Installing the Scala IDE for Eclipse with the Scala Worksheet (Linux / Mac OS X / Windows)

You can download the Scala IDE for eclipse with the Scala Worksheet pre-installed from the following URL:

http://scala-ide.org/download/sdk.html **(Make sure to download the IDE for Scala version 2.11.x!)**

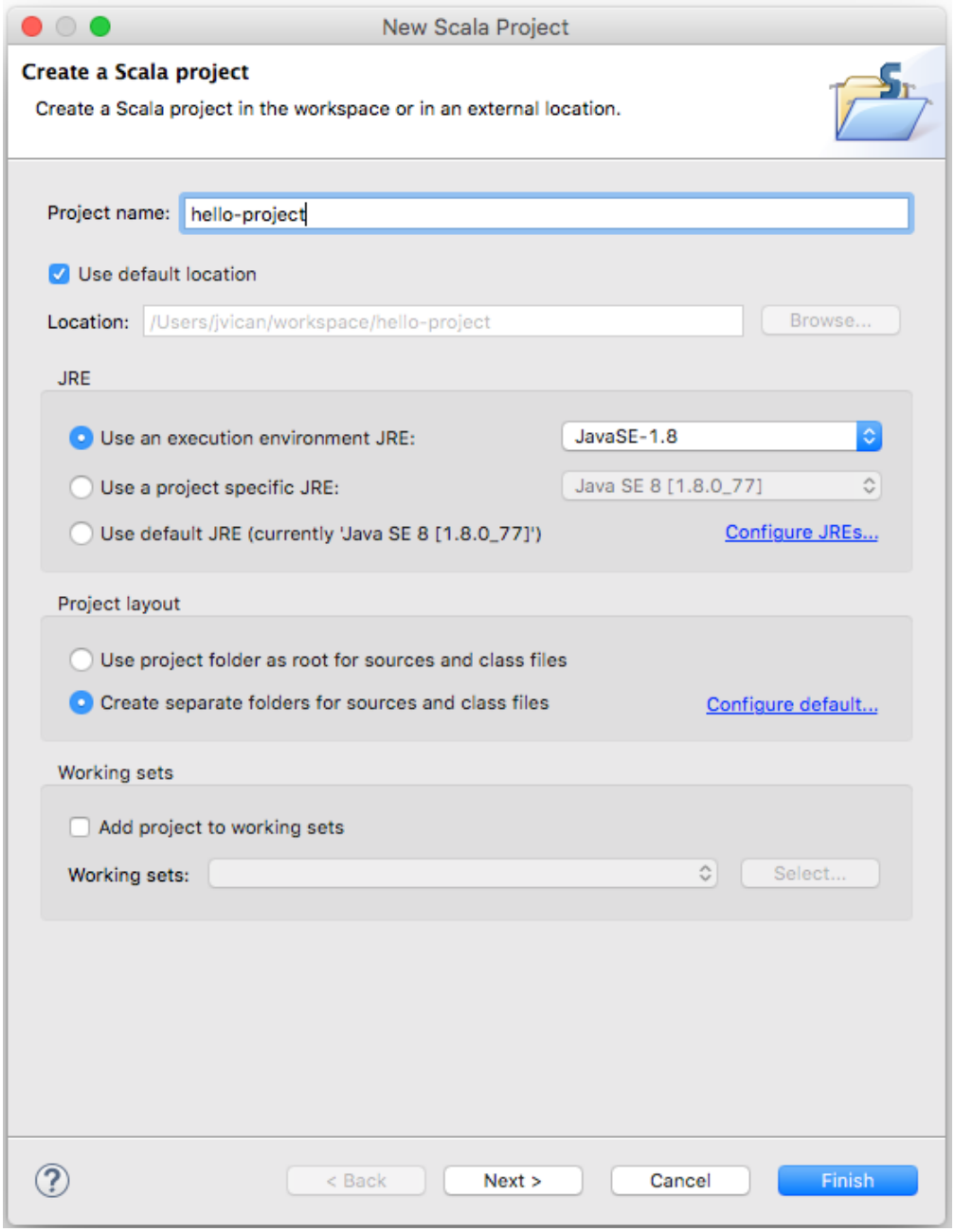
After downloading the archive for your operating system, **simply unpack it and start eclipse**. Eclipse requires you to select a workspace on startup. We recommend you create one workspace directory for this class and use it for all assignments.

