

Introduction to Labs

JDK and IntelliJ

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

Topics list

1. Installing **JDK**.

2. Integrated Development Environment (IntelliJ)

What is a **JDK**?

- Java Development Kit (JDK).
- It includes **tools** for developing Java applications.
- It also includes a Runtime Environment (**JRE**) 
 - **JRE** is the implementation of the JVM.
- Free from **Oracle** website.

Do I need to do an install?

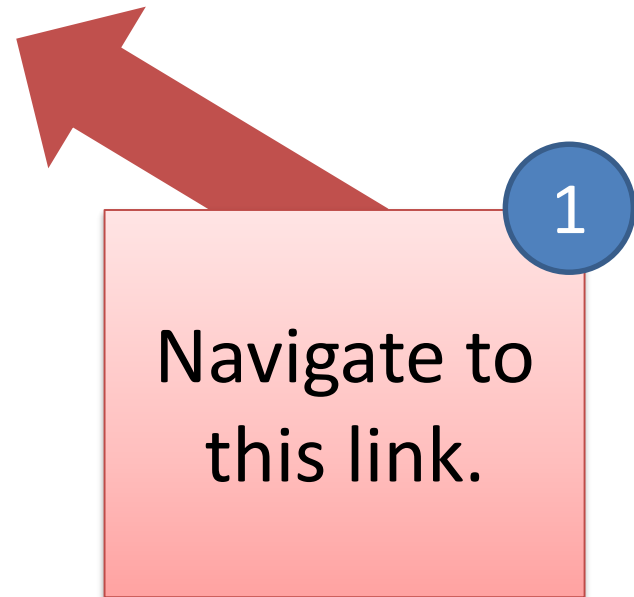
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<https://www.oracle.com/technetwork/java/javase/downloads/index.html>



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Java Platform (JDK) 11

Java Platform, Standard Edition

Java SE 11.0.1(LTS)

Java SE 11.0.1 is the latest release for the Java SE 11 Platforms

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Oracle JDK

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Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications, and components using the Java programming language.

The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

Important changes in Oracle JDK 11 License

With JDK 11 Oracle has updated the license terms on which we offer the Oracle JDK. The new [Oracle Technology Network License Agreement for Oracle Java SE](#) is substantially different from the licenses under which previous versions of the JDK were offered. Please review the new terms carefully before downloading and using this product.

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Java SE Development Kit 11.0.1

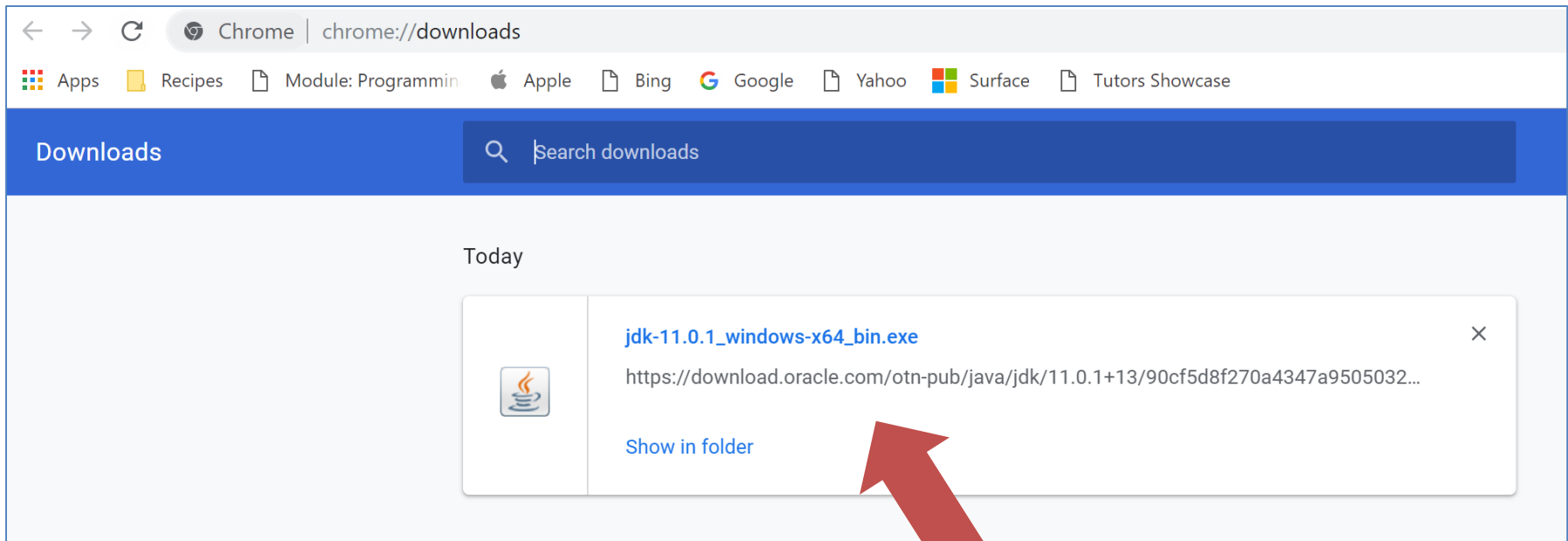
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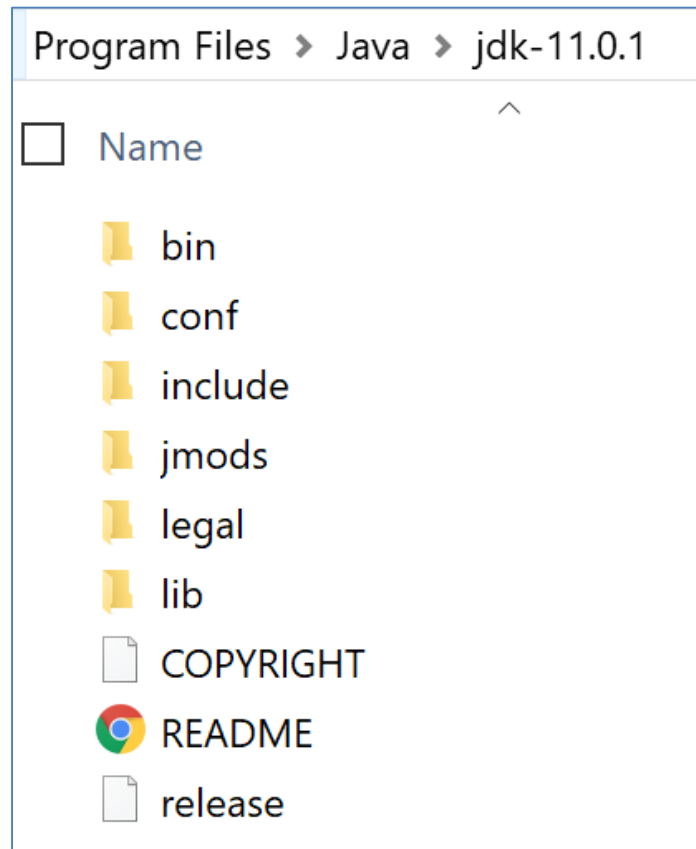
Download the Kit for your operating system.



Click on the downloaded file to start the JDK installation.

6

Once your JDK is installed,
you should have a folder structure
similar to this one:



Topics list

1. Installing **JDK**.

2. Integrated Development Environment (IntelliJ)



" 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,

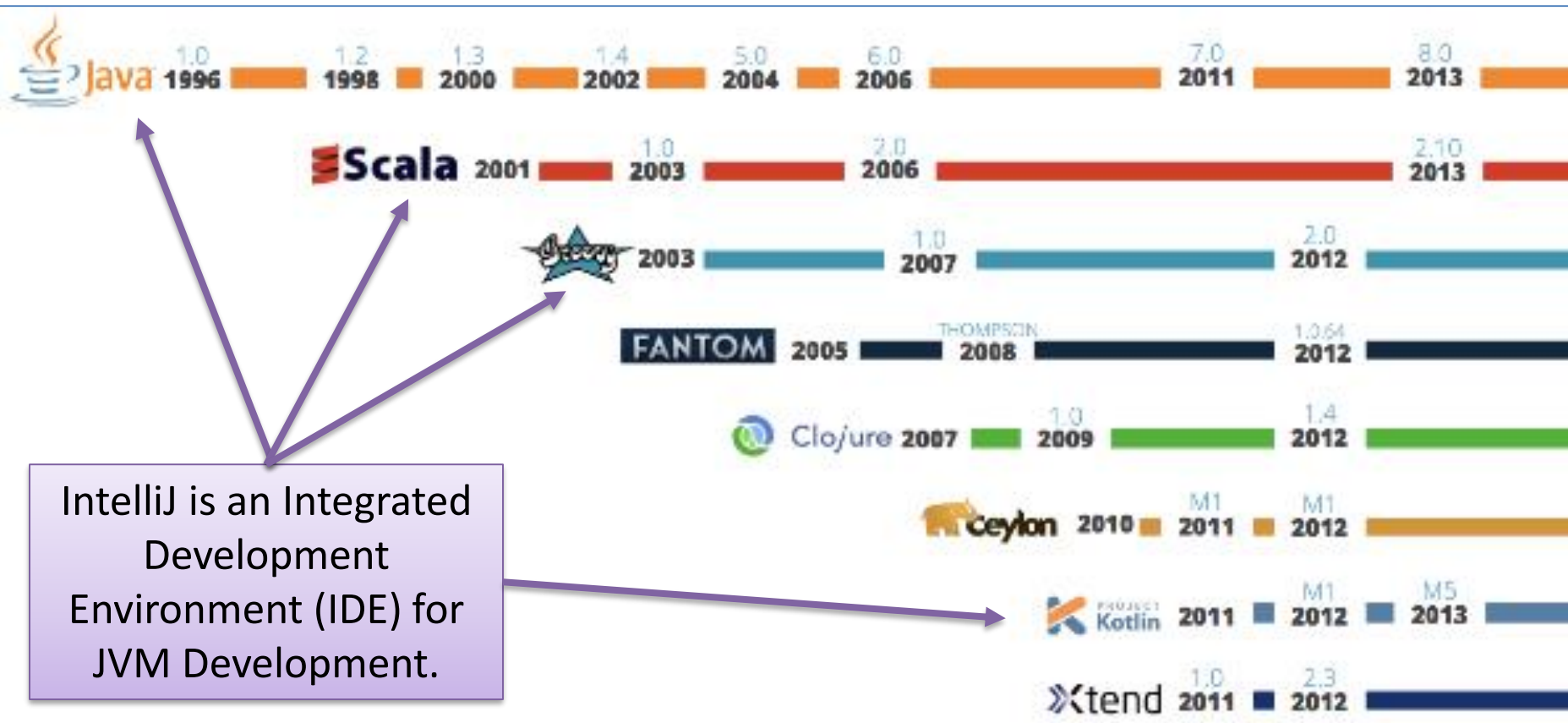
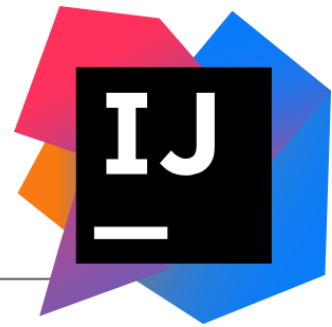
Creator of the Java Programming Language(2011, TheServerSide)



