

# Set Up Scala in IntelliJ IDEA

Here is an instruction created by Xindan Zhang; thanks to her help.

**Installing Java8 and JDK first!!**

**Installing Java 8:**

<https://www.java.com/en/download/manual.jsp>

**Installing JDK with Java 8**, since the version is out-of-date, it is hard to find on the website.

Download the one that match your computer configuration。

The shortcut for downloading JDK (**Java SE Development Kit**):

Java SE Development Kit 8u202

<https://www.oracle.com/java/technologies/javase/javase8-archive-downloads.html>

Java SE Development Kit 8u391

<https://www.oracle.com/java/technologies/javase/javase8u211-later-archive-downloads.html>

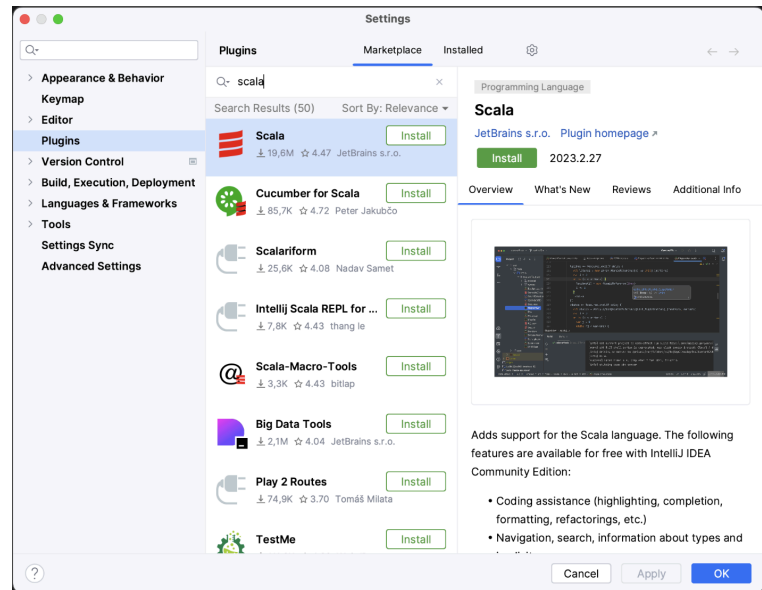
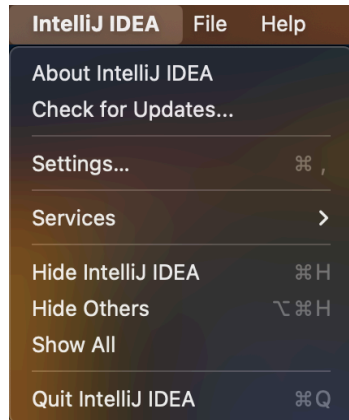
**Installing IntelliJ IDEA:**

<https://www.jetbrains.com/idea/download/?section=mac>

It is free to use. Apply for a permit license with your college email account.

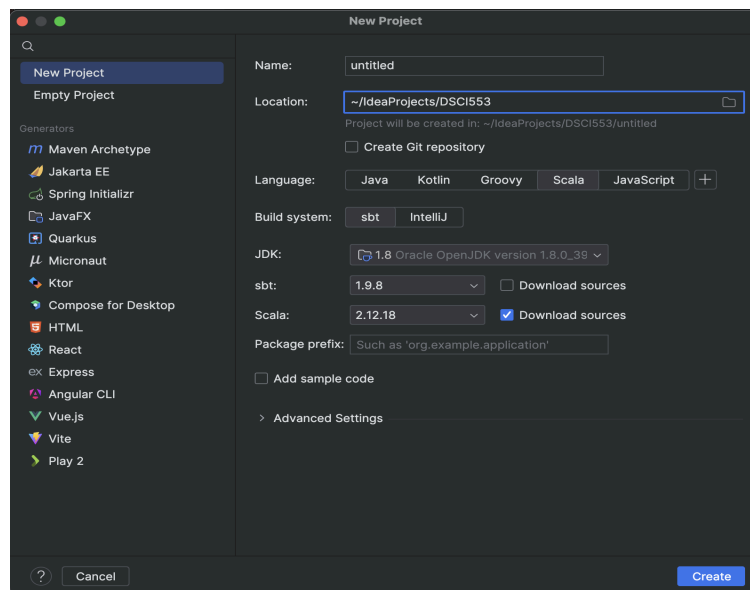
**Setting up Scala:**

After installing IntelliJ IDEA, click **Settings**.



