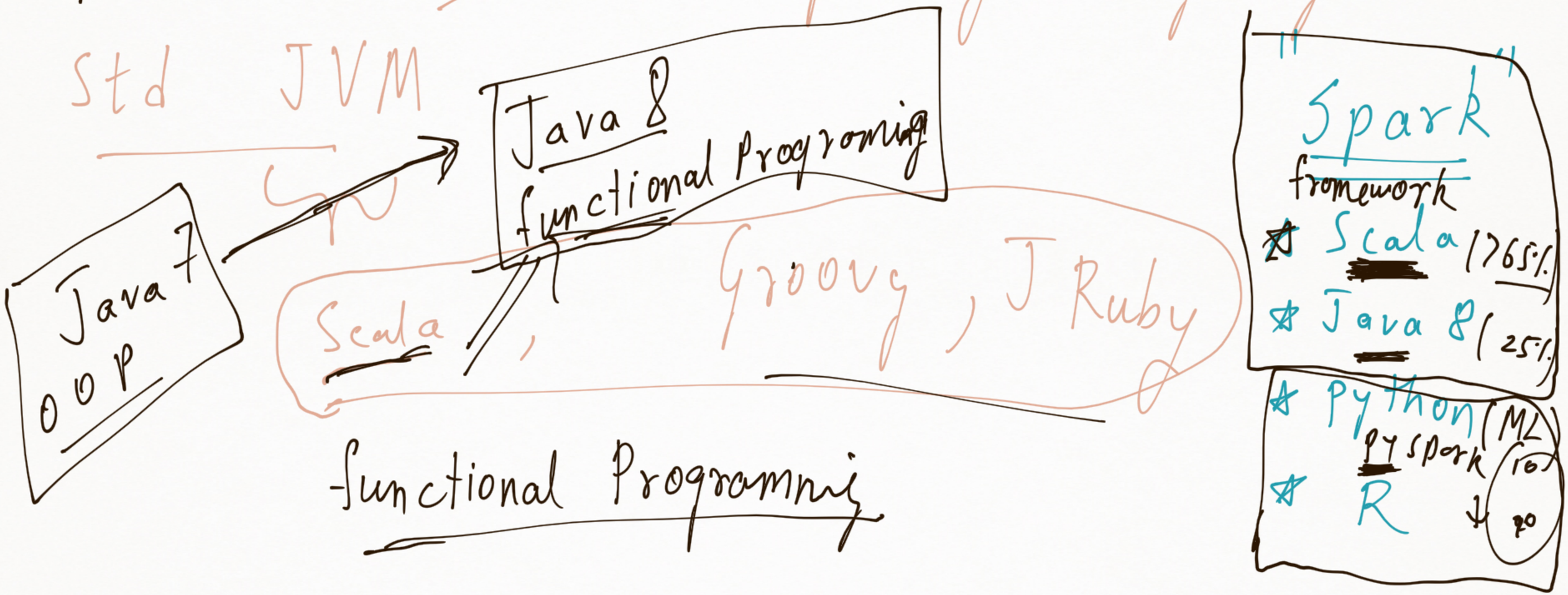
Scala Day 1

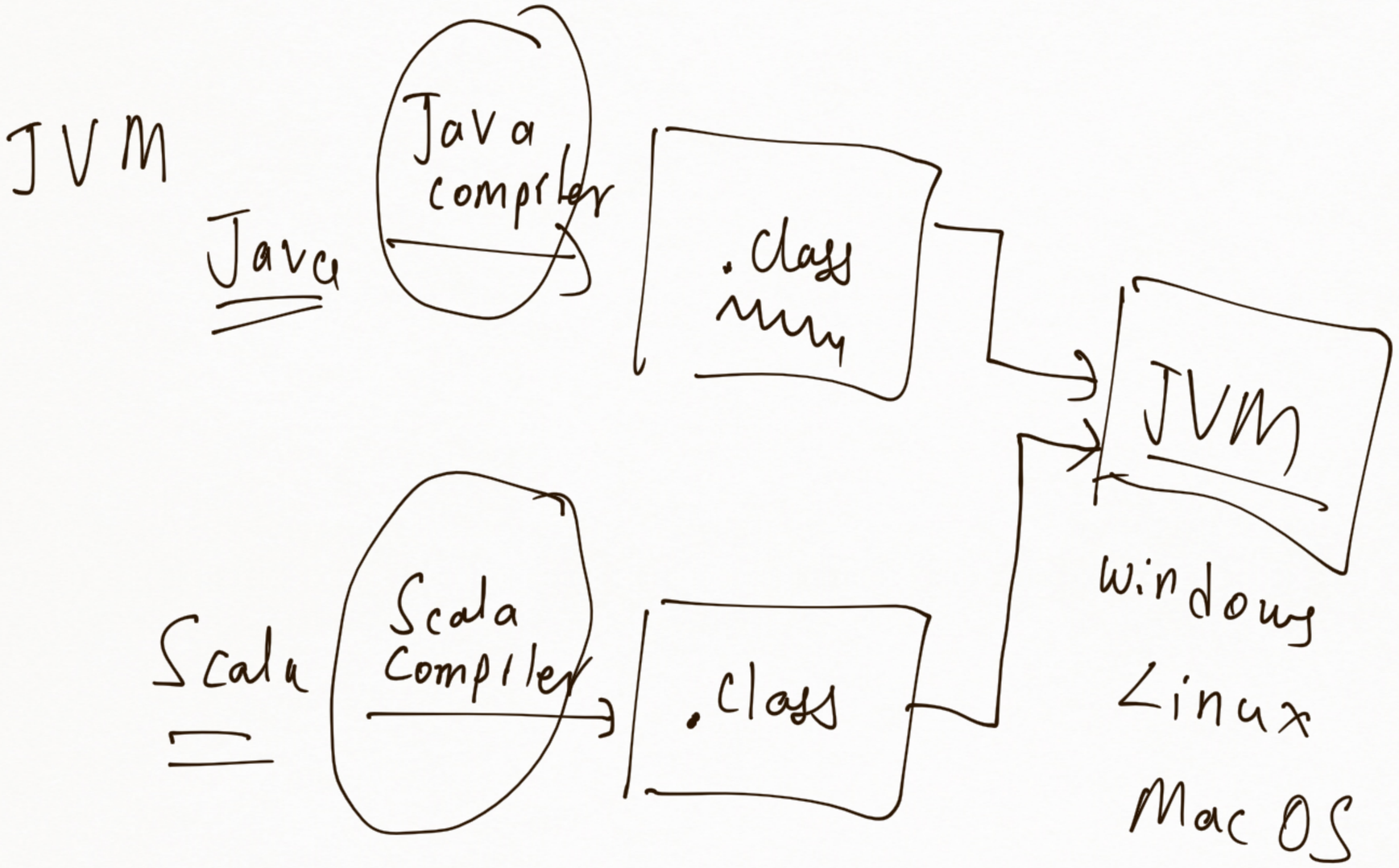
Created 2004 By Martin Odersky

"Java"

Scala → "Scalable plograming Longuonge"

Std JVM




JVM
Java
Java compiler
.class
Scala
Scala Compiler
.class
JVM
Windows
Linux
Mac OS

Scala OOP + Functional Programming

Java 8 OOP + Functional Programming

Execution / Development Environment

* Java & * Scala

* Eclipse Or Intellij Or (VS Code, Python) , Pycharm

Java → Maven

Scala → SBT (build.sbt)

Scala Build Tool

} Dependency Management

Java / Scala → Excel Reads / Excel Write

"Apache POI" Package

Java

1] OOP Language

Primitive data type : int, char, boolean.
byte, short, long, float, double

Operators: + - x ÷

2]
```
public static int sum(int a, int b)
{
    int c = a + b;
    return c;
}
```

return

arguments
parameters

Scala

1] Pure OOP Language

Int

→ Methods +, -, x, ÷

→ Imperative

functional Programming

```
def sum(a: Int, b: Int) = {a+b}
```

3) Java

```
int c = a + b;
```

integer

primitive data type

3) Scala int int

val c = a + b

ver c = a + b

val → Value

Val a = 20

a = 15 Error

ver → Variable

Var a = 20

a = 12

int, float

integer

Static typed Language.