JVM Language History



IntelliJ and the JVM



IntelliJ and the JVM



Do I need to do an install?

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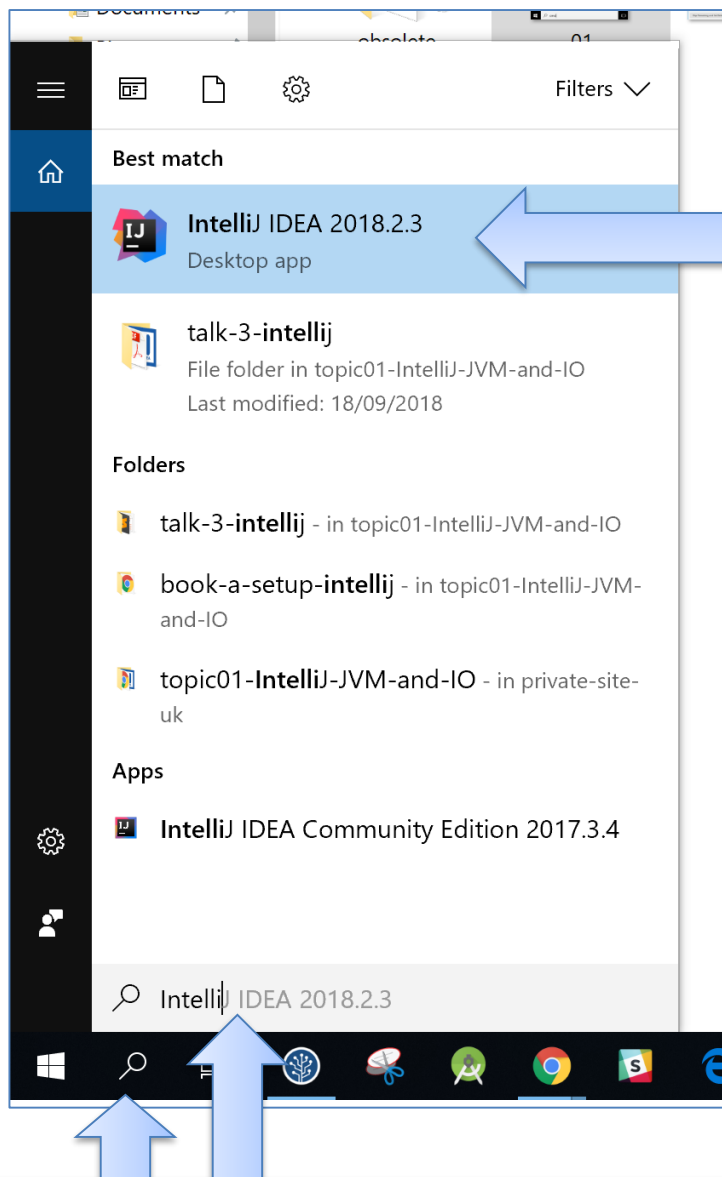
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(see lab01a for instructions)



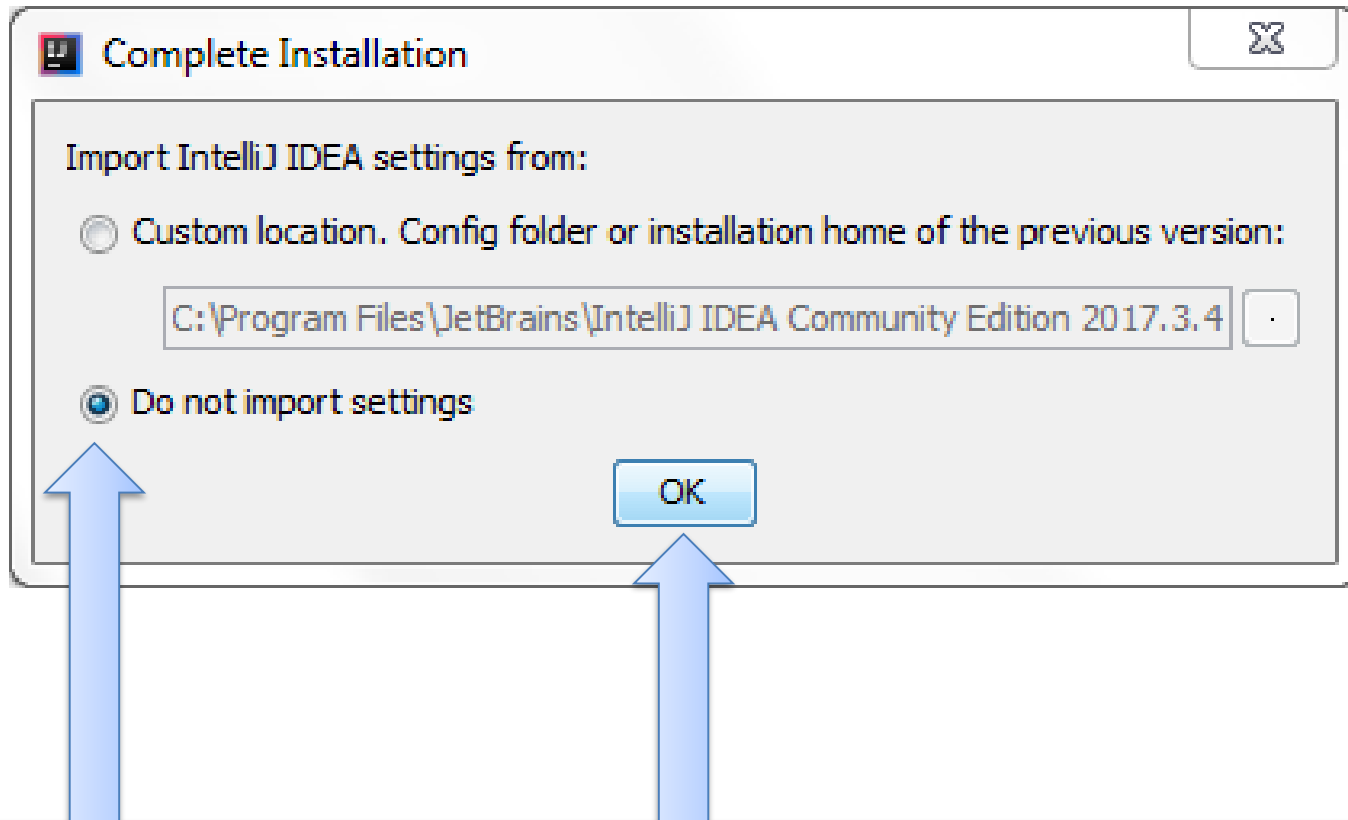
*Using a computer that has the JDK
and IntelliJ installed,
let's create and run our first
project!*

