O'REILLY®

Scala Programming Fundamentals Sealed Traits, Collections, and Functions

Daniel Hinojosa

About Me... Daniel Hinojosa

Programmer, Developer, Consultant, Instructor, and Speaker

Notable Content:

Testing in Scala (Book)
Beginning Scala Programming (Video)
Java & TDD (Video Training)
Scala Beyond The Basics
Scala Programming Fundamentals Series

Speaker:

OSCON No Fluff Just Stuff Tour DevNexus

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Other Scala Classes

- Learn the Basics of Scala in 3 hours
- Setting Up Scala Projects
- Scala Beyond the Basics
 - Implicits
 - Pattern matching
- Scala Programming Fundamentals
 - Classes, Methods, Traits
- Scala Programming Fundamentals
 - Sealed, Collections, and Functions

Structure of the Class

- All LiveCoding
- Performed in IntelliJ and Eclipse
- Commits and Pushing performed throughout the class
- Your Choice :
 - Watch
 - Code with Me
- Definitely Ask Questions

Checklist before we proceed...

- We provided pre-setup configuration already.
- Be sure JAVA_HOME is set and that the following works:
 - javac -version
 - java -version
- Be sure SBT is setup and ensure that the following works
 - sbt about
- Be sure that Scala plugins are installed in IntelliJ and Eclipse

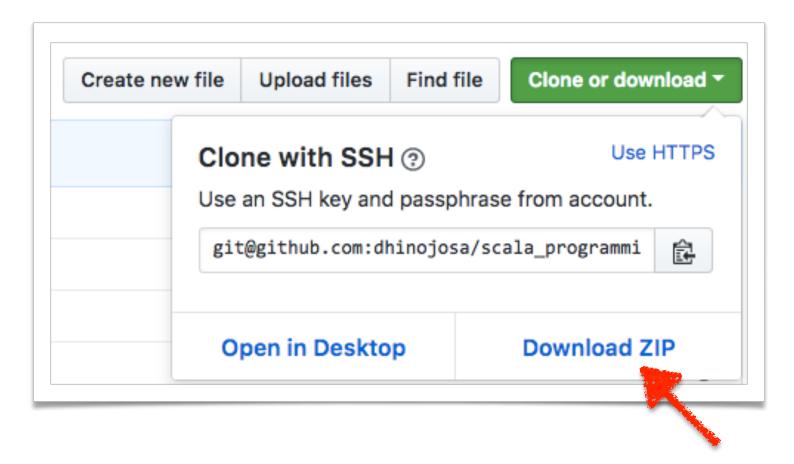
Repository Location, Clone it!

https://github.com/dhinojosa/scala_programming_fundamentals_2

or use the abbreviation...

https://bit.ly/2lgoOyp

But, if don't know Git too well...



Once downloaded...Run SBT

```
~/Development/scala_programming_fundamentals_2(master) » sbt
```

You should see something like this...

```
~/Development/scala programming fundamentals 2(master) » sbt
[info] Loading global plugins from /Users/danno/.sbt/1.0/plugins
[info] Loading settings from plugins.sbt ...
[info] Loading project definition from /Users/danno/Development/scala
/project
[info] Loading settings from build.sbt ...
[info] Set current project to scala programming fundamentals 2 (in bu
opment/scala programming fundamentals 2/)
[info] sbt server started at local:///Users/danno/.sbt/1.0/server/30c
sbt:scala programming fundamentals 2>
```

You'll need to update your project...

```
~/Development/scala programming fundamentals 2(master) » sbt
[info] Loading global plugins from /Users/danno/.sbt/1.0/plugins
[info] Loading settings from plugins.sbt ...
[info] Loading project definition from /Users/danno/Development/scala programming
/project
[info] Loading settings from build.sbt ...
[info] Set current project to scala programming fundamentals 2 (in build file:/
opment/scala programming fundamentals 2/)
[info] sbt server started at local:///Users/danno/.sbt/1.0/server/30cfdcd7772580
sbt:scala programming fundamentals 2> update
[info] Updating ...
[info] Done updating.
[success] Total time: 2 s, completed Mar 29, 2018, 12:59:55 PM
sbt:scala programming fundamentals 2>
```

Updating Your Project

- This will download Scala and all your dependencies into your ~/.ivy2
- This may take a while depending on your connection speed.
- If you have any problems, there might be issues with network connection, or proxy based issues

Proxy Issues

 If you have problems because of any proxy server, add the following to your environment variables and change username and password accordingly

```
export JAVA_OPTS="$JAVA_OPTS \
-Dhttp.proxyHost=yourserver \
-Dhttp.proxyPort=8080 \
-Dhttp.proxyUser=username \
-Dhttp.proxyPassword=password"
```

Lab: Let's get setup!