Hello World: Scala IDE and the Scala Worksheet

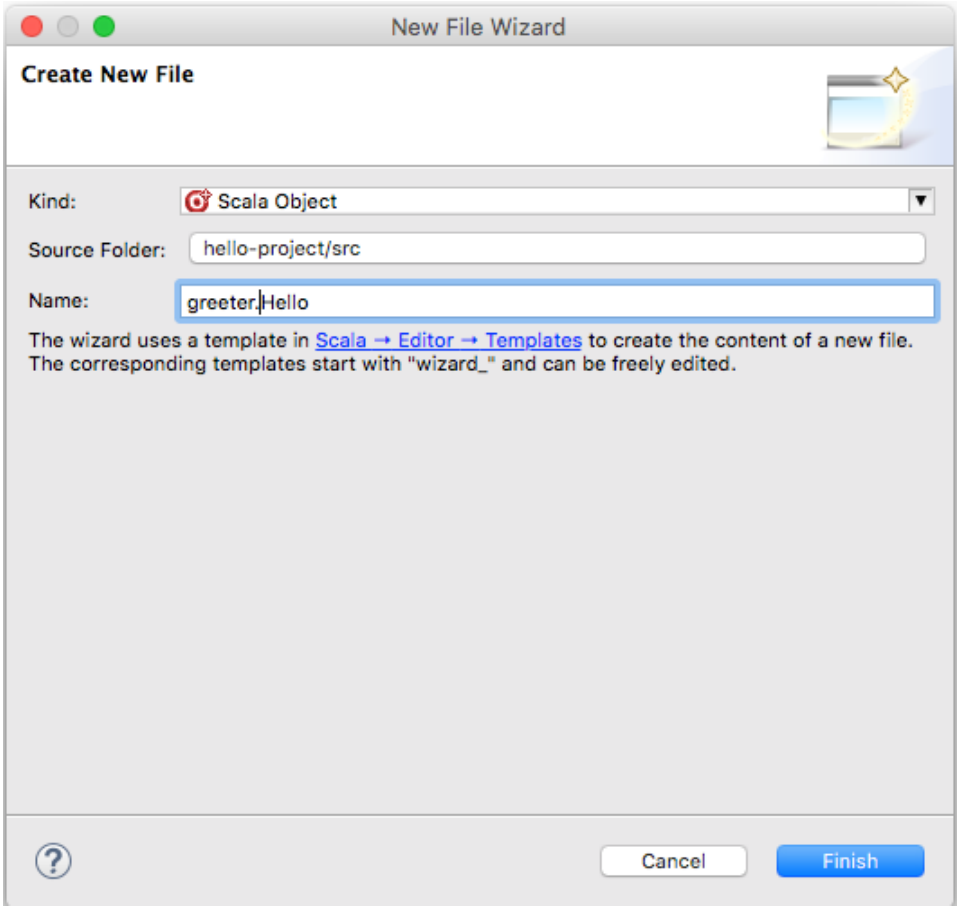
To familiarize yourself with the Scala IDE, create a small "Hello World" project in eclipse:

1. Go to "File" - "New" - "Other..." and select "Scala Project" from the folder "Scala Wizards"

2. Choose a project name and select "Finish"



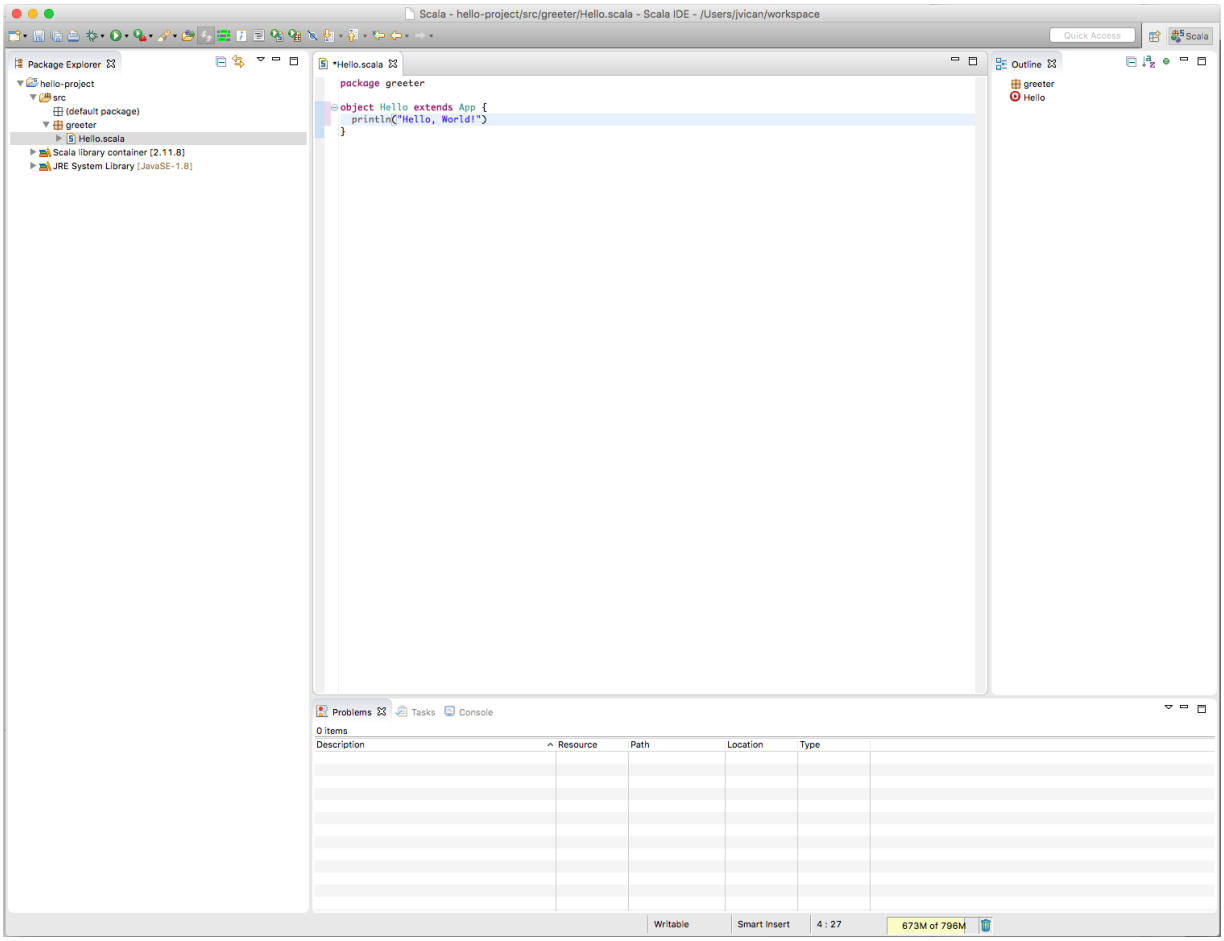
3. Select "File" - "New" - "Scala Object" to create a new object