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



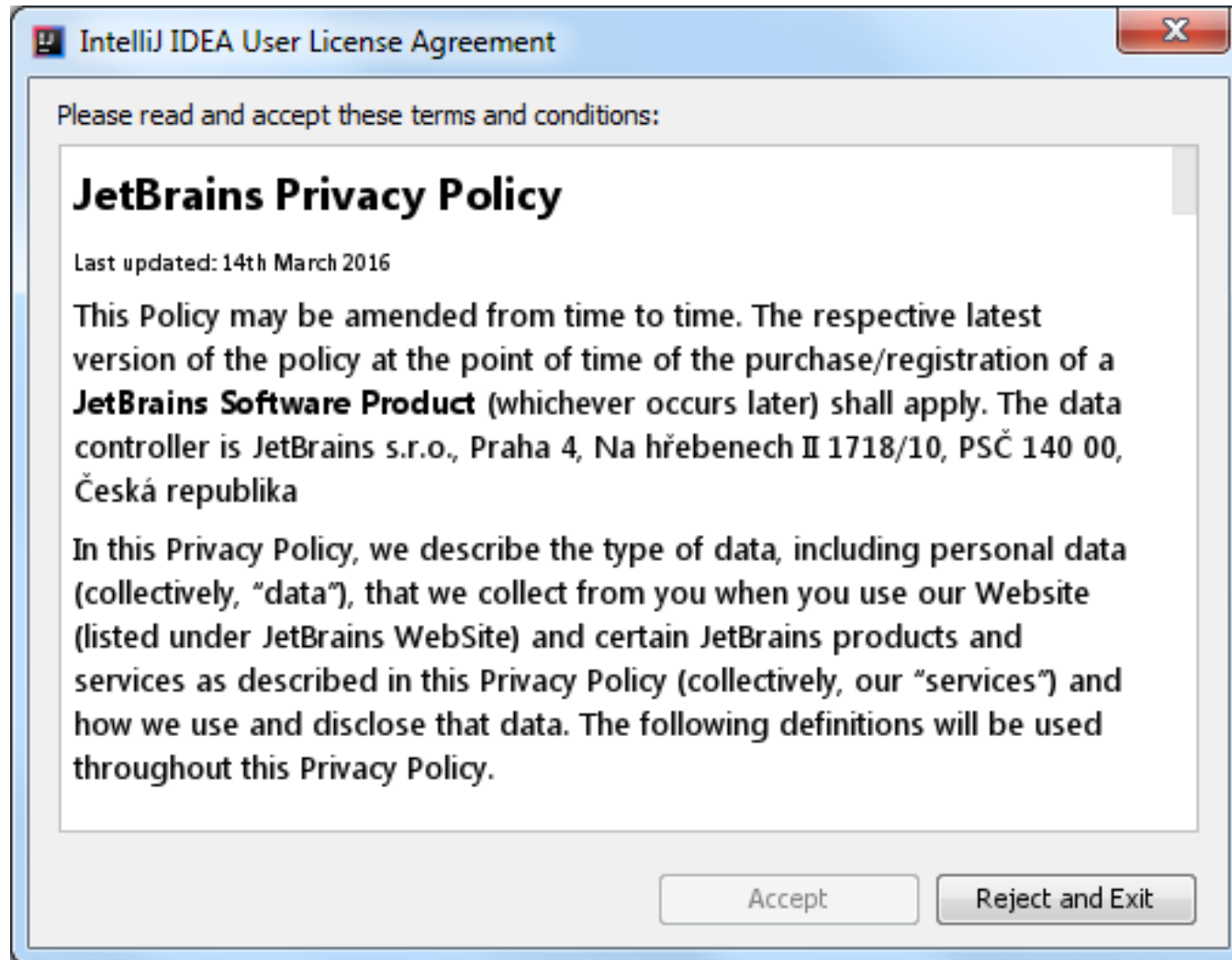
1

Start IntelliJ by clicking on the search icon on your taskbar, typing IntelliJ into the search box and launching the desktop app.



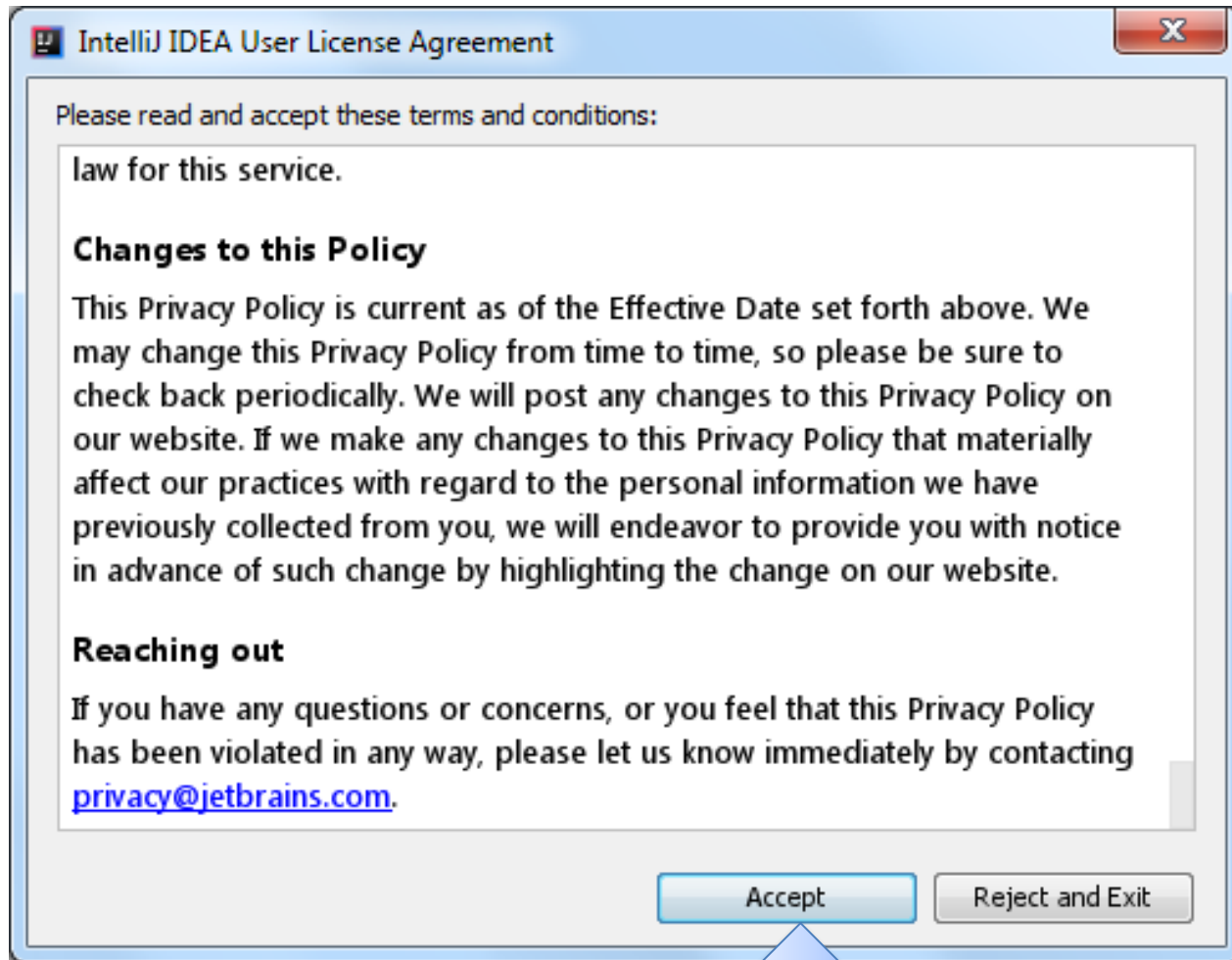
2

This window typically appears when you first start IntelliJ.
Don't import the settings. Click OK.



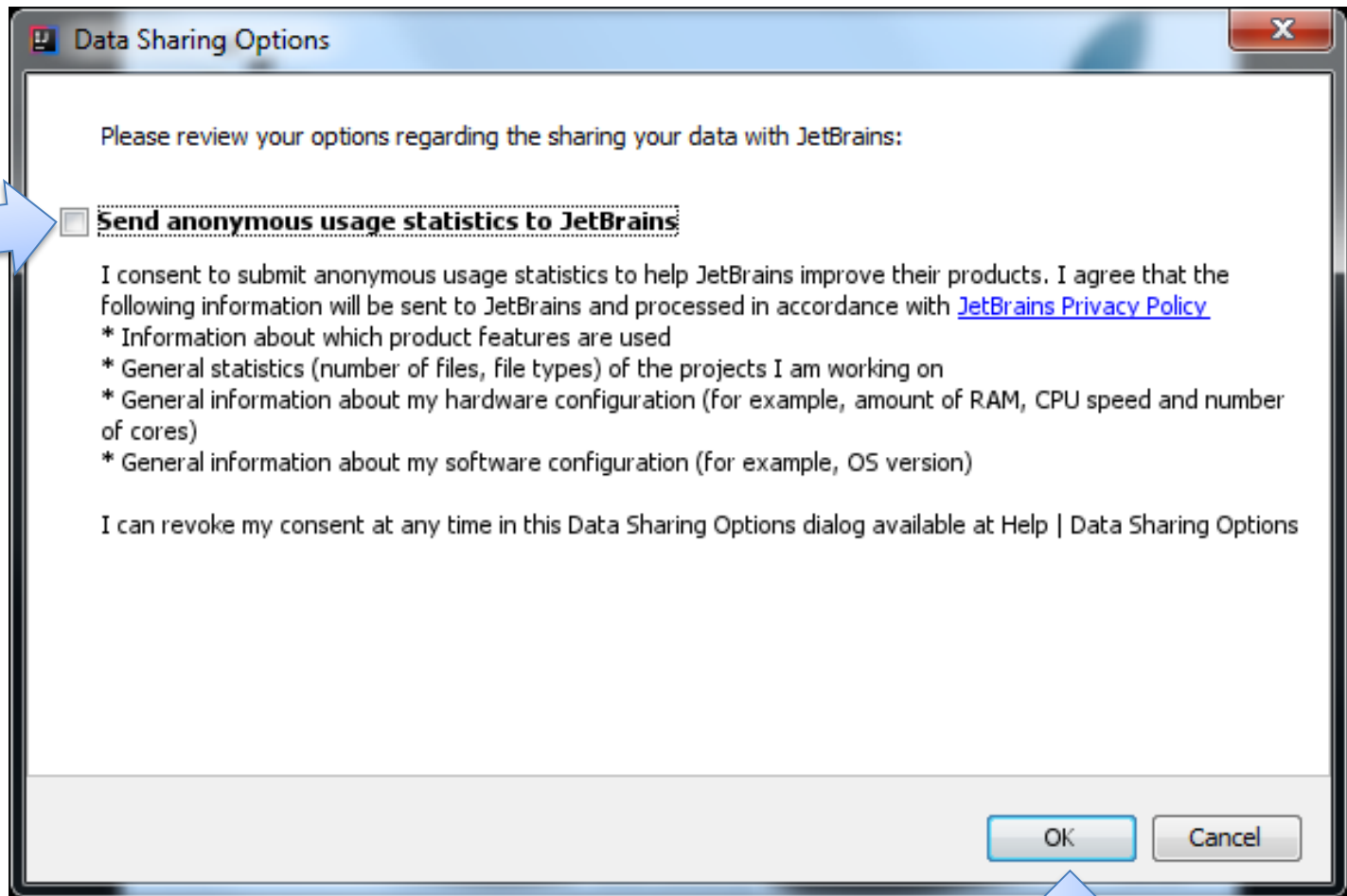
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Scroll down to the end of the User Licence Agreement (ULA)...



