Introduction to Labs

JDK and IntelliJ

Produced Dr. Siobhán Drohan

by: Ms. Mairead Meagher



Topics list

1. Installing JDK 10.

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?

Using College Computers only..



Using Personal Machine...



http://www.oracle.com/technetwork/java/java se/downloads/jdk10-downloads-4416644.html

Navigate to this link - a specific version of JDK10.

ORACLE"











Oracle Technology Network / Java / Java SE / Downloads

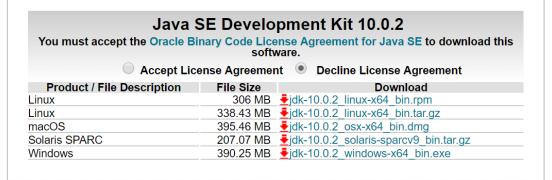




See also:

- Java Developer Newsletter: From your Oracle account, select Subscriptions, expand **Technology**, and subscribe to **Java**.
- Java Developer Day hands-on workshops (free) and other events
- Java Magazine

JDK 10.0.2 checksum



Java SDKs and Tools

- Java SE
- Java EE and Glassfish
- Java ME
- Java Card
- NetBeans IDE
- Java Mission Control

Java Resources

- Java APIs
- Technical Articles
- Demos and Videos
- Forums
- Java Magazine
- Developer Training
- Tutorials
- 🖊 Java.com

The following page is displayed

ORACLE"











Oracle Technology Network / Java / Java SE / Downloads



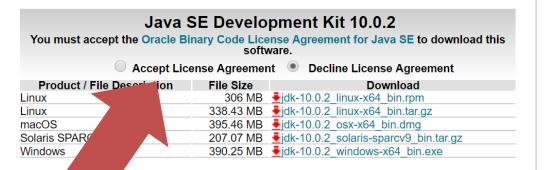


See also:

- Java Developer Newsletter: From your Oracle account, select Subscriptions, expand **Technology**, and subscribe to **Java**.
- Java Developer Day hands-on workshops (free) and other events
- Java Magazine

language and running on the Java platform.

JDK 10.0.2 checksum



Java SDKs and Tools

- Java SE
- Java EE and Glassfish
- Java ME
- Java Card
- NetBeans IDE
- Java Mission Control

Java Resources

- Java APIs
- Technical Articles
- Demos and Videos
- Forums
- Java Magazine
- Developer Training
- Tutorials
- 🖊 Java.com

3

Accept the Licence Agreement.

ORACLE*











Oracle Technology Network / Java / Java SE / Downloads

Java SE		
Java EE		
Java ME		
Java SE Subscription		
Java Embedded		
Java Card		
Java TV		
Community		
Java Magazine		

Overview Downloads Documentation Community Technologies Training Java SE Development Kit 10 Downloads 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.

See also:

- Java Developer Newsletter: From your Oracle account, select Subscriptions, expand Technology, and subscribe to Java.
- Java Developer Day hands-on workshops (free) and other events
- Java Magazine

JDK 10.0.2 checksum

Java SE Development Kit 10.0.2

You must accept the Oracle Binary Code License Agreement for Java SE to download this software.

Thank you for accepting the Oracle Binary Code License Agreement for Java SE; you may now download this software.

Product / File Description	File Size	Download
Linux	306 MB	₹jdk-10.0.2_linux-x64_bin.rpm
Linux	338.43 MB	₹jdk-10.0.2 linux-x64 bin.tar.gz
macOS	395.46 MB	₹jdk-10.0.2 osx-x64 bin.dmg
Solaris SPARC	207.07 MB	₹jdk-10.0.2 solaris-sparcv9 bin.tar.gz
Windows	390.25 MB	₫jdk-10.0.2_windows-x64_bin.exe

Java SDKs and Tools

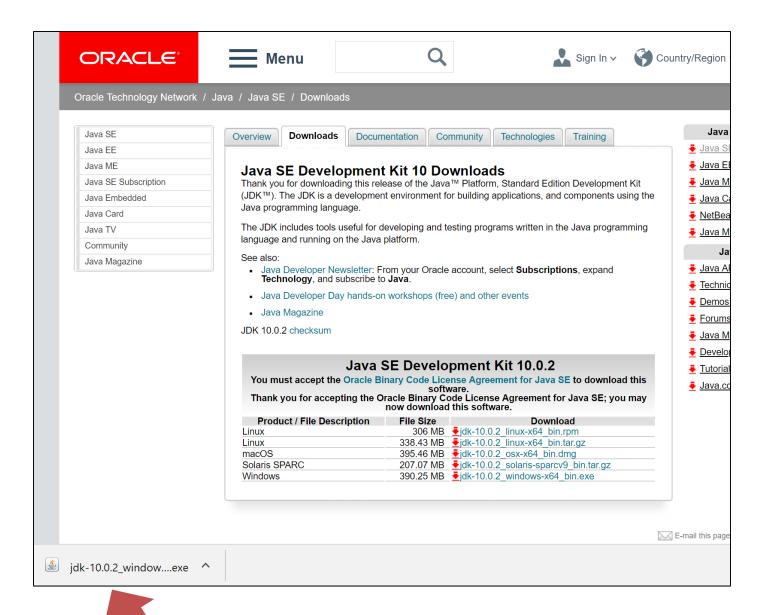
- Java SE
- Java EE and Glassfish
- Java ME
- Java Card
- ♣ NetBeans IDE
- Java Mission Control