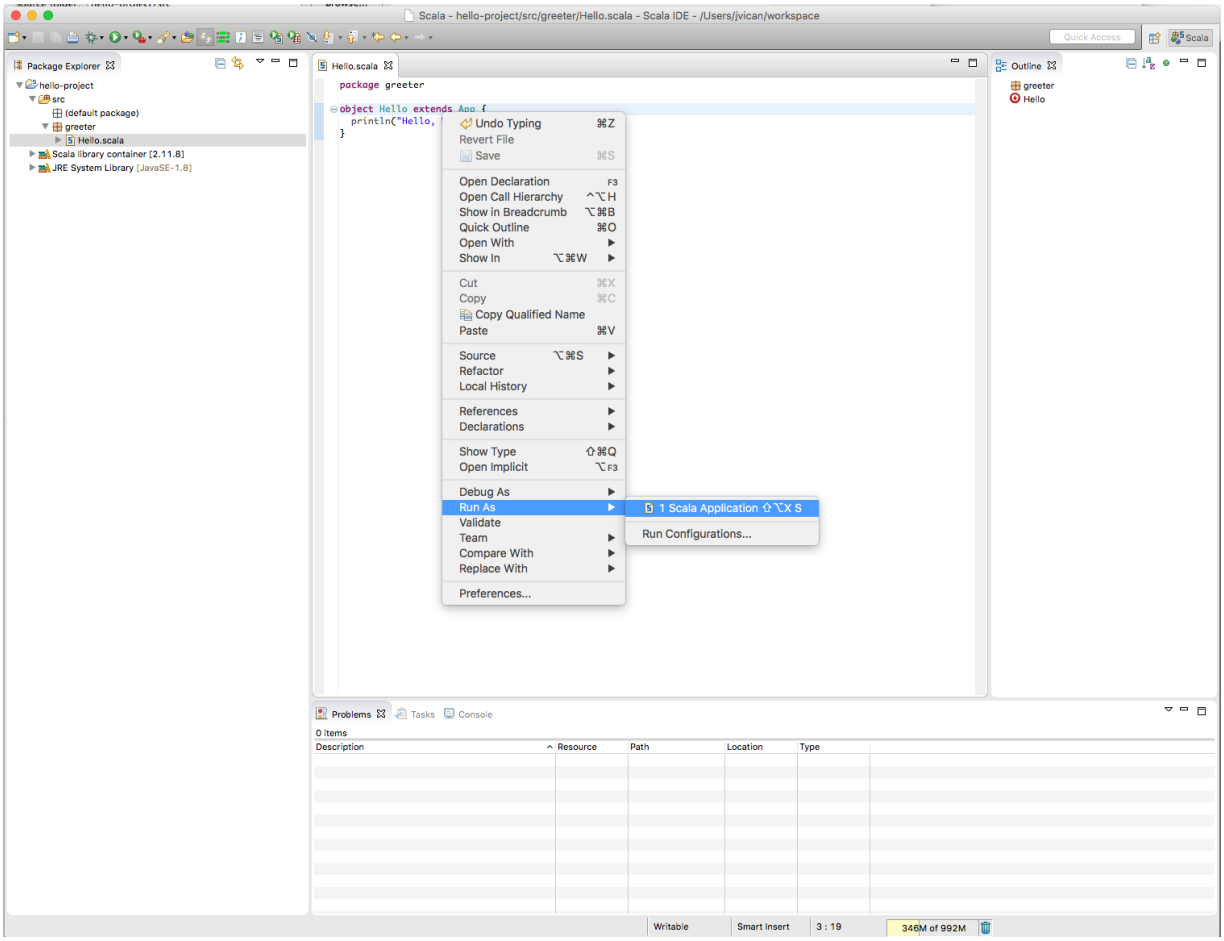
4. Enter "greeter.Hello" as the name for the object, where "greeter" is the name of the package in which it will be created.