Oval c : Int = a + b

c = a + 10

Ver c : Int = a + b

objects

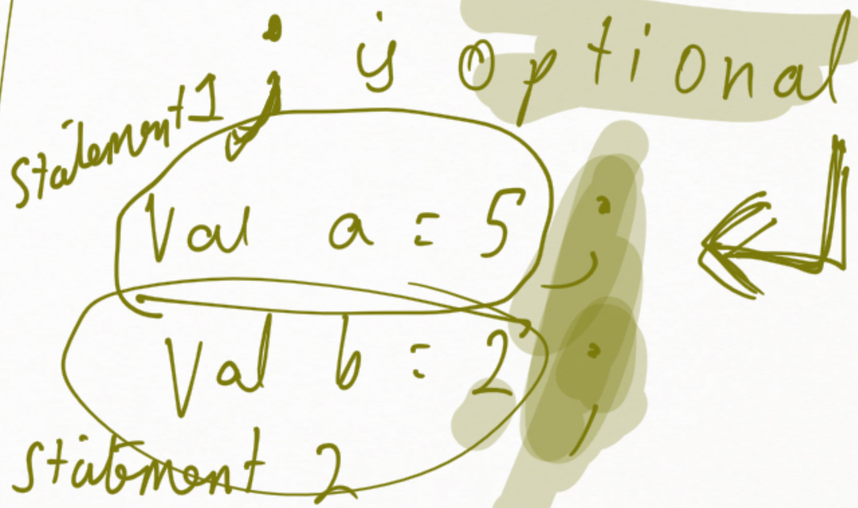
Java

; end of statement

```
int a = 5;
int b = 2;
```

Scala

; is optional




```
Val a = 5 ;   Val b = 2;
```

Java

sum (a, b)

Operators + - x ÷

Scala.

a . sum (b)

a equals b

a equals b

optional

int c = a + b

c = a.sum(b)