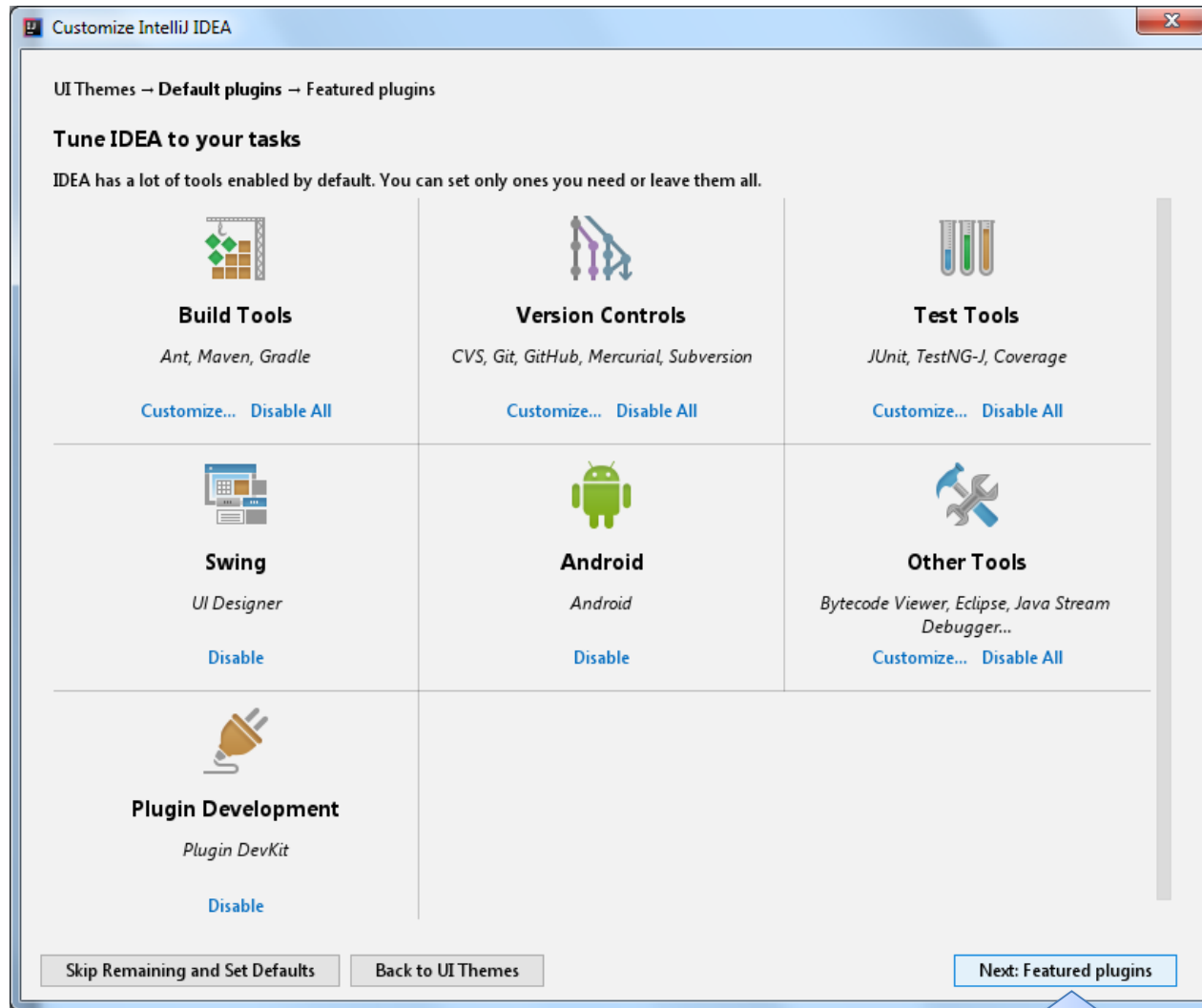
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When the Accept button appears, click it.



5

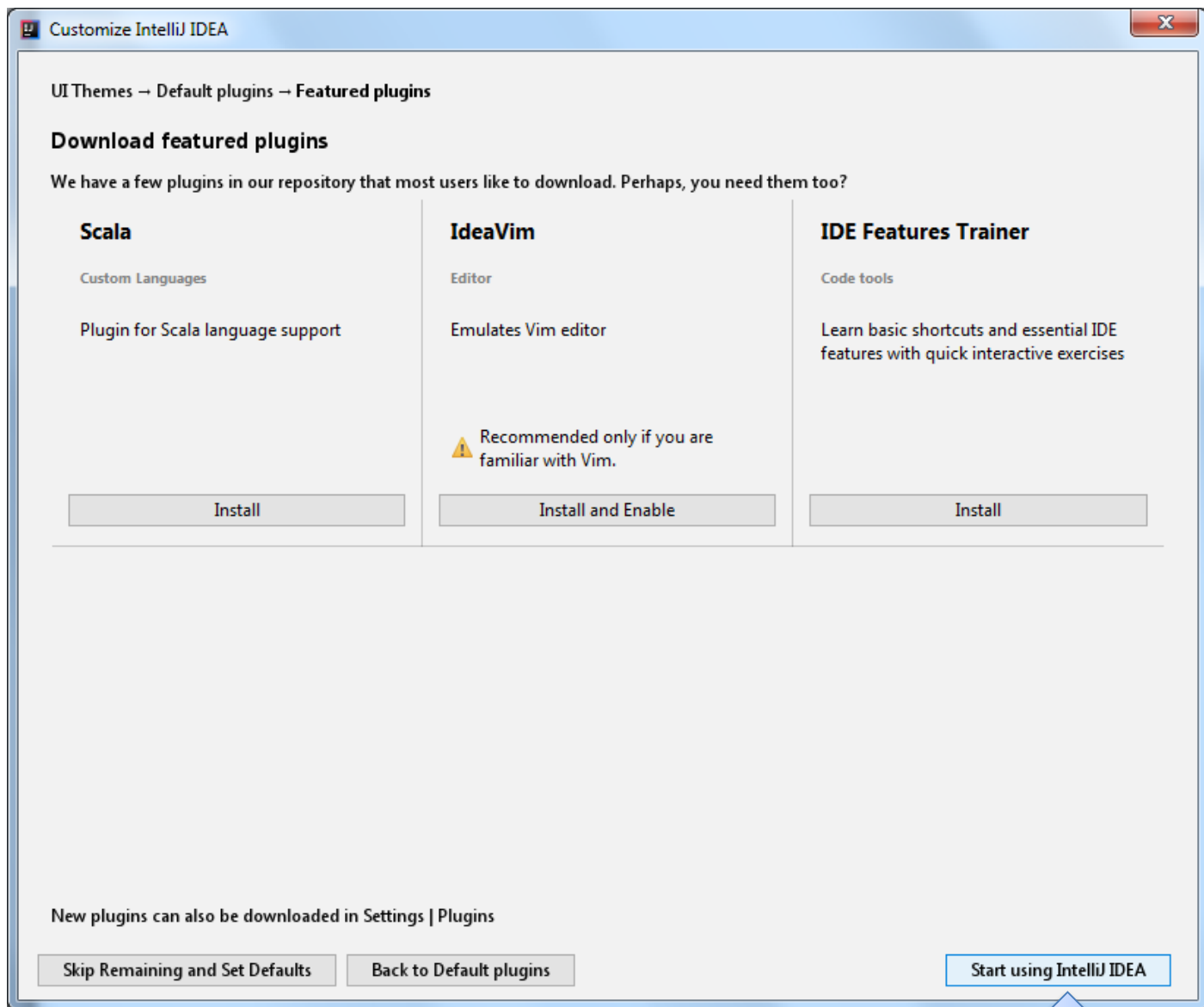
Decide if you want to share anonymous data with Jetbrains and click the OK button.