Java Resources

- Java APIs
- Technical Articles
- Demos and Videos
- Forums
- Java Magazine
- Developer Training
- Tutorials
- Java.com

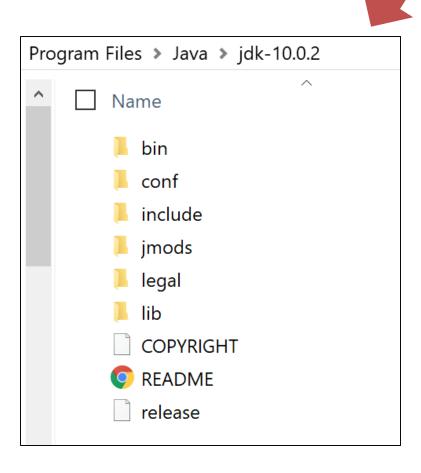
4

Download the Kit for your operating system.



Click on the downloaded file to start the JDK installation.

Once JDK10 is installed, you should have a folder structure similar to this one:



Topics list

1. Installing JDK 10.

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,

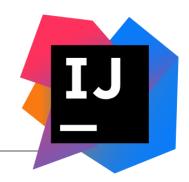
Creator of the Java Programming Language(2011, TheServerSide)

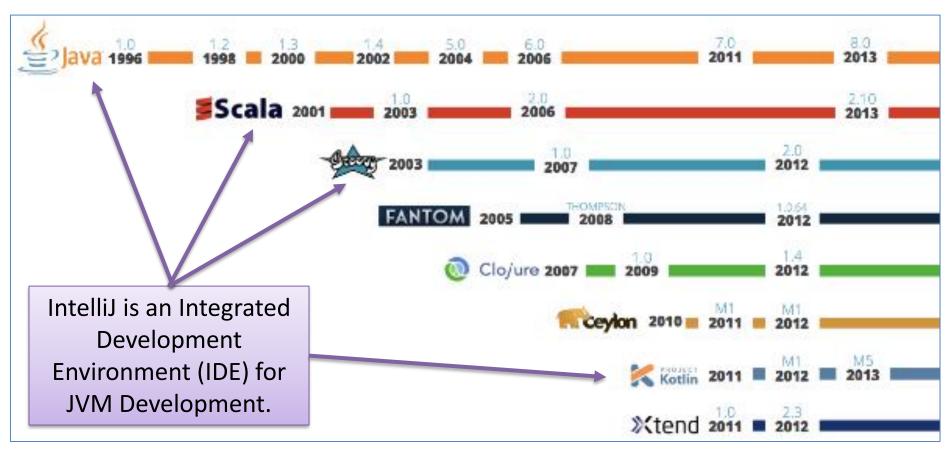


JVM Language History

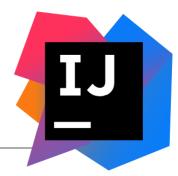


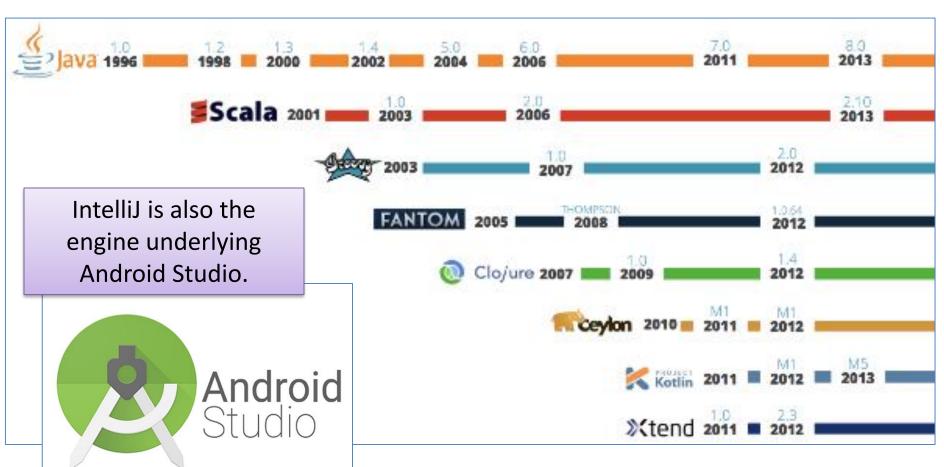
IntelliJ and the JVM





IntelliJ and the JVM





Do I need to do an install?

