| Level | M1 |
|---|---|
| Course | Java introduction |
| Subject | Lab Work 0 |
| Duration | |

**JUNIA** Grande
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*Objective: Download, install and configure the required environment to develop in Java*

## 1. JDK – JRE - JMV
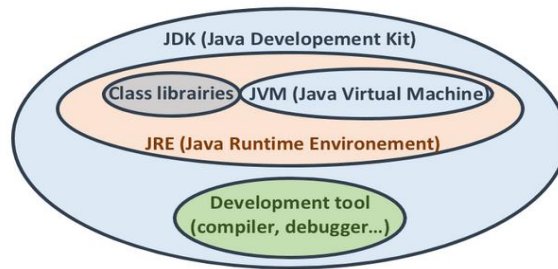


For interoperability purpose, **J**ava programs runs in a **V**irtual **M**achine (**JVM**