7

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

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



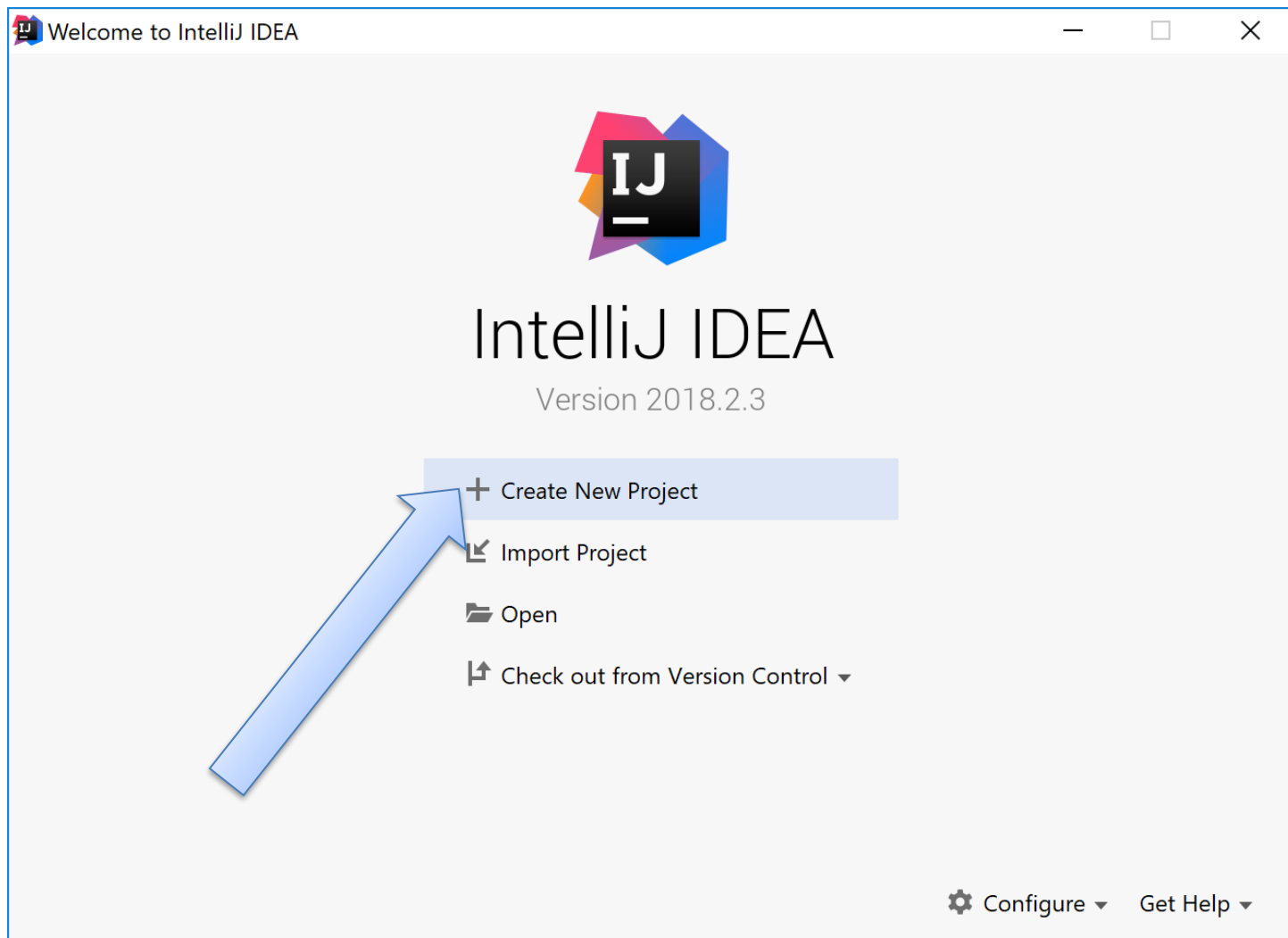
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Same again here...we aren't using these plugins, so click Start...



9

You will see this splash screen and then...