5. Change the source code to the one given here:

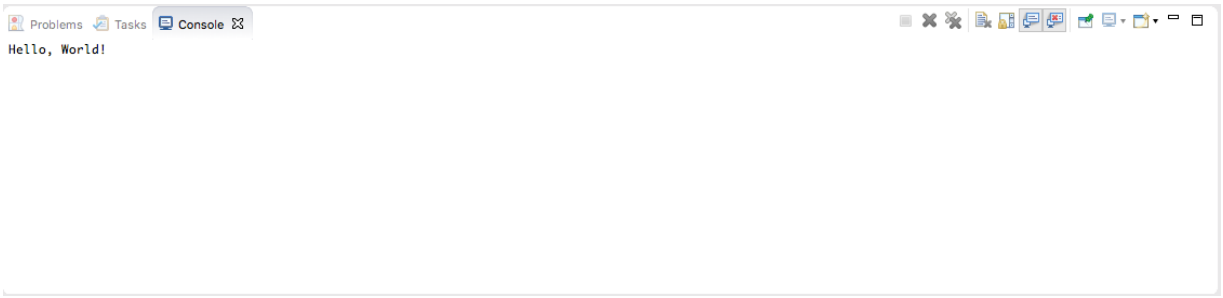
```
1  package greeter
2  object Hello extends App {
3    println("Hello, World!")
4
```



6. Save the file and right click on the line where the object is defined. Chose to run as "Scala Application".



You should see a the hello world output in the Eclipse console.



Creating a Scala Worksheet

Creating a Scala Worksheet is very easy:

1. Right-click on the package greeter in the hello world project that you just created
2. Select "New" - "Scala Worksheet"
3. Choose a name for your worksheet (different than Hello or the name you chose for the "Scala Object" before)

Now you can type some Scala code into the worksheet. Every time you save the file, the content of the worksheet will be evaluated. Copy the following code into the object of your worksheet:

```
1    val x = 1                                  //> x  : Int = 1
2    def increase(i: Int) = i + 1               //> increase: (i: Int)Int
3    increase(x)                                //> res0: Int = 2
```

Creating the Eclipse project from sbt

Every assignment in the course is a SBT project. Therefore, any Eclipse user must do this in order to open their project with Eclipse. Otherwise, Eclipse will not recognize the project at all.

First, you need to create the Eclipse project *from sbt.* Make sure you're using the version `0.13.x`. SBT doesn't have built-in support for eclipse, so if you want to be able to import your SBT projects into the IDE you need to install a SBT plugin. SBT plugins are installed in a file called `plugins.sbt`, under the `project` directory of your project's root folder. To create an eclipse project from `sbt`, add the following line to `project/plugins.sbt` if it's not already there:

```
1  addSbtPlugin("com.typesafe.sbteclipse" % "sbteclipse-plugin" % "4.0.0")
```

Then, run the following commands:

```
1  $ sbt
2  > eclipse
3  ...
```

Opening the Project in Eclipse

Once the Eclipse project has been created from sbt, you can import it in Eclipse. Follow these steps to work on the project using the Scala IDE:

1. Start up Eclipse
2. Select "File" - "Import" from the menu
3. In the folder "General", select the item "Existing Projects into Workspace" and click "Next >"
4. The text field "Select root directory" asks for the root folder of your project. The root folder is where the `build.sbt` file is located. Select the directory where you unpacked the handout archive (assignment), as explained in the beginning of the tutorial.
5. Click "Finish".

Working with Eclipse

To learn how to use the Scala IDE, we recommend you to watch the official tutorial video which is available here: http://scala-ide.org/docs/current-user-doc/gettingstarted/index.html.

This website also contains a lot more useful information and handy tricks that make working with eclipse more efficient.

Running Tests inside Eclipse

You can easily execute the test suites directly inside eclipse. Simply navigate to source file of the test suite in src/test/scala, right-click on it and select "Run As" - "JUnit Test".

The JUnit window will display the result of each individual test.

Mark as completed