Open the Marketplace tab, and find the **Scala plugin**. Search Scala and click Install (restart the IDE if prompted).

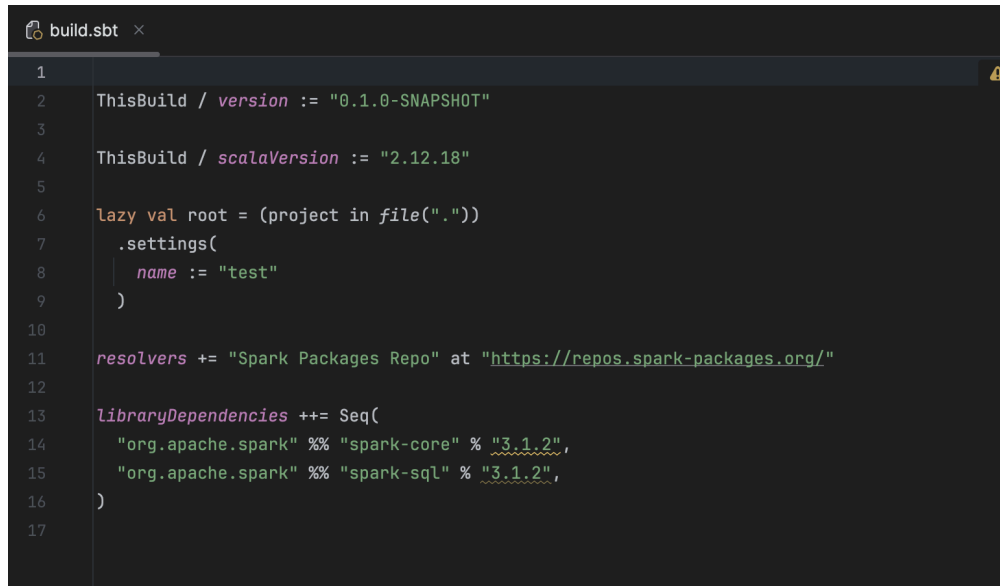
On the Welcome screen, click New Project. Alternatively, in the main menu, go to File | New | Project. From the list on the **left**, select **Scala**. Name the new project and change its location if necessary.



From the JDK list, select the JDK (for DSCI 553, **the required version is 1.8.xx**) that you want to use in your project. If you don't have the necessary JDK on your computer, select Download JDK on the website.

Select the sbt build system. The required version for Scala is 2.12, then **sbt 1.x** uses **Scala 2.12**. Choose one you like. Finally, create a new project.

Using a build tool such as sbt becomes essential once you create projects with dependencies or more than one code file. Be careful! It is related to whether your project can run successfully. The figure below is a sample for build.sbt.



```
1
2 ThisBuild / version := "0.1.0-SNAPSHOT"
3
4 ThisBuild / scalaVersion := "2.12.18"
5
6 lazy val root = (project in file("."))
7   .settings(
8     name := "test"
9   )
10
11 resolvers += "Spark Packages Repo" at "https://repos.spark-packages.org/"
12
13 libraryDependencies += Seq(
14   "org.apache.spark" %% "spark-core" % "3.1.2",
15   "org.apache.spark" %% "spark-sql" % "3.1.2",
16 )
17
```

After finishing the whole project, we need to set up the jar file.

Open **terminal**,

**cd path/to/the/directory/of/work**

**sbt package**

Terminal will mention:

[info] compiling 1 Scala source to path/to/the/directory/of/work/target/scala-2.12/classes..

**Find your jar file under /target/scala-2.12**

Finally, upload your jar file and scala files to the vocareum.