

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

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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

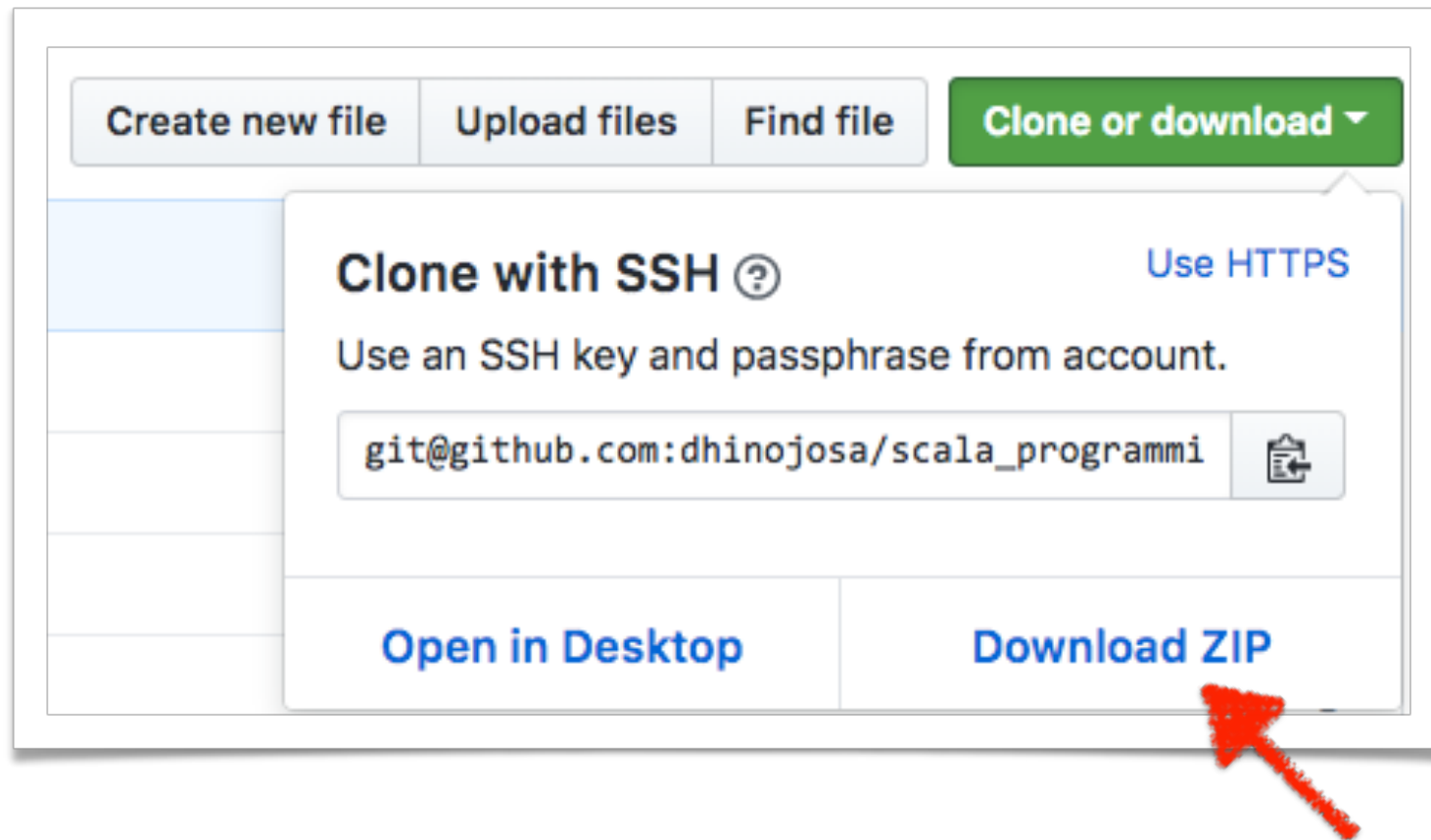
Repository Location, Clone it!