Using College Computers only..

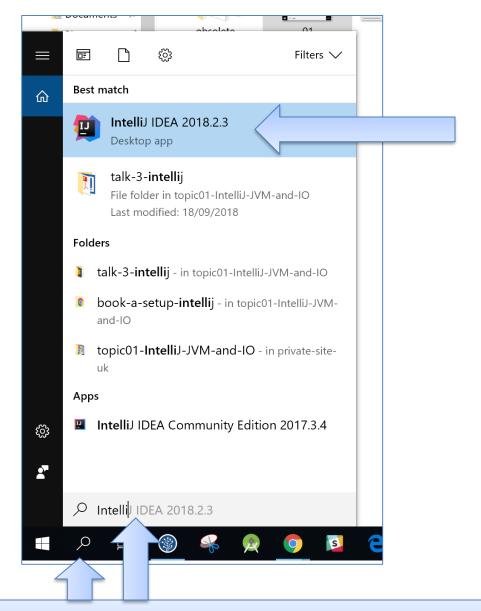


Using Personal Machine... (see lab01a for instructions)

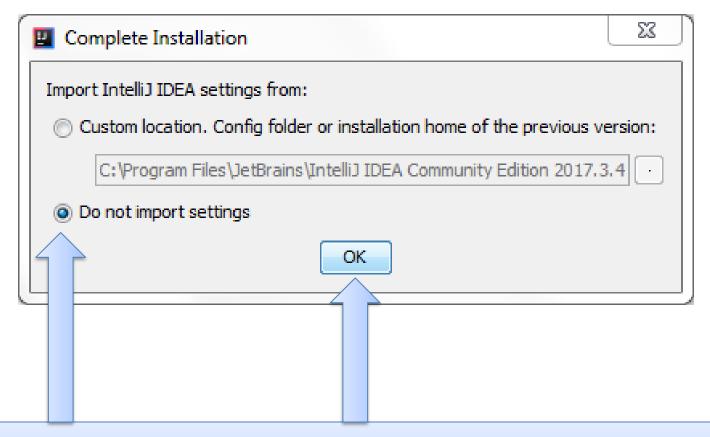


Using a computer that has the JDK and IntelliJ installed, let's create and run our first project!

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

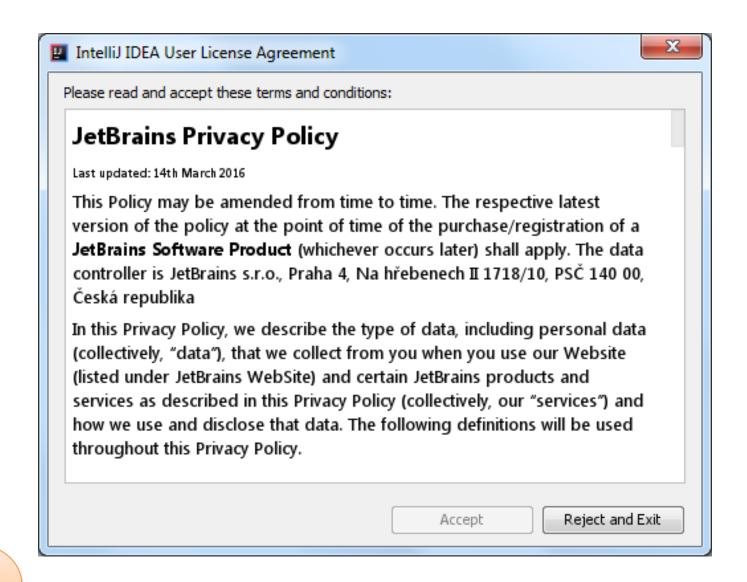


Start IntelliJ by clicking on the search icon on your taskbar, typing IntelliJ into the search box and launching the desktop app.