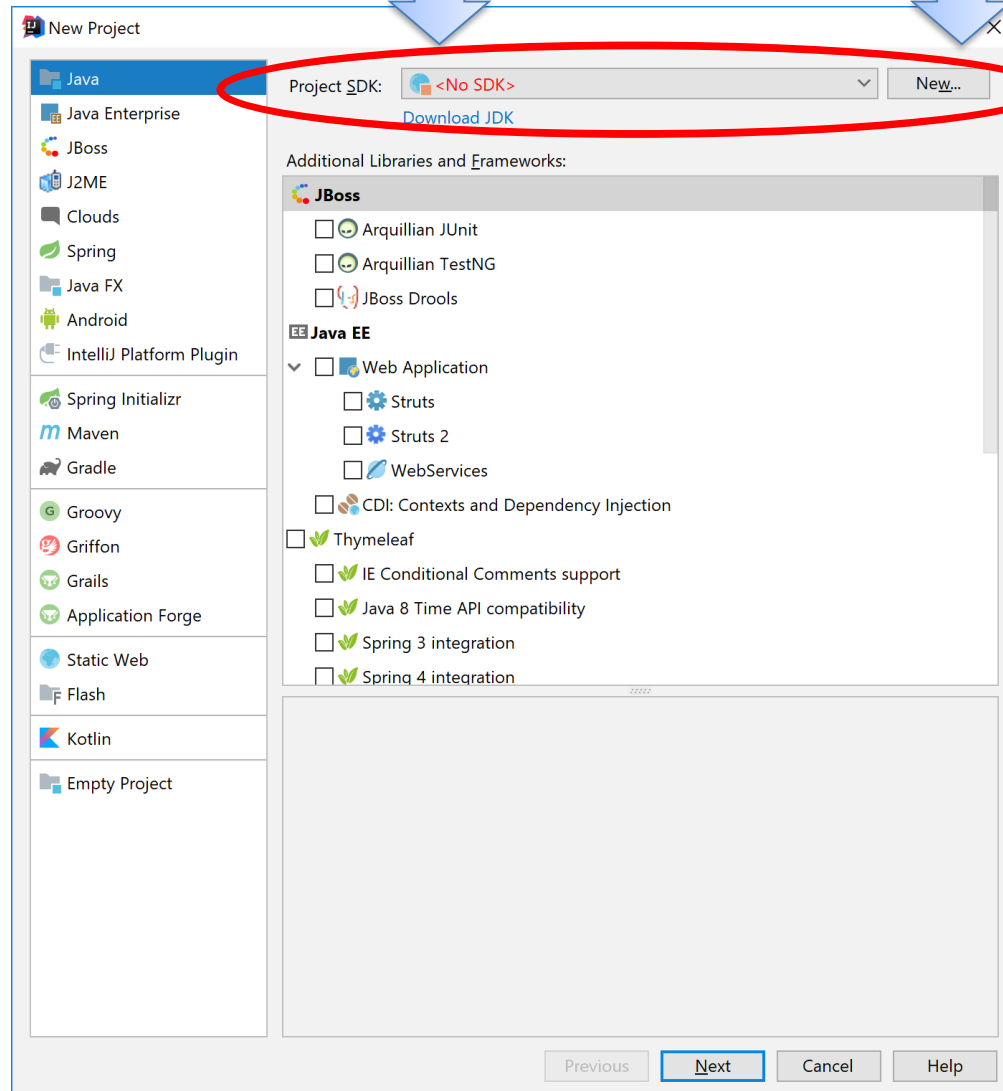


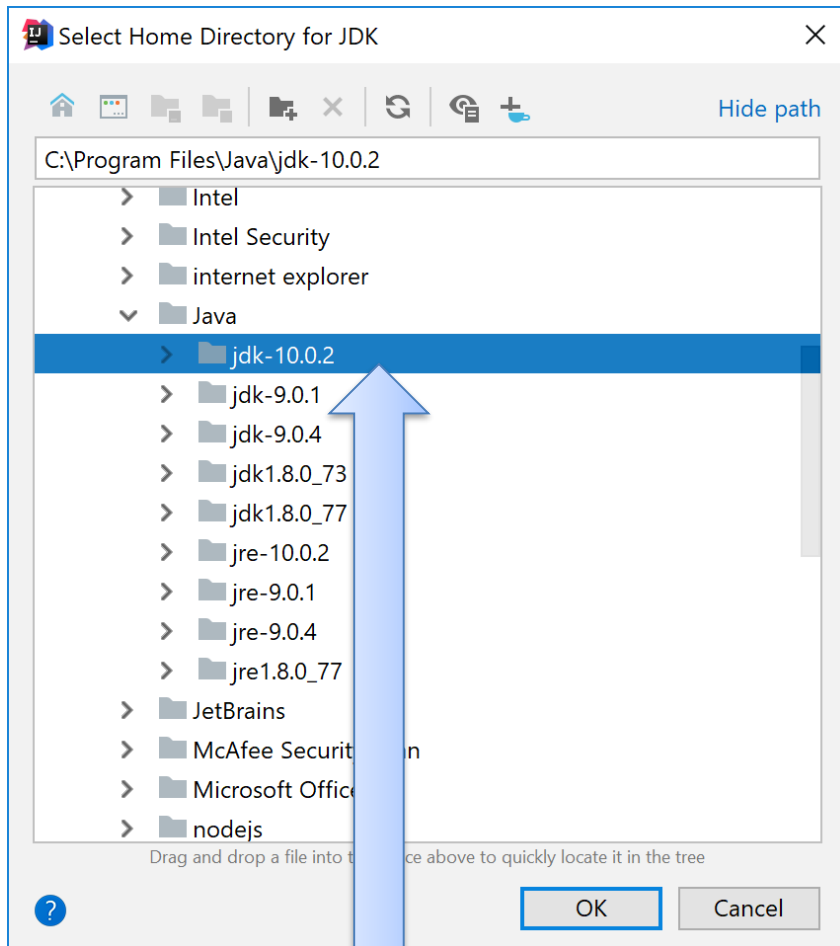
10

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

11

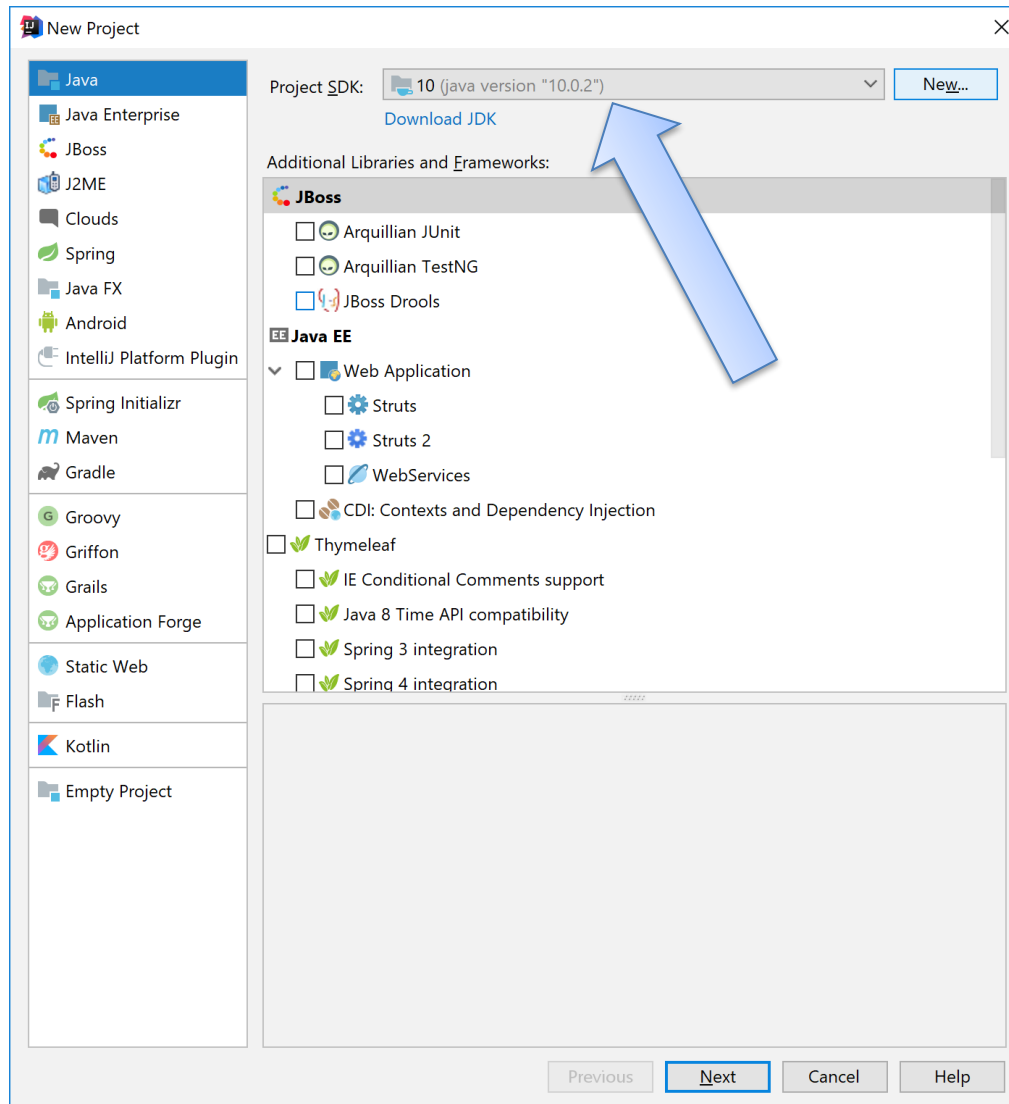
You may get this...no SDK. If so, click on the “New...” button





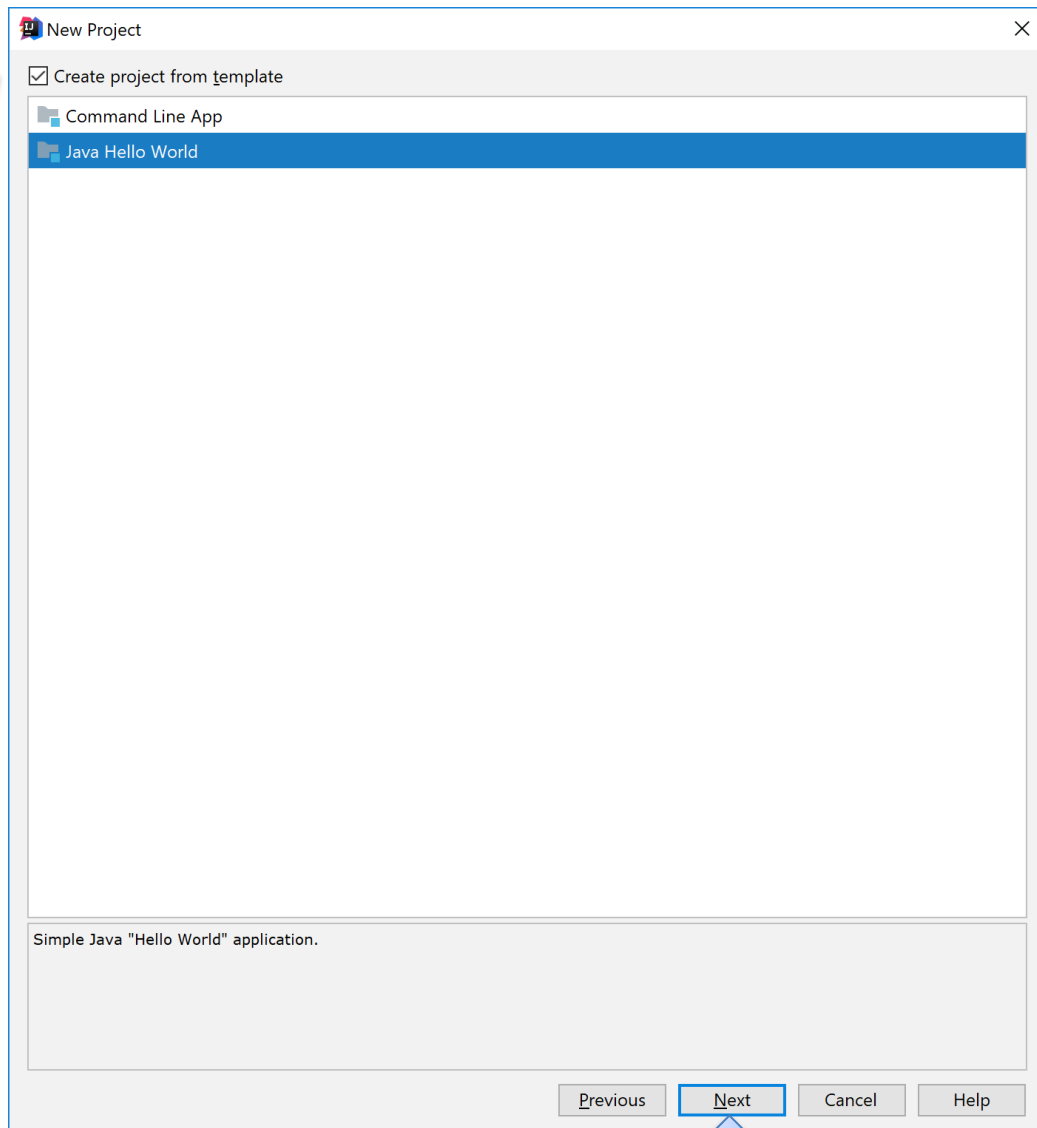
12

...and **locate** the JDK10 or JDK11 version. Click **OK**.



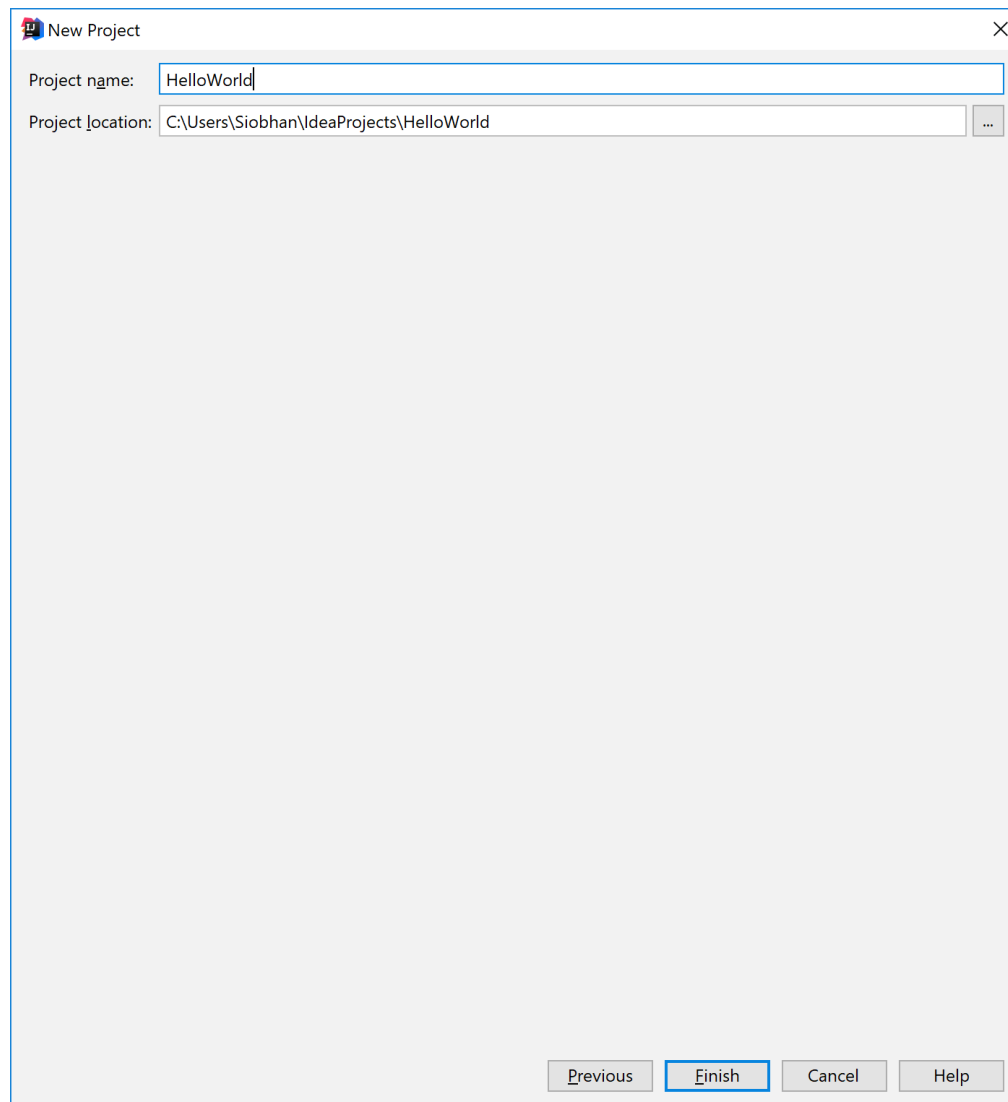
13

Now that Java is located, click Next.