sum

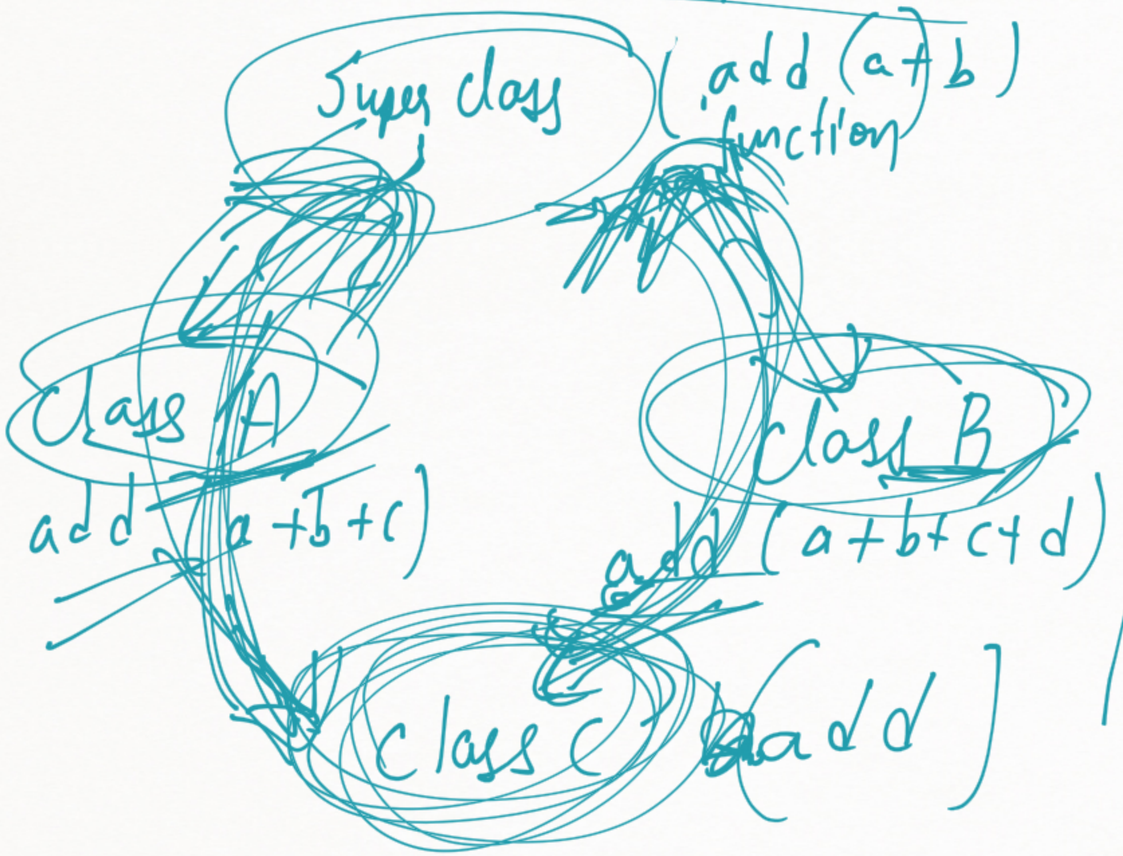
subtract

multiply

divide

"Java"

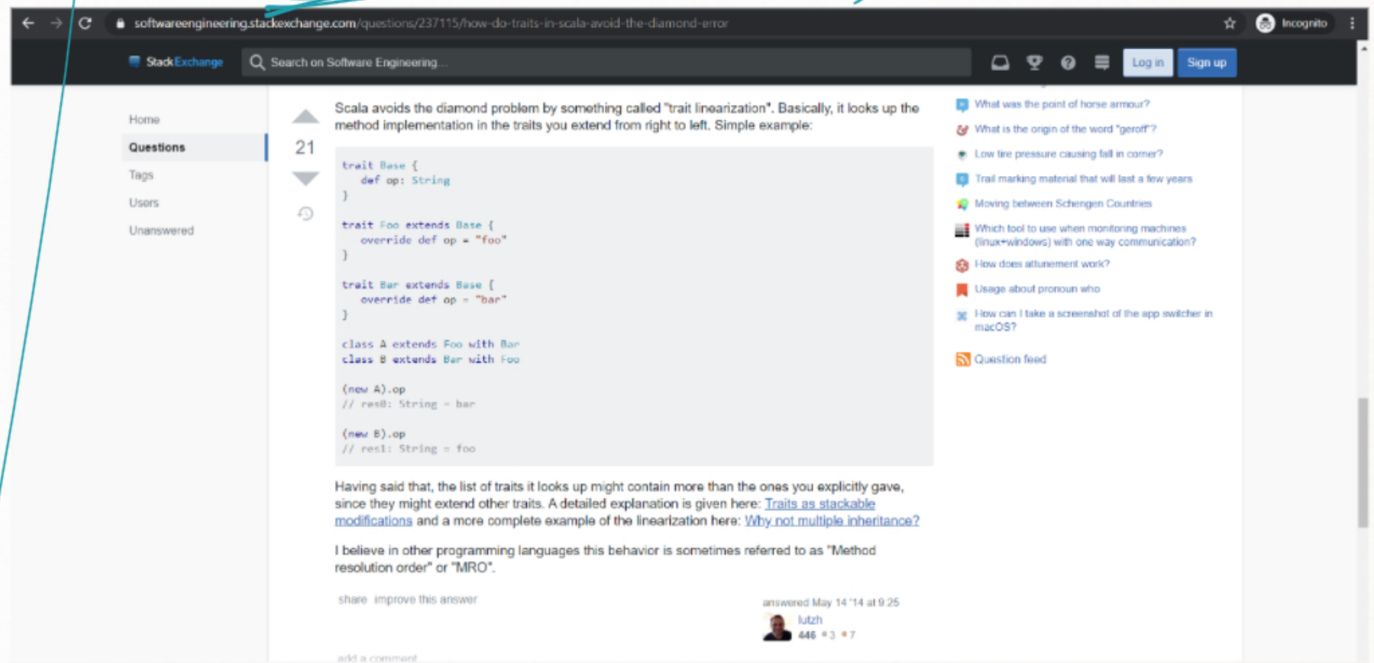
"Diamond ⇄ Inheritance problem."

