

Basic programmig with Scala

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1 First steps

1.1 Your development environment for this course

I recommend you to install these:

- Latest IntelliJ IDEA EAP version from here:
<http://confluence.jetbrains.com/display/IDEADEV/IDEA+13+EAP>
- Java 8 (the current java source code requires JDK 8) from here:
<https://jdk8.java.net/download.html>
- sbt (one of the Scala build tools available) following the instructions here:
<http://www.scala-sbt.org/release/docs/Getting-Started/Setup.html>
- git for your OS of choice.

1.2 Running the code samples with sbt

Once you can use sbt from the command line, start it, compile the code samples and run `com.oscarvarto.HelloScala`:

```
$ pwd
/Users/oscarvarto/ScalaBasics
oscar-imac:ScalaBasics oscarvarto$ ls
README.md      build.sbt      doc            project        src
$ sbt
[info] Loading project definition from /Users/oscarvarto/ScalaBasics/project
[info] Updating {file:/Users/oscarvarto/ScalaBasics/project/}scalabasics-build...
[info] Resolving org.fusesource.jansi#jansi;1.4 ...
[info] Done updating.
[info] Set current project to scalaBasics (in build file:/Users/oscarvarto/ScalaBasics/)
> compile
[info] Updating {file:/Users/oscarvarto/ScalaBasics/}scalabasics...
[info] Resolving jline#jline;2.11 ...
[info] Done updating.
[info] Compiling 5 Scala sources and 4 Java sources to /Users/oscarvarto/ScalaBasics/target/scala-2.10
[success] Total time: 7 s, completed Jan 25, 2014 5:30:24 AM
> run
```

Multiple main classes detected, select one to run:

- [1] com.oscarvarto.Arithmetics
- [2] com.oscarvarto.ControlFlowScala
- [3] com.oscarvarto.HelloJava
- [4] com.oscarvarto.ControlFlowJava
- [5] com.oscarvarto.ArithmeticsJava
- [6] com.oscarvarto.HelloVariablesJava
- [7] com.oscarvarto.fp.OptionExperiment
- [8] com.oscarvarto.HelloScala
- [9] com.oscarvarto.HelloVariables

Enter number: 8

```
[info] Running com.oscarvarto.HelloScala
Hello Scala
```

[success] Total time: 13 s, completed Jan 25, 2014 5:30:41 AM
>

Note: The first time you run sbt you will have to wait while it downloads some stuff.

1.3 Opening the source code in IntelliJ IDEA

From the sbt prompt, type gen-idea. You should see something like:

```
> gen-idea
[info] Creating IDEA module for project 'scalaBasics' ...
[info] Resolving jline#jline;2.11 ...
[info] Excluding folder target
[info] Created /Users/oscarvarto/ScalaBasics/.idea/IdeaProject.iml
[info] Deleted existing library files
[info] Created /Users/oscarvarto/ScalaBasics/.idea
[info] Excluding folder /Users/oscarvarto/ScalaBasics/target
[info] Created /Users/oscarvarto/ScalaBasics/.idea_modules/scalaBasics.iml
[info] Created /Users/oscarvarto/ScalaBasics/.idea_modules/scalaBasics-build.iml
>
```

Once you open the project in IntelliJ IDEA, you should be able to see something like Figure 1.1.

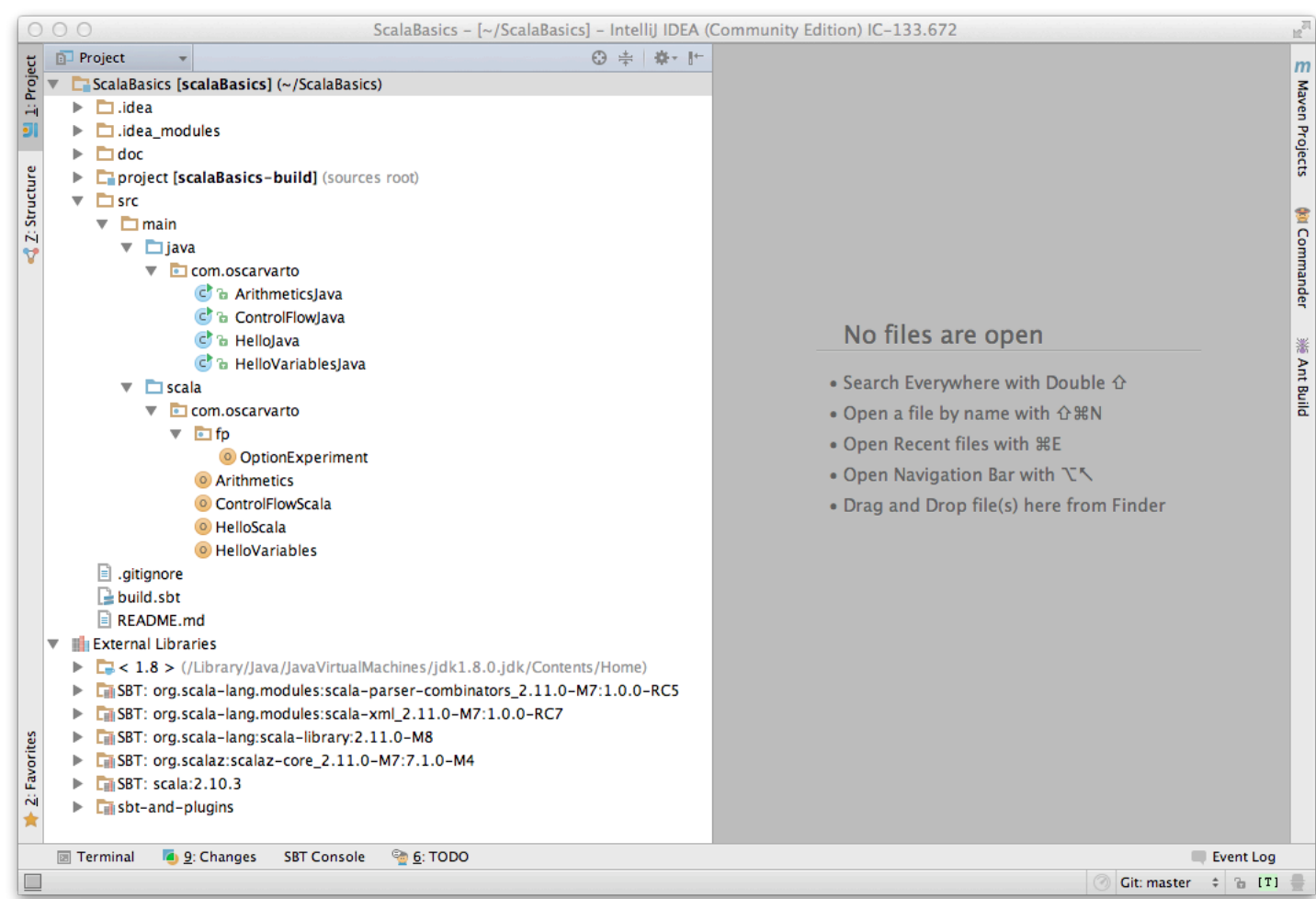


Figure 1.1: The ScalaBasics project opened in IntelliJ IDEA