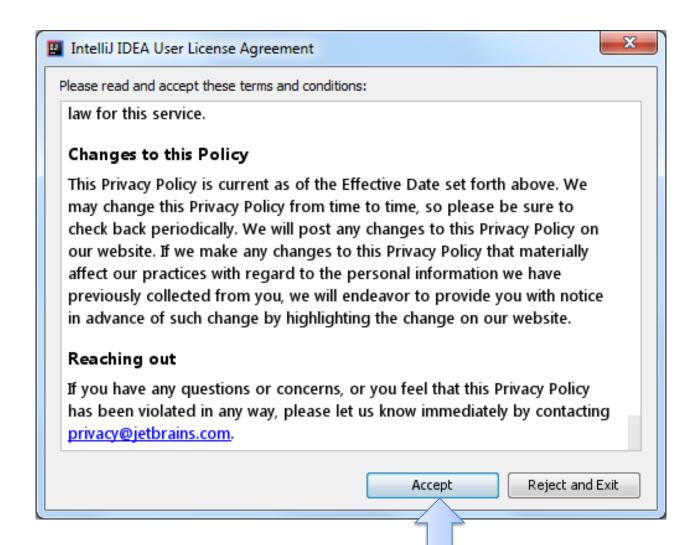


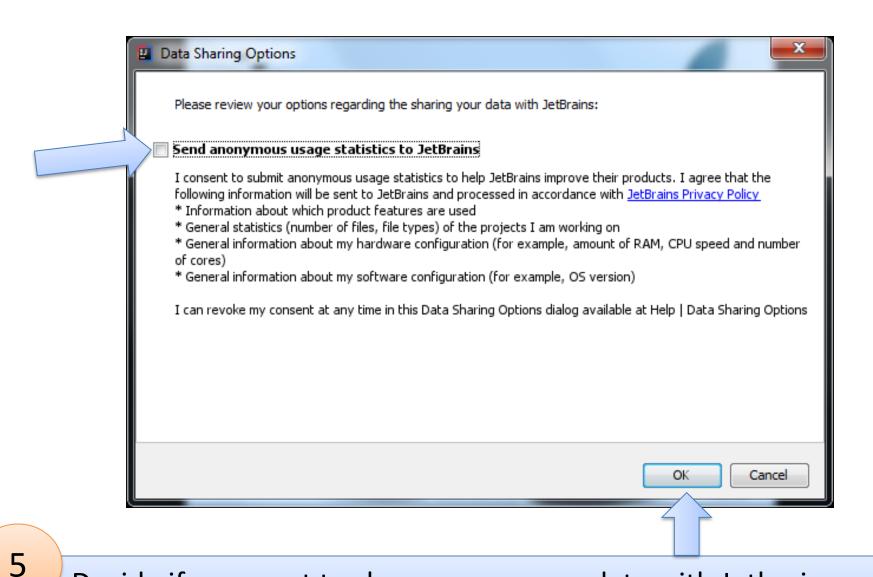
This window typically appears when you first start IntelliJ. **Don't** import the settings. Click OK.