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_fundamentals_2/project  
[info] Loading settings from build.sbt ...  
[info] Set current project to scala_programming_fundamentals_2 (in build file:/Users/danno/Development/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

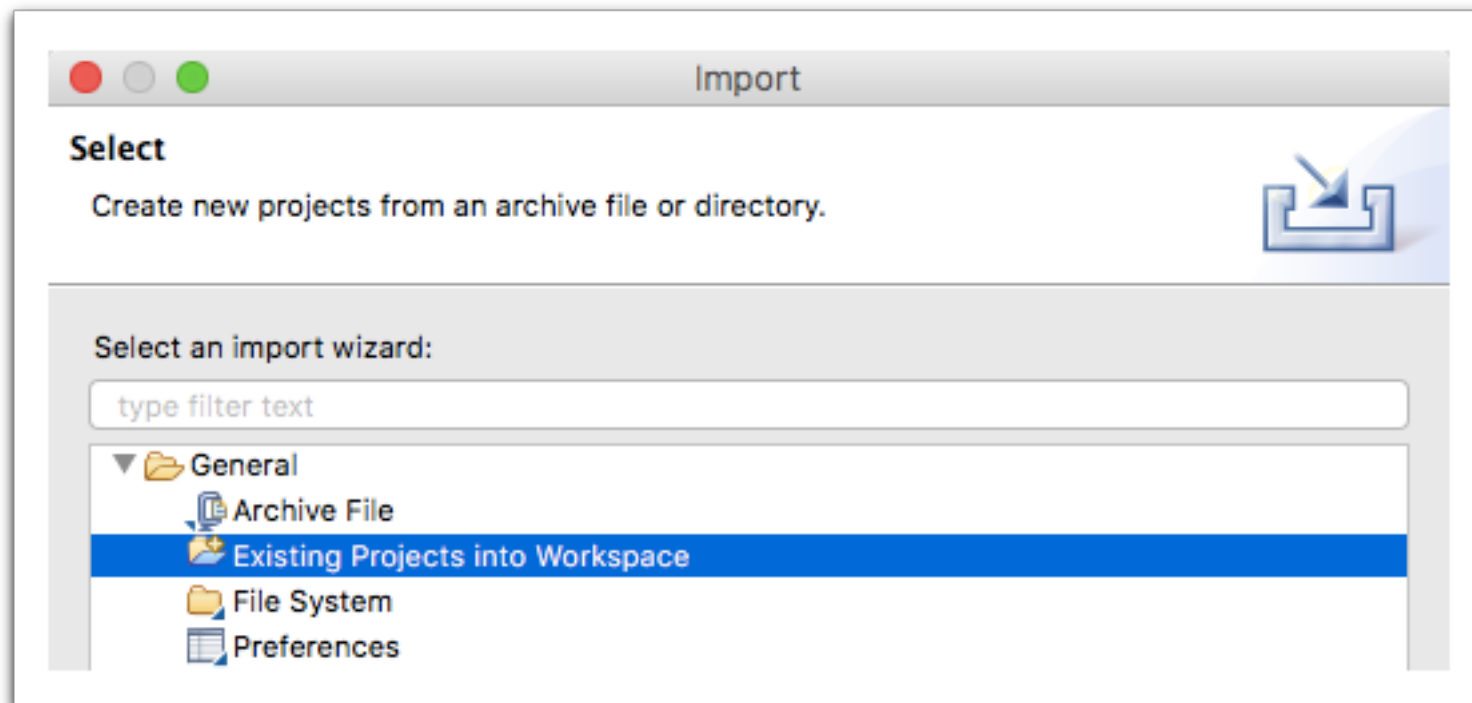
`https://github.com/dhinojosa/scala_programming_fundamentals_2`
- Run `sbt` at the command line
- Once in the `sbt` console, run `update`
- Wait for the download to complete

