Scala

Session 2

Course Contents

Today's Session (Getting Up to Speed)

- Conditional Expressions
- Type Hierarchy
- Loops
- Pattern Matching

Environment Setup

- JDK
- sbt (build tool for Scala)
- Idea-Intellij

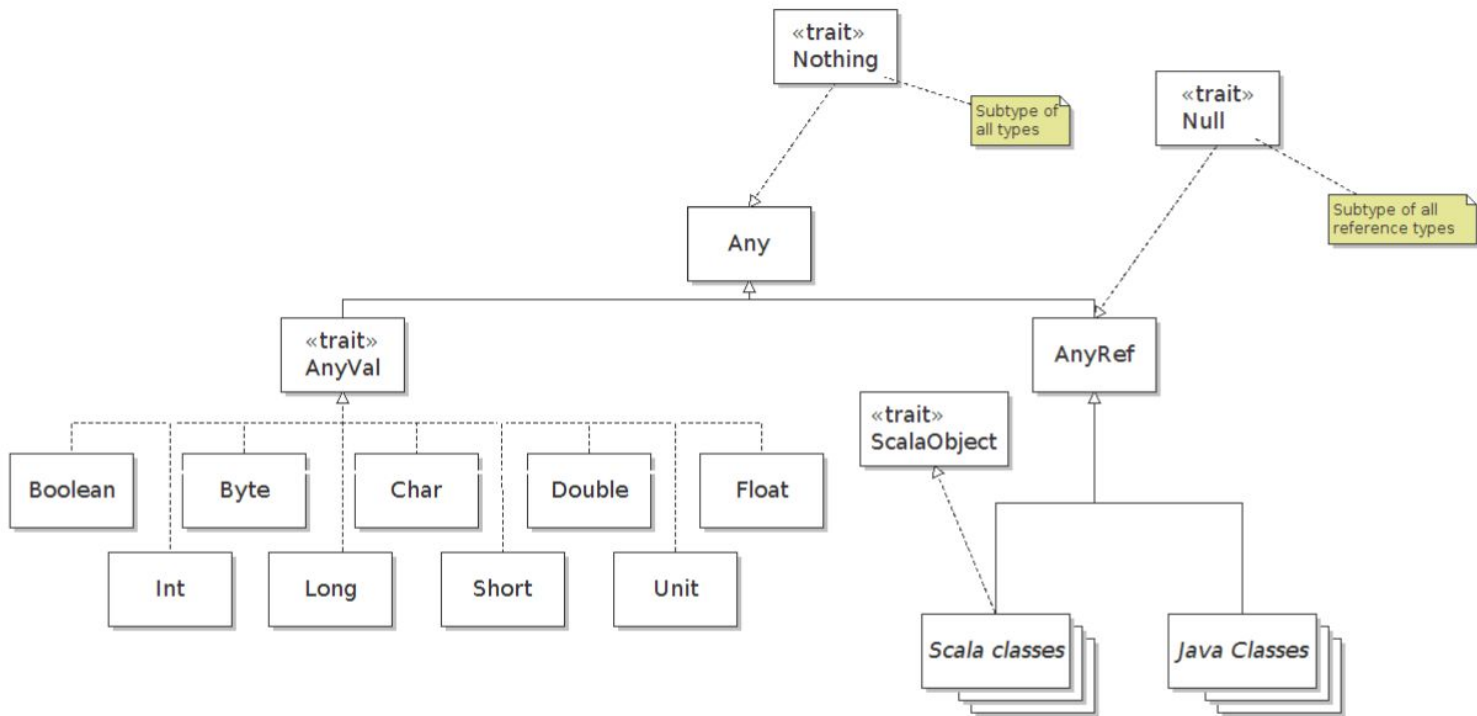# Sample Project

- Lets create a simple project via IntelliJ

Expressions vs Statements

- Expression returns a value e.g. (1+3)
- Statement carries out an action e.g. (if-else)
- In Scala, almost every construct have a value.

Conditional Expressions

- `if (x > 0) 1 else -1`
- This is also equivalent to
  - `x > 0 ? 1 : -1` (Java, C++)
- Every expression has a type
- Type of expression is supertype of both branches
- Unit type
  - `if (x >0) 1 else ()`
  - Think of () as placeholder for "No useful value"
  - Think of Unit as analog to void. However void is like empty wallet, whereas unit is like wallet with a bill labelled "No dollars"
- If condition multiple lines

Type Hierarchy

Loops

- while
- for

Pattern Matching

- Simple Matching
- Matching on Type
- Matching on Sequence
- Matching on Tuples