2

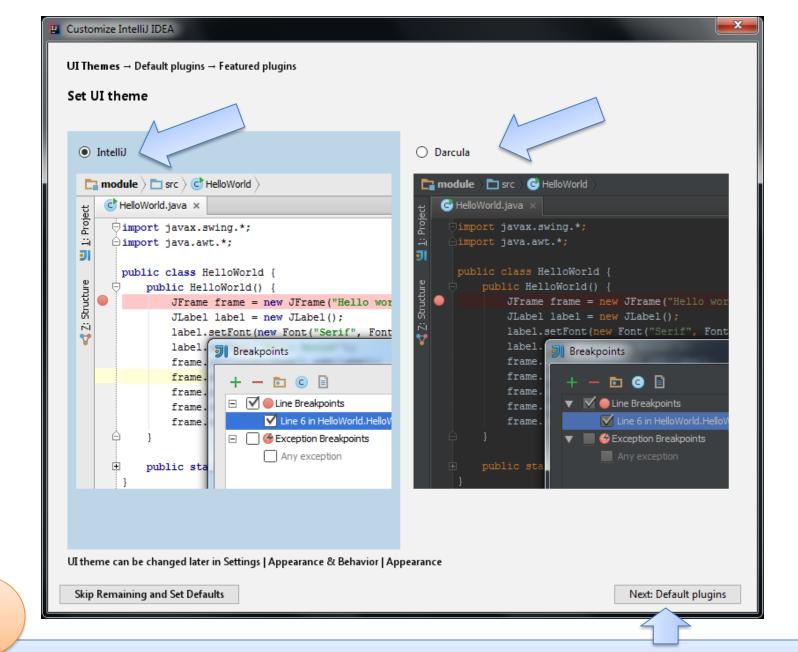


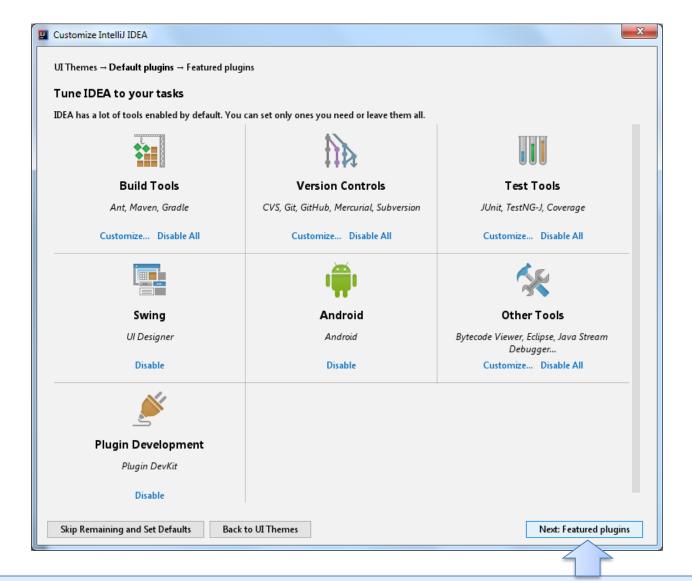
3





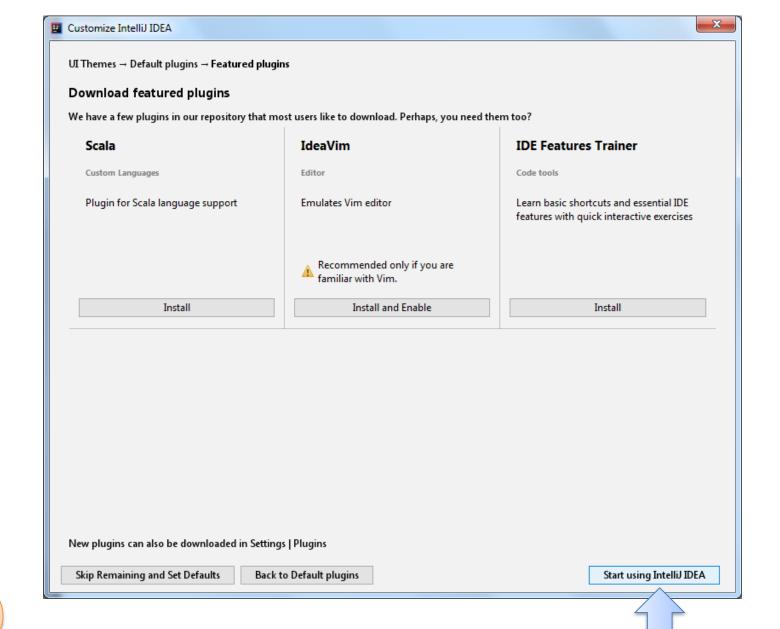
Decide if you want to share anonymous data with Jetbrains and click the OK button.





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

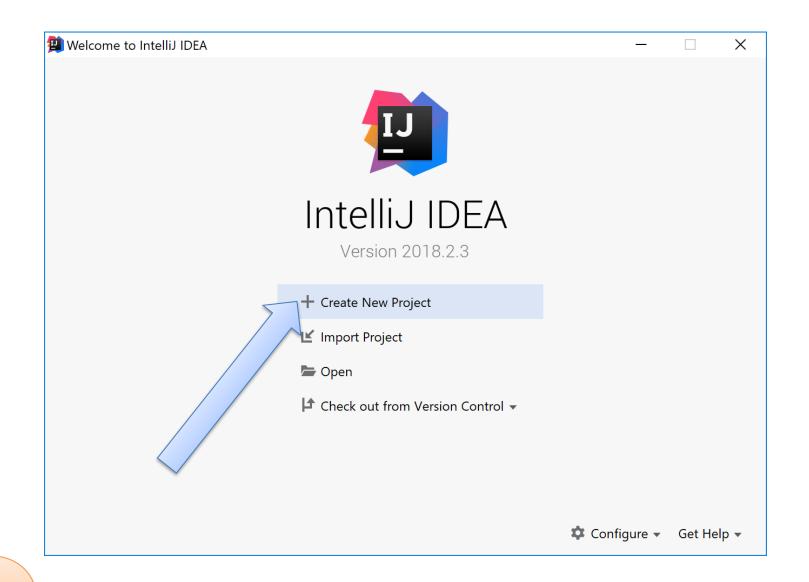
At the moment, we won't be using them, so click Next.