Setup for Eclipse

Run the Eclipse Plugin in SBT

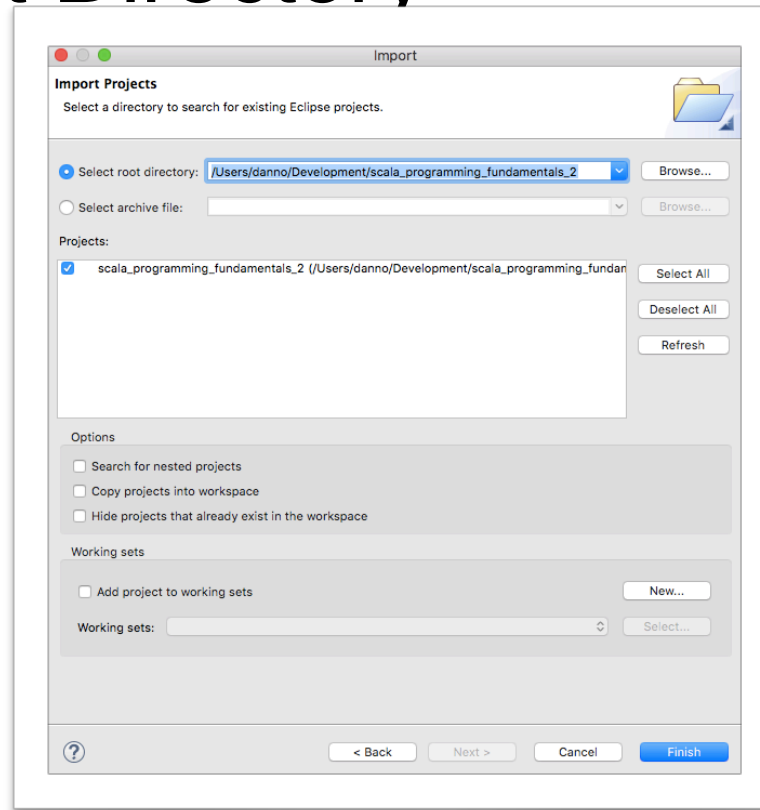
```
sbt:scala_programming_fundamentals_2> eclipse
```


Import Existing Project



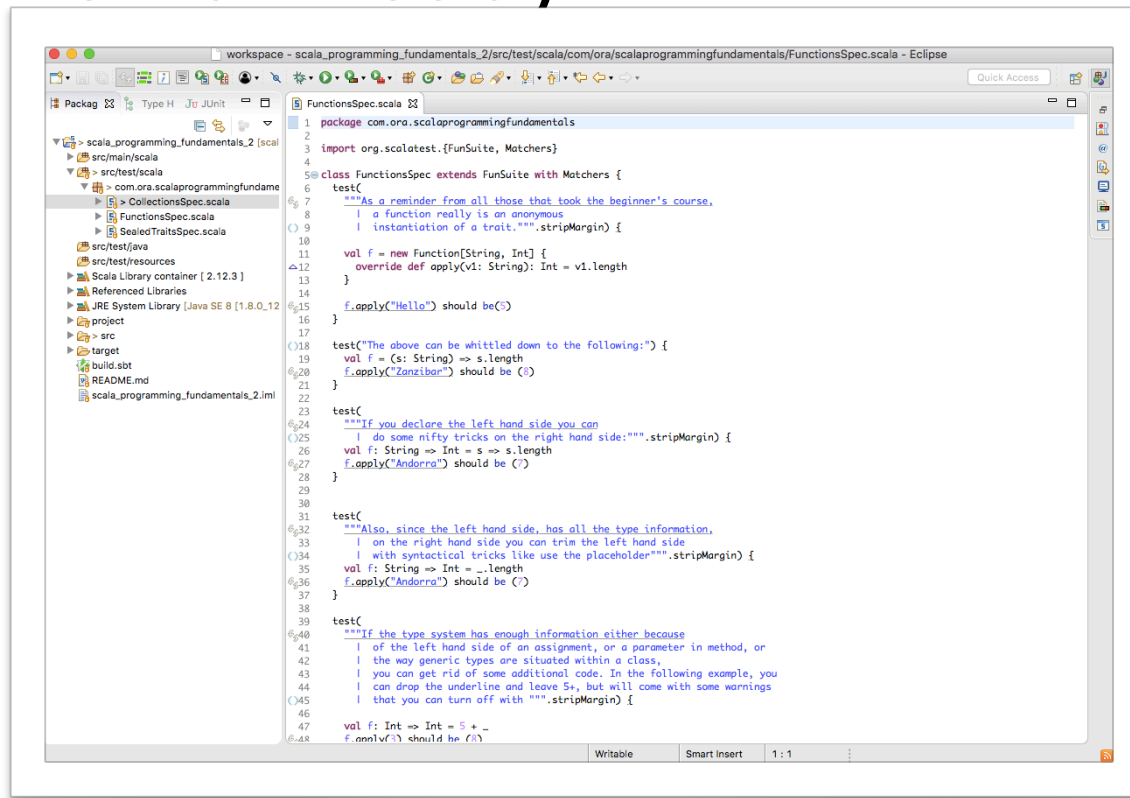
File > Import Project >
Select Existing Projects Into Workspace > Next

