

Appendix B: Java/Scala²

Feature	Java	Scala
Public Class	<code>public class</code>	<code>class</code>
Loops	<code>for(Type it : c){...}</code>	<code>c.foreach {...}</code>
Lists	<code>List list = asList(1,2,3);</code>	<code>val list = List(1,2,3)</code>
Maps	<code>Map m = ...; m.put(x,y);</code>	<code>val m = Map(x -> y)</code>
Function Def.	<code>void method(Type t) {}</code>	<code>def method(t: Type) = {}</code>
Mutable Value	<code>Type t</code>	<code>var t: Type</code>
Immutable Value	<code>final Type t</code>	<code>val t: Type</code>
Null safety	<code>(x == null ? null : x.y)</code>	<code>for (a <- Option(x)) yield a.y</code>
Null replacement	<code>(x == null ? "y" : x)</code>	<code>Option(x) getOrElse "y"</code>
Sort	<code>Collections.sort(list)</code>	<code>list.sort(_ < _)</code>
Wildcard import	<code>import java.util.*;</code>	<code>import scala.collection._</code>
Var-args	<code>(String... args)</code>	<code>(args: String*)</code>
Type parameters	<code>Class<T></code>	<code>Class[T]</code>
Concurrency	<code>Fork/Join</code>	<code>Akka</code>

No Java Analog

Feature	Scala
Default closure arg.	<code>_</code> (<i>underscore is positionally matched</i>)
Default value	<code>def method(t:String = "yes")</code>
Add method to object	<code>use Trait</code>
Auto-delegate	<code>use Trait</code>
Extension methods	<code>implicit class</code>
Rename import	<code>import scala.collection.{Vector => Vect}</code>

²Version 1.3 of this cheat sheet.

Null, Nil, Etc.

Type	Description
Null	A Trait with one instance, null, similar to Java's null.
Nil	Represents an empty List of zero length.
Nothing	A Trait that is a subtype of everything. There are no instances of it.
None	None signifies no result. Option has two subclasses: Some and None.
Unit	Type to use on a method that does not return a value