8

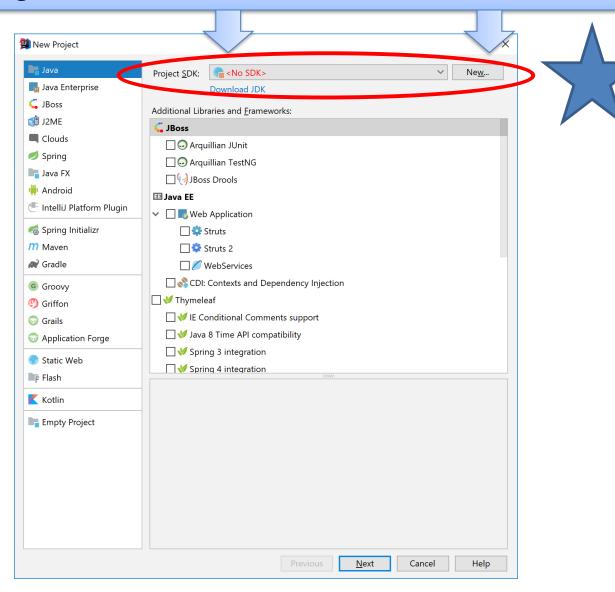


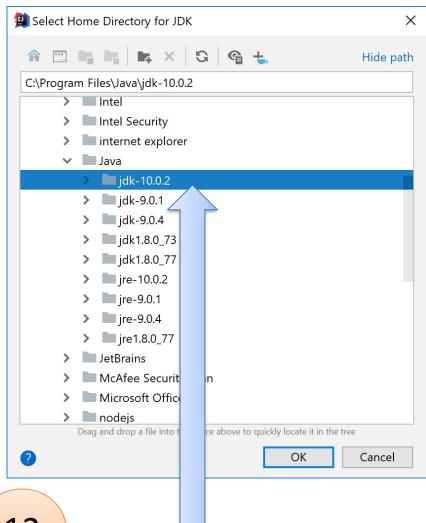
9



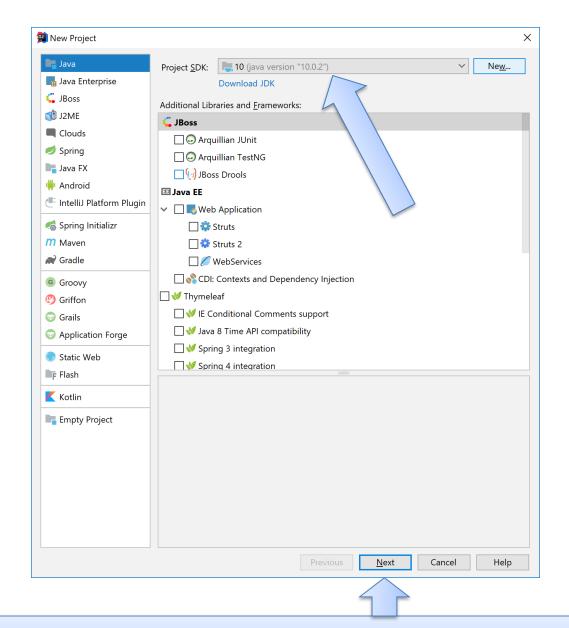
IntelliJ is now running... click on the **Create New Project** link

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

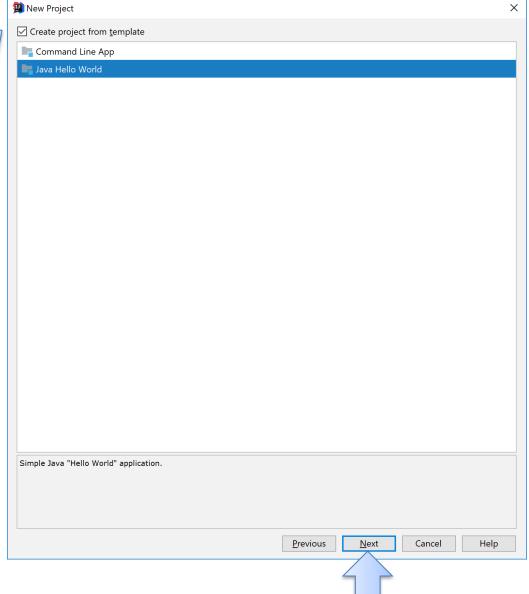




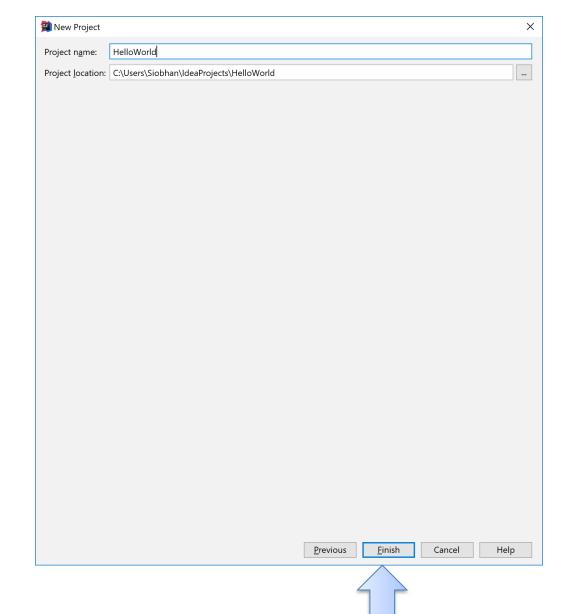
...and locate the JDK10 version. Click OK.



