OO Programming

Java – setup and run

* Java standard edition ( Java SE)
  + standard
* Java enterprise edition (Java EE)
  + Heavy duty server systems – medium to large companies
* Java Micro Edition (Java ME)
  + Small memory constrained devices
* Java FX
  + GUI internet applications

Java is write once, run anywhere

* Architectural neutral
* Portable across different platforms

Easy to work with

Object orientated

* An interacting collection of independent software components

Internationalization

* Uses 16 but Unicode characters

Performance

* Although an interpreted language, Java programs run almost as fast as native C, C++

Simple and easy to develop powerful and well designed set of APIs

-<https://docs.oracle.com/en/java/javase/15/docs/api/index.html>

Different Parts to Java

* JDK – Java development kit
* JRE – Java runtime environment Java Class Library
* JVM – Java Virtual Machine – executes the bytecode

The name of .java source file must be the exact same as the name of the class in our code, its also case sensitive

Java API is organised into Modules which consist of packages which consist of Classes/interfaces

Packages are just handy way to group similar classes.

* Java.math.. for example is maths related classes

Can have more than one constructor. A constructor sets up the data for a new object.