Clone or download
 scala_programming_fundamentals_2
 from
 https://github.com/dhinojosa/

```
scala_programming_fundamentals_2
```

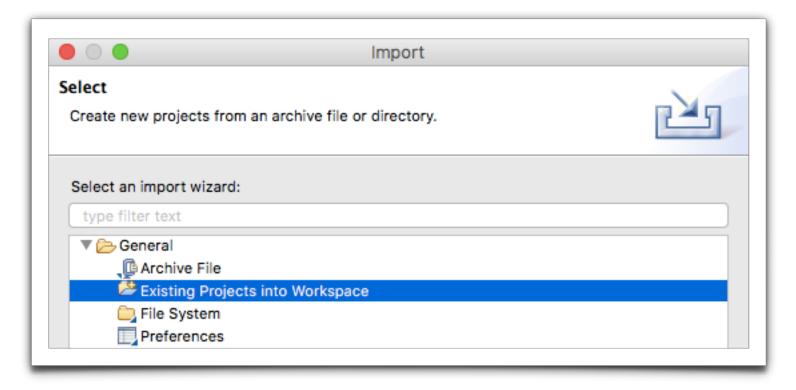
- Run sbt at the command line
- Once in the sbt console, run update
- Wait for the download to complete

Setup for Eclipse

Run the Eclipse Plugin in SBT

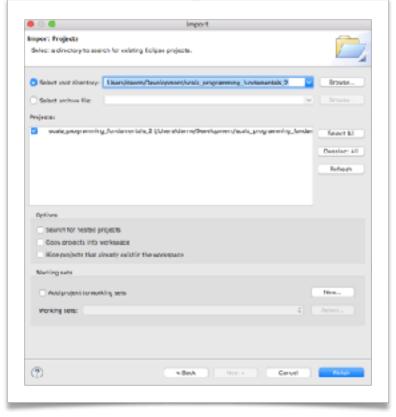
```
sbt:scala_programming_fundamentals_2> eclipse
```

Import Existing Project



File > Import Project >
Select Existing Projects Into Workspace > Next

Select Root Directory



Select the Root Directory of the Project using Browse, Ensure that the Project is Found, hit Finish Project is now ready

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Select the Root Directory of the Project using Browse, Ensure that the Project is Found, hit Finish

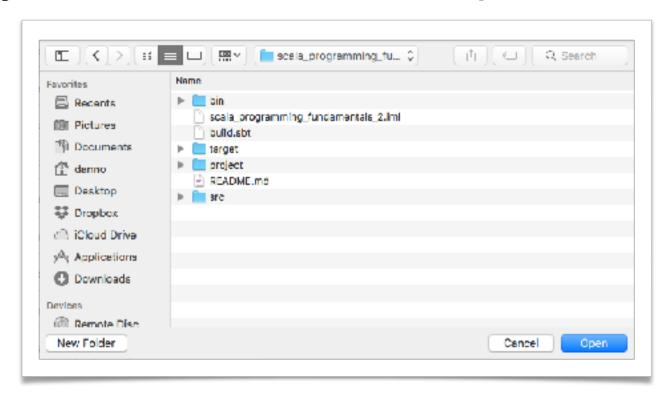
Setup for IntelliJ

From IntelliJ Intro Screen, or from the splash screen, select Import Project



Locate the

scala_programming_fundamentals_2 project and click OK, accept defaults



Project is now ready...

```
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    scala programming fundamentals 2 - Develop

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    Is project Iscala programming fundamentals ?
                                                    class FunctionsSpec extends FunSvite with Matchers (
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           Til com.ora.scalaprogrammingfundamen
                                                       f.apgly("Hello") should be(5)
                CollectionsSpec
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                                                     test("The above can be whittled down to the following:") {
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        .cache-tes/s
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       [irfc] Reapplying settings...
       [irfc] Set current project to scala_programming_fundamentals_2 (in build
       file:/Users/darng/Development/scala_programming_fundamentals_2/)
       [irfc] Applying State transformations org.jettrains.sbt.CreateTasks from /Users/damnc/Library/Application
        Support/IntelliJIdea2017.3/Scala/launcher/sbt-structure-1.0.jar
       [irfc] Reapplying settings...
       [irfc] Set current project to scala programming fundamentals 2 (in build
       file:/Users/danno/Development/scala_programming_fundamentals_2/)
       [info] Writing structure to /private/var/folders/_x/2x6ld3jx3xg2x6pr1y29t7540000gn/T/stt-structure.xxl...
       [irfc] Done.
       [success] Total time: 2 s, completed Mar 29, 2038 8:06:30 PM
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Sealed Traits and Abstract Classes, Collections, and Functions (Live Coding)

Thank You