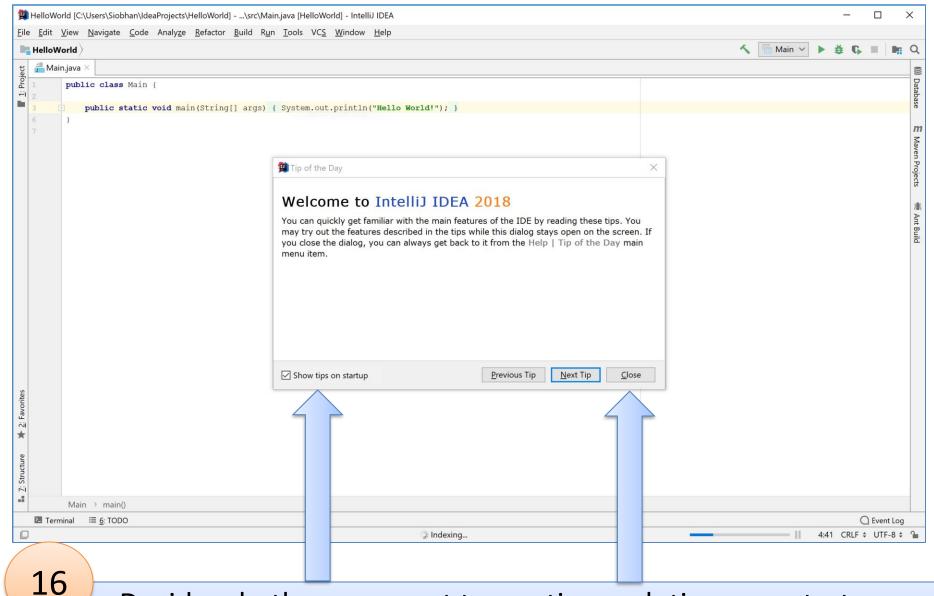




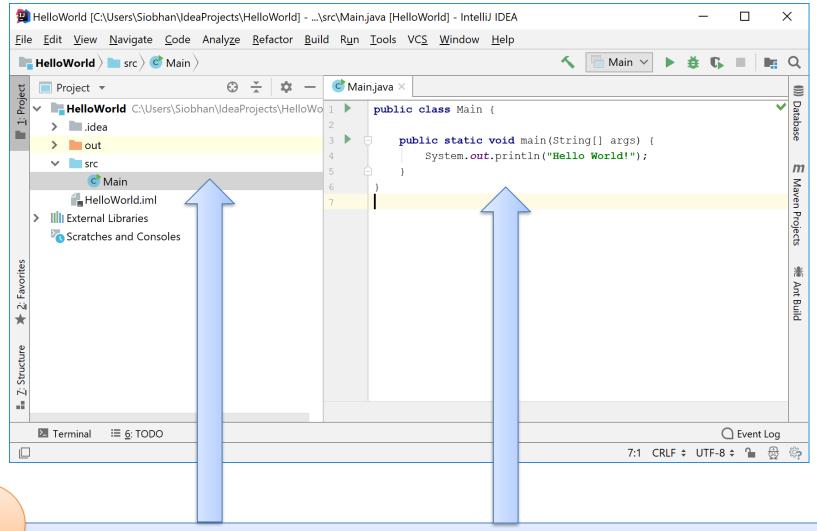
Tick the box to create a project from a template. Select **Java Hello World** and click the Next button.