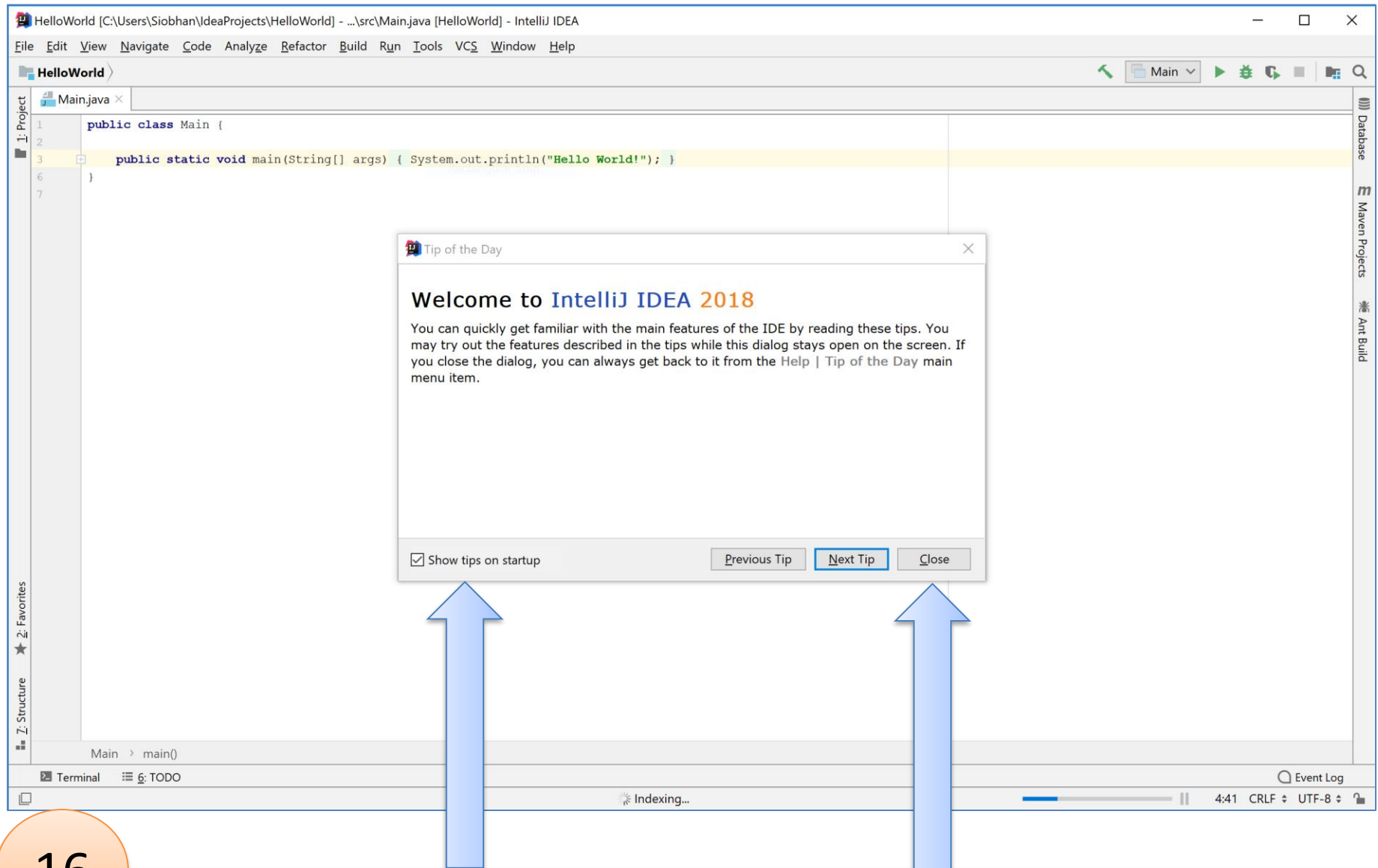
14

Tick the box to create a project from a template. Select **Java Hello World** and click the Next button.



