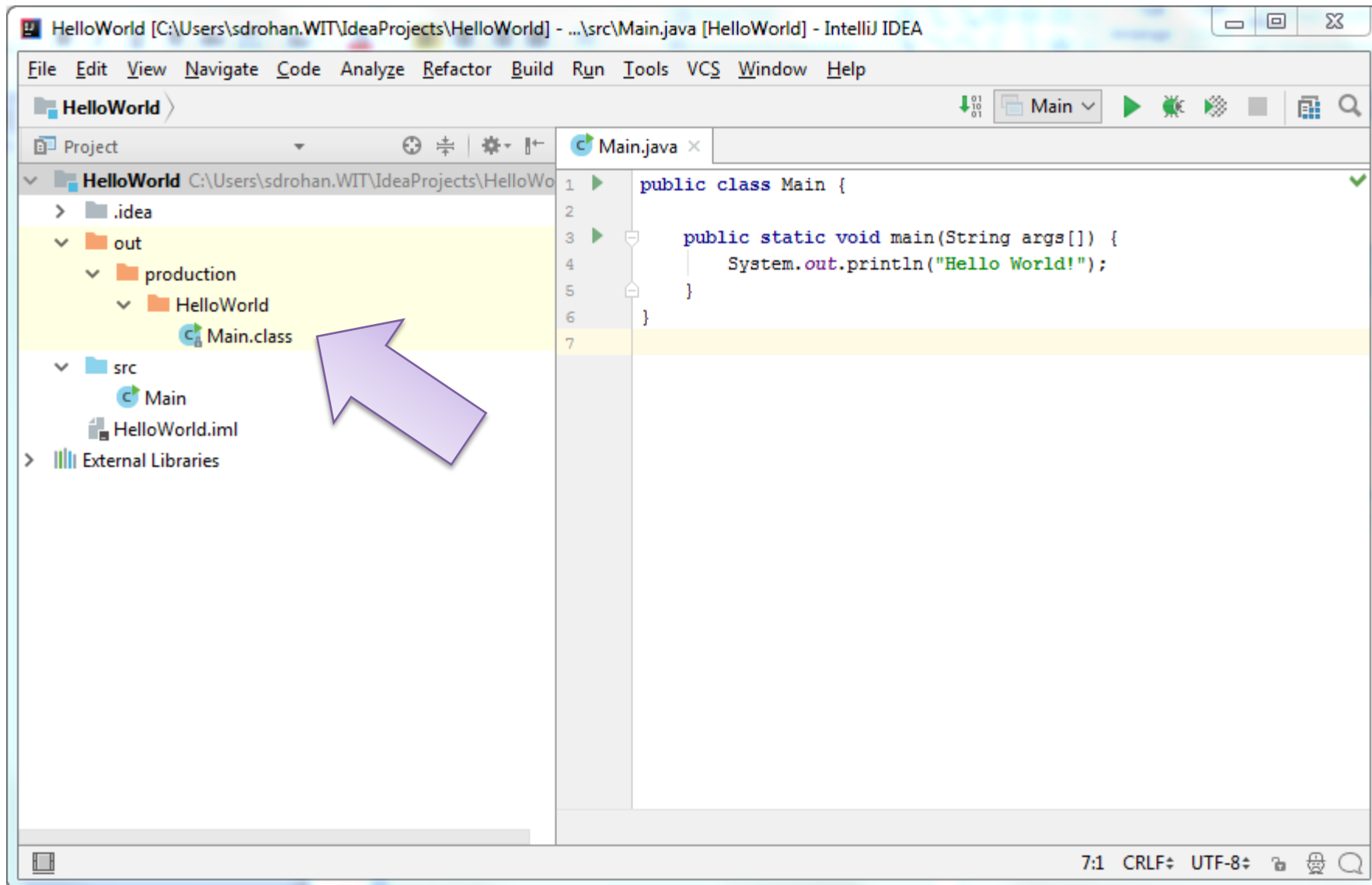
```
Run Main
"C:\Program Files\Java\jdk1.8.0_60\bin\java" ...
Hello World!
Process finished with exit code 0
```

Compilation completed successfully in 6s 305ms (moments ago)

22

**Hello World!** is printed to console.

*Let's look at where our  
**Main.class**  
file lives...*



Main.class is the **bytecode** of Main.Java

# Questions?

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