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

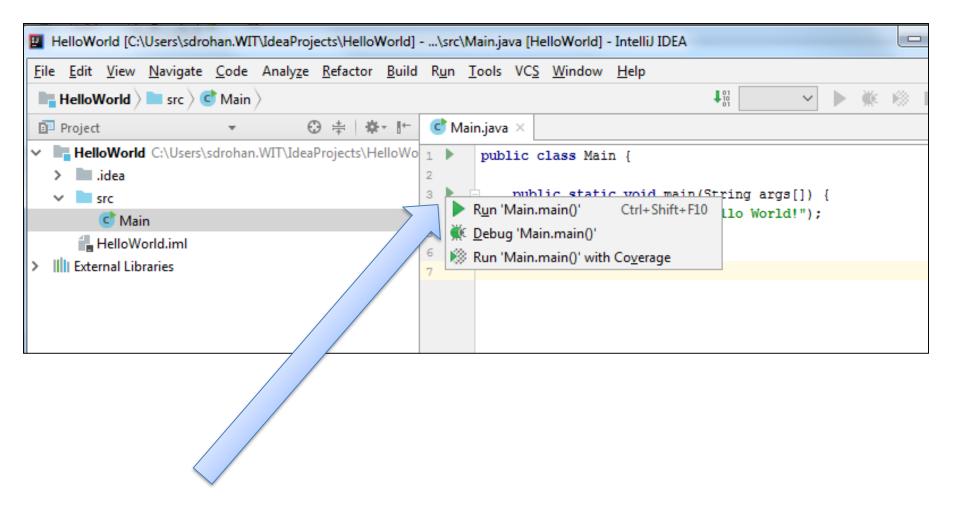


Decide whether you want to see tips each time you start IntelliJ. Then close the tip window.

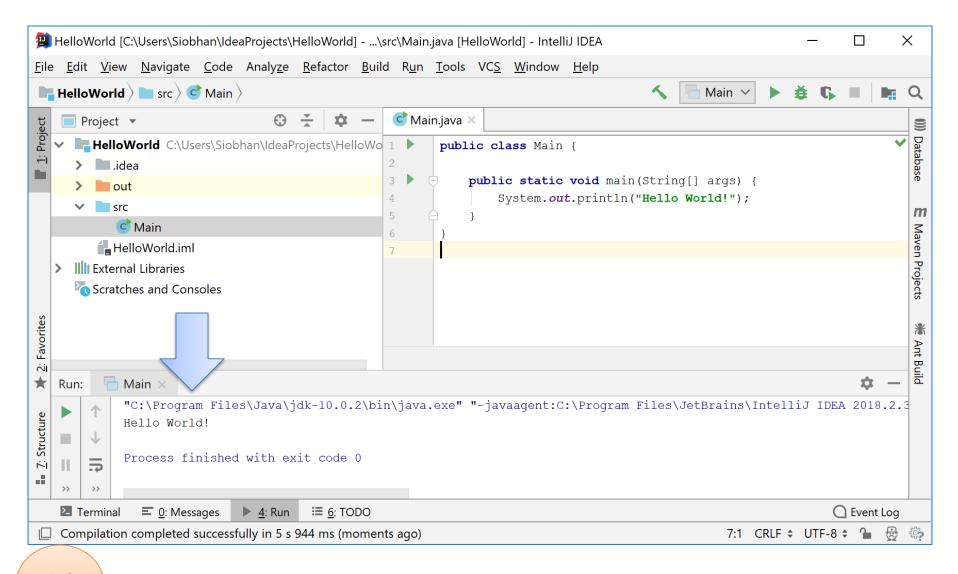


The above **Main** class, complete with the **main** method code is generated.

17



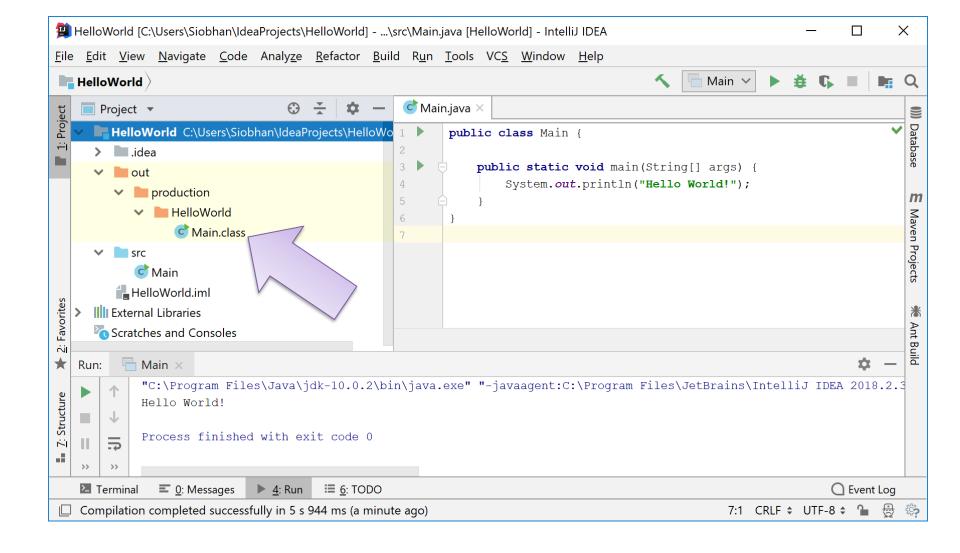
Click on the green triangle beside the main method.
Then select **Run 'Main.main()'**



19

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?