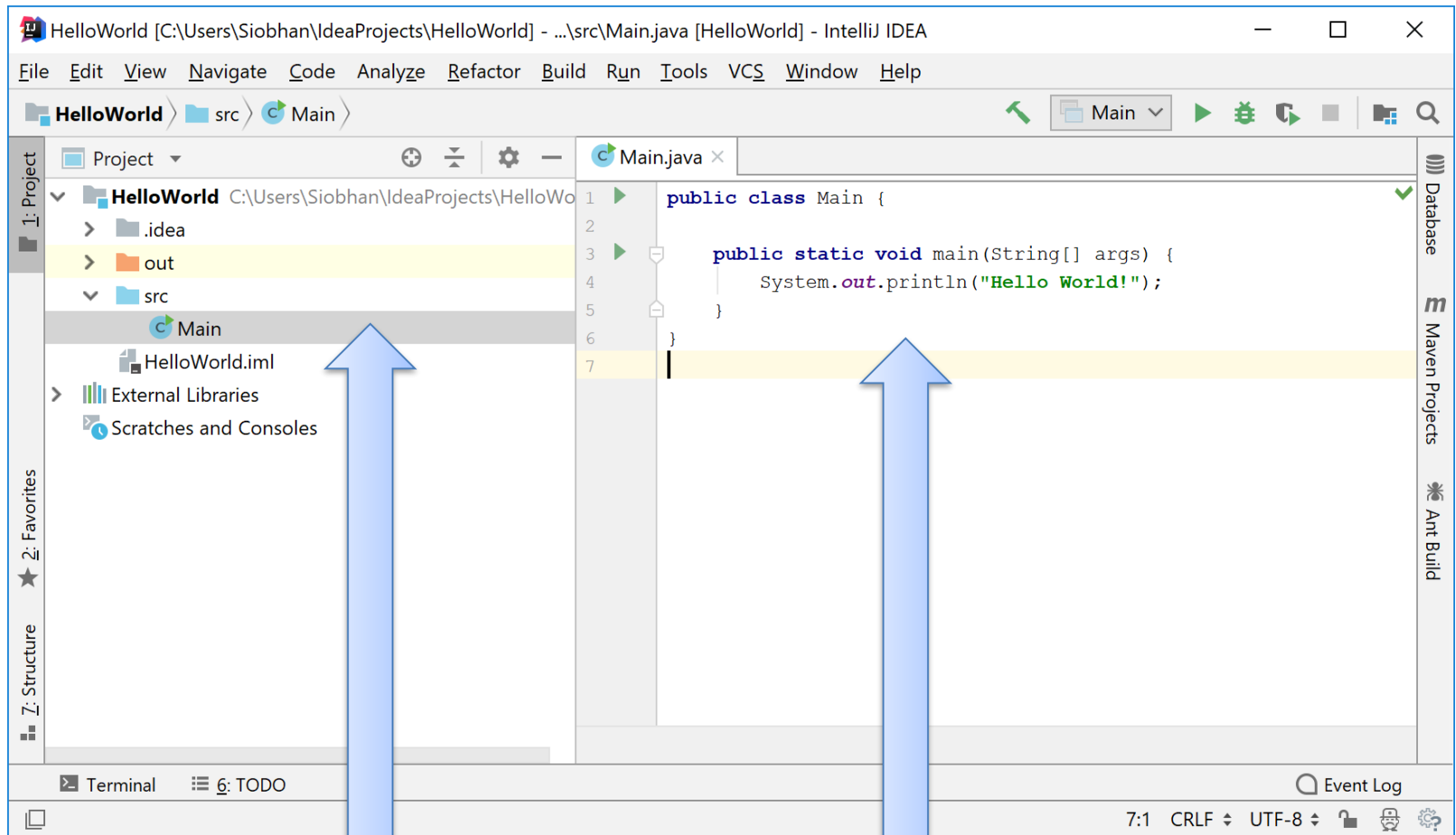
15

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



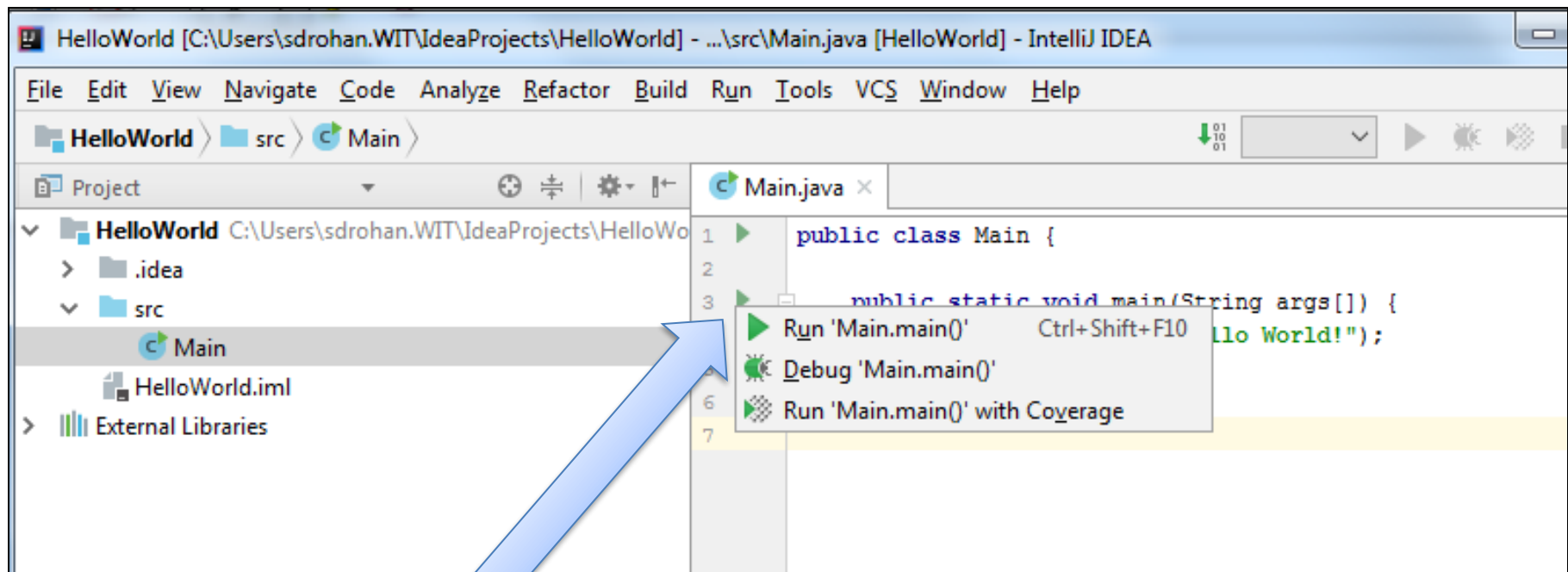
16

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



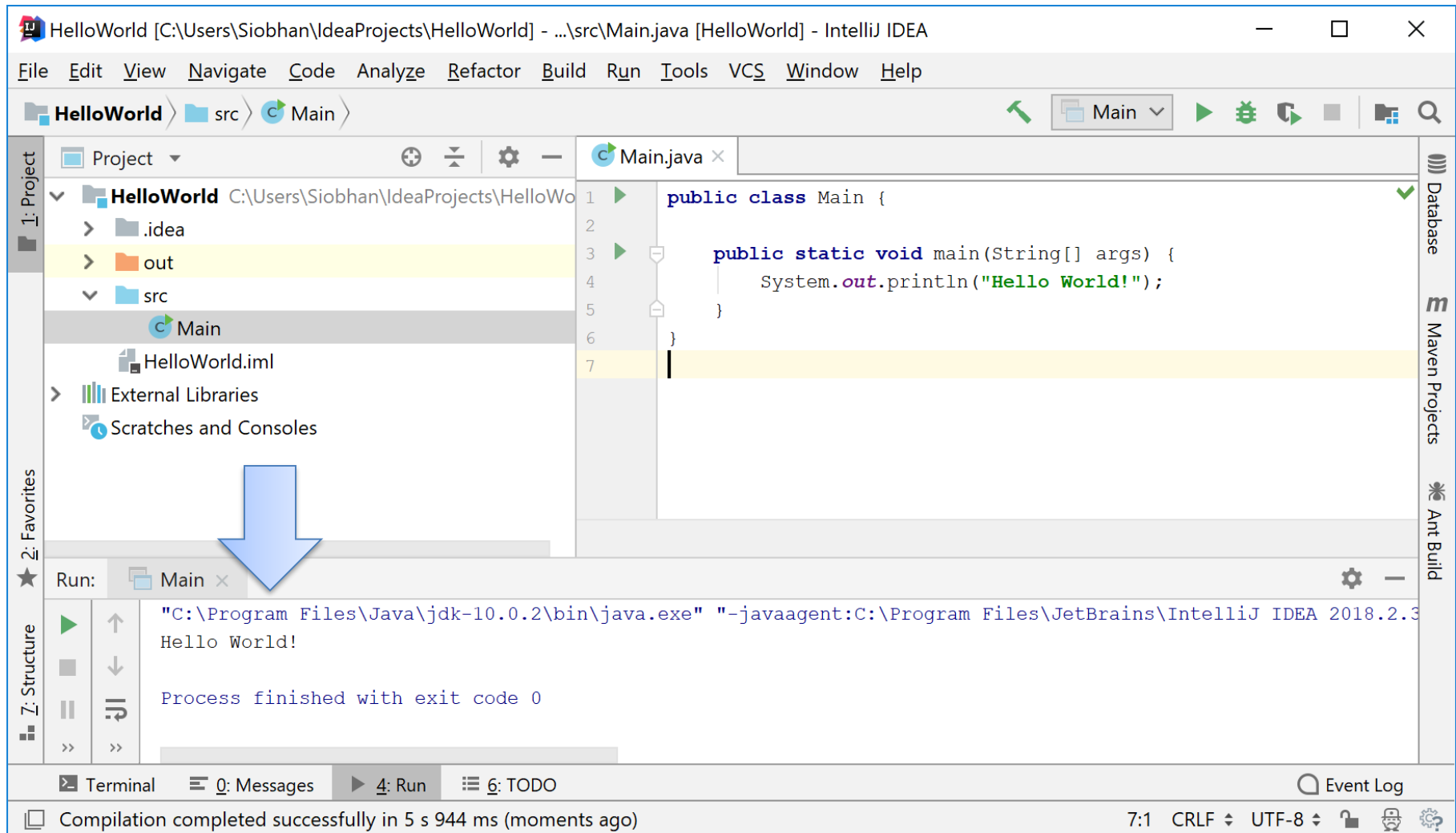
17

The above **Main** class, complete with the **main** method code is generated.



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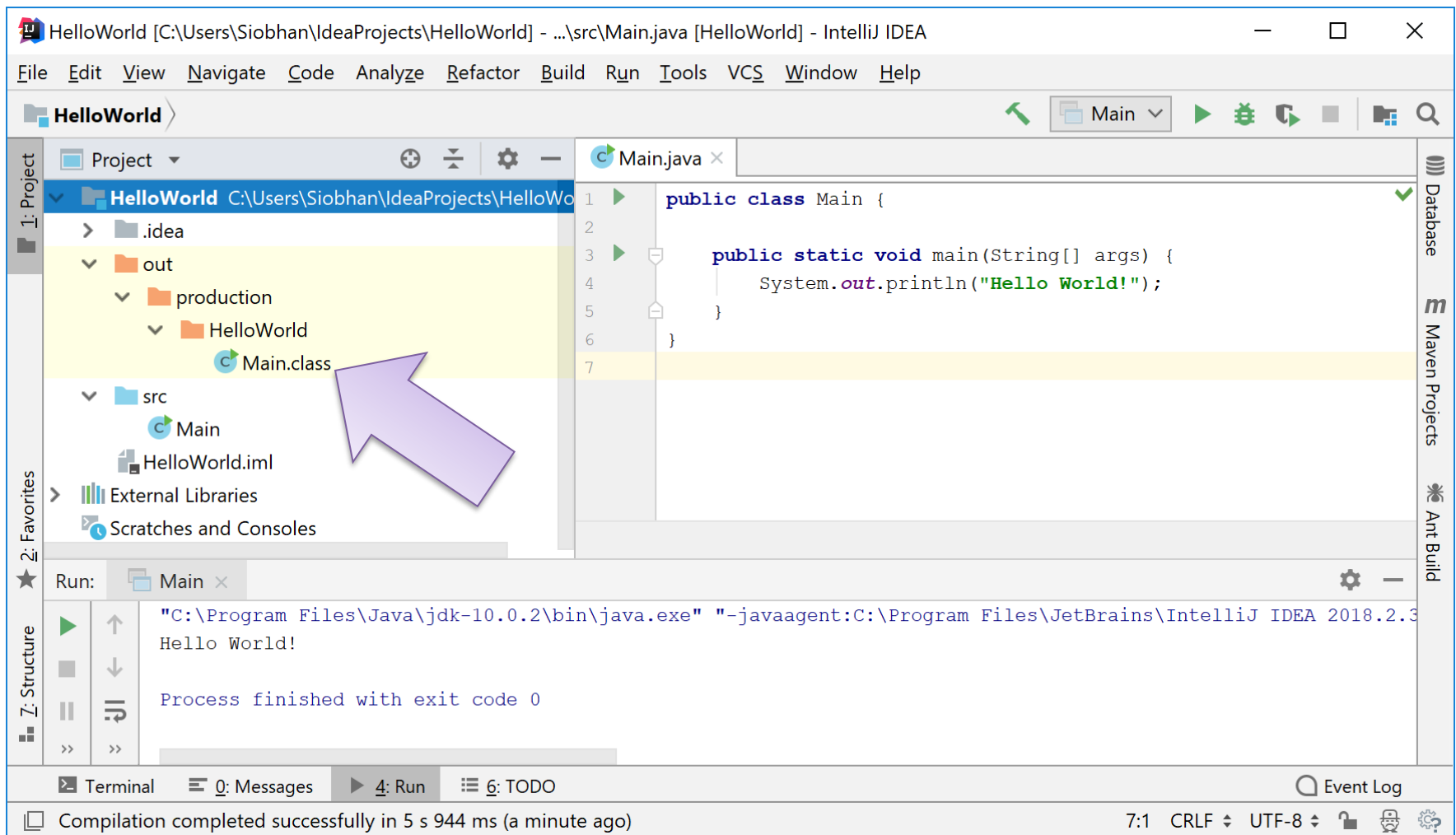
Click on the green triangle beside the main method.
Then select **Run 'Main.main()'**



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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?