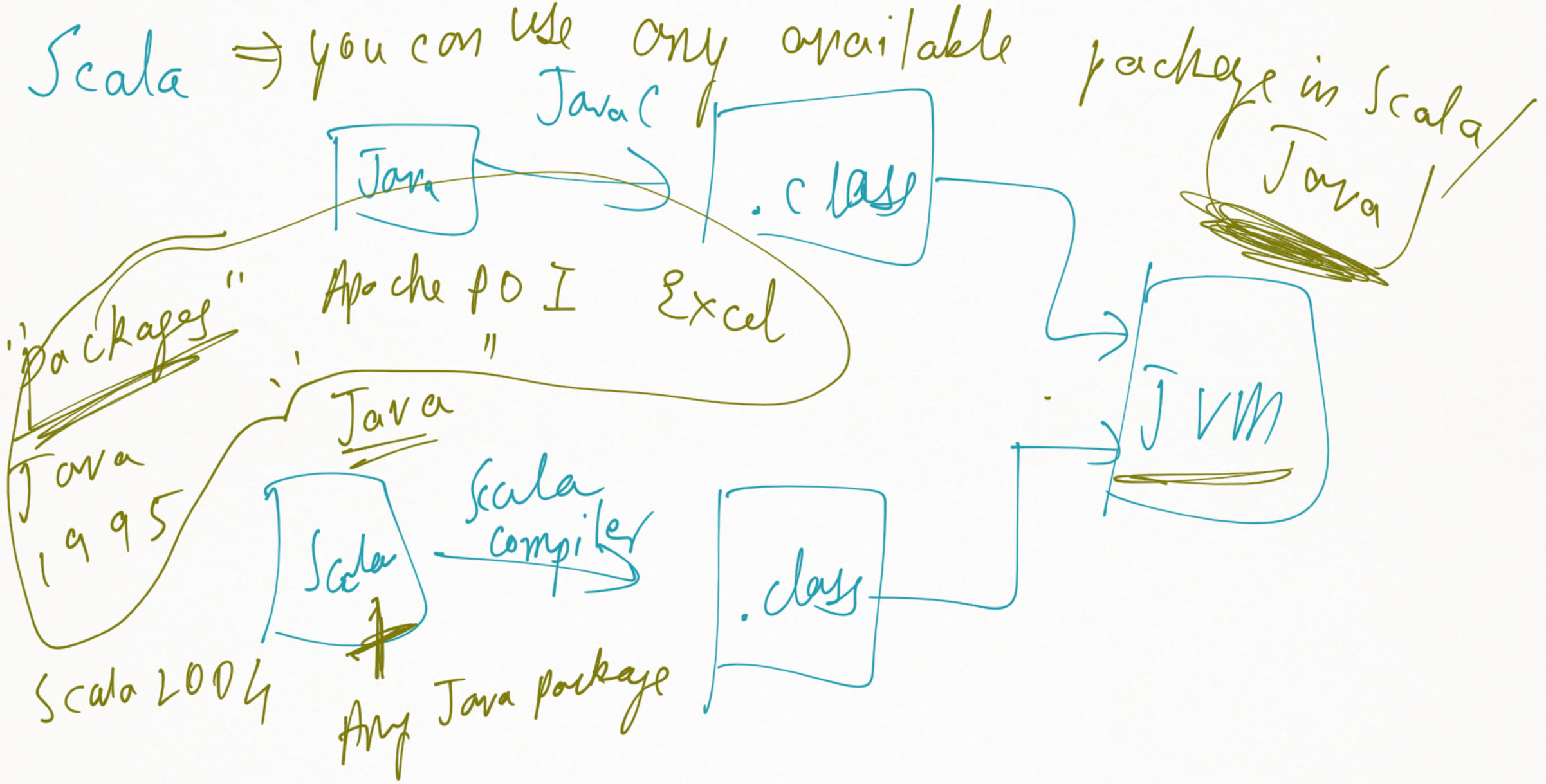


Scala

Trait (avoids problem)

Diamond




Scala ⇒ you can use any available package in Scala
Java
Javac
.class
Java
"packages"
Apache POI
"
Excel
Java
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Scala compiler
.class
JVM
Scala 2004
Any Java package

Refer to word document to install java + Scala.