Select Root Directory



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

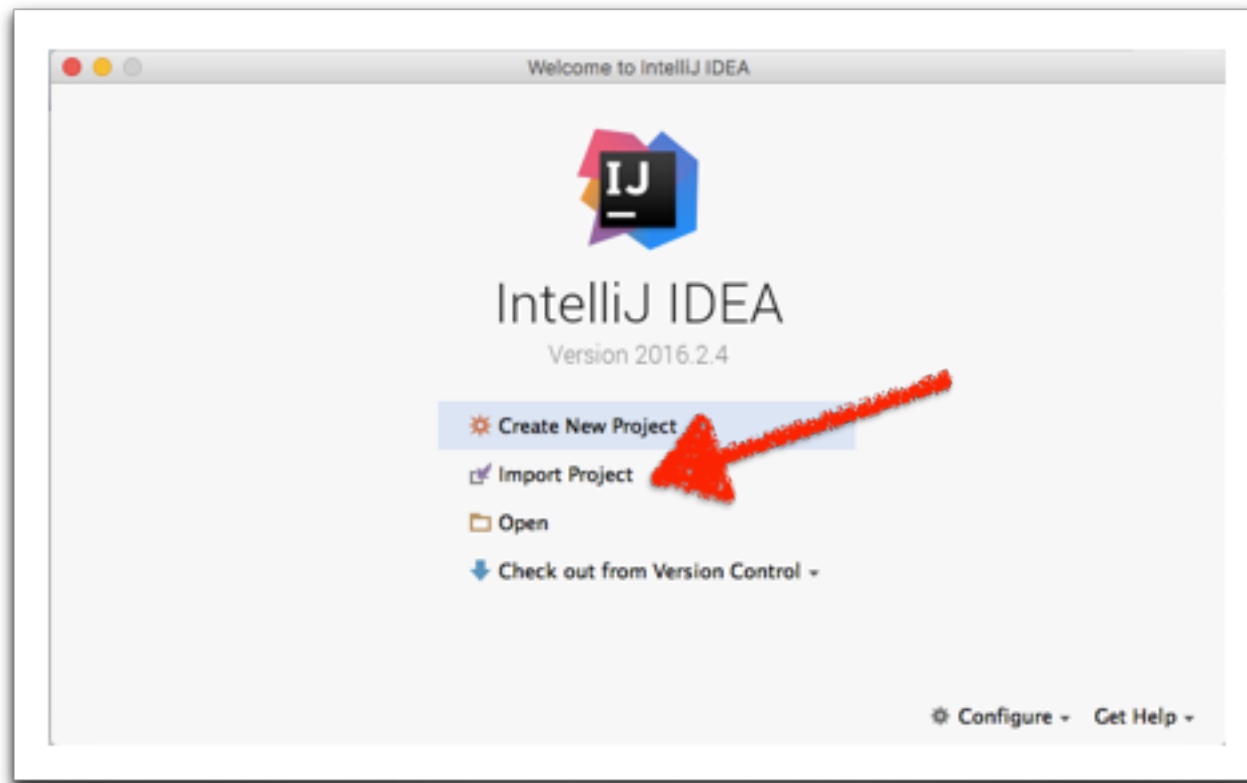
Project is now ready



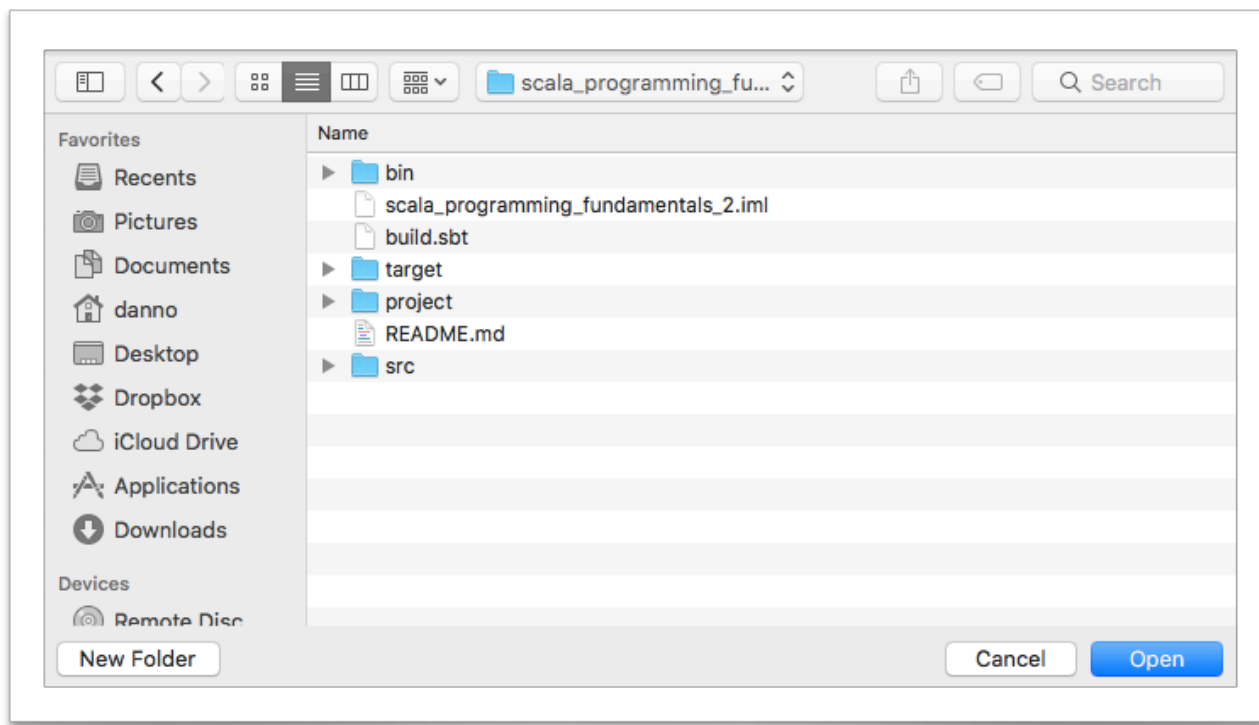
Select the Root Directory of the Project using Browse,
Ensure that the Project is Found, hit Finish

Setup for IntelliJ

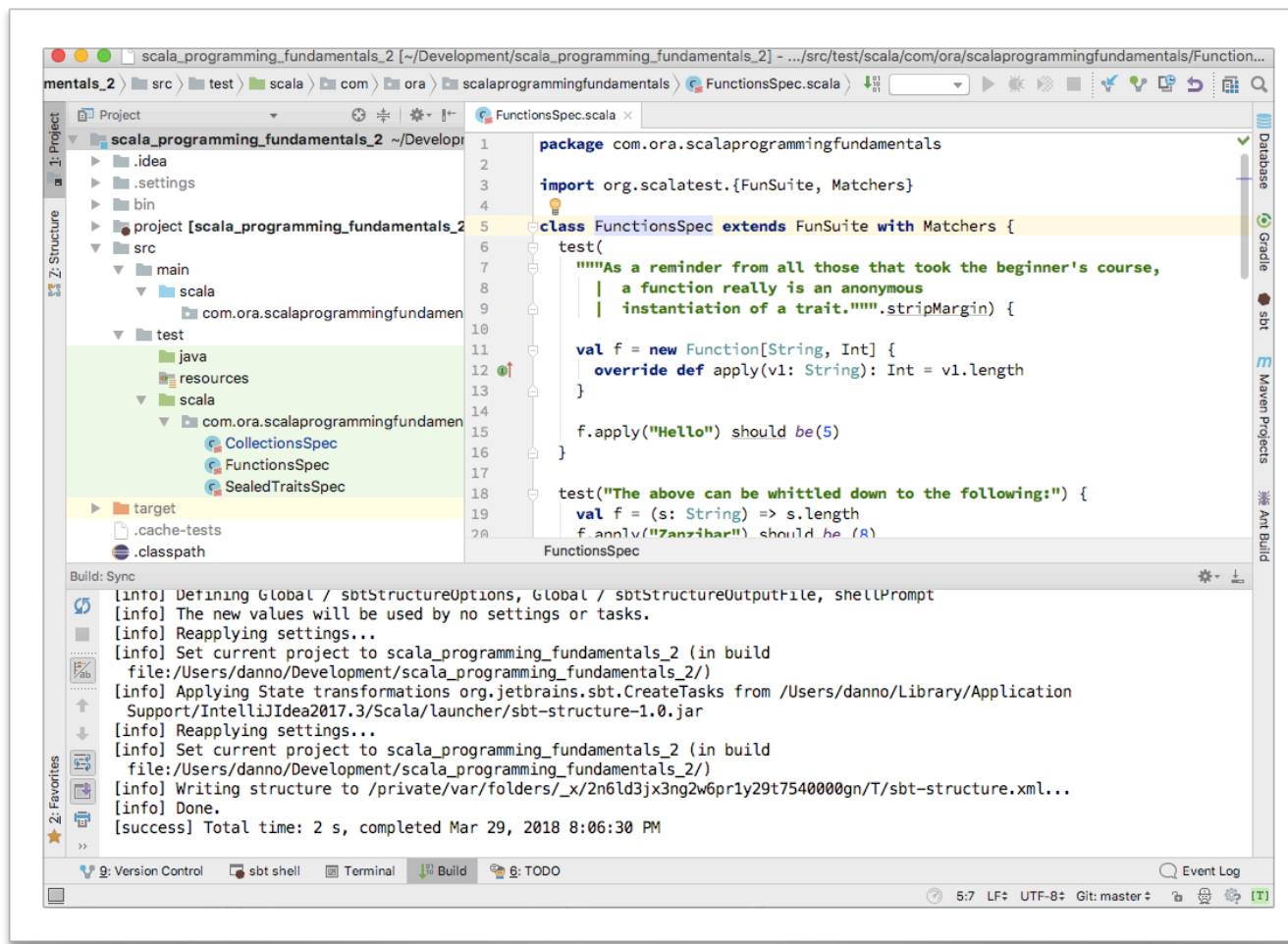
From IntelliJ Intro Screen, or from the splash screen, select Import Project



Locate the
scala_programming_fundamentals_2
project and click OK, accept defaults



Project is now ready...



Traits and Abstract Classes, Collections, and Files

(Live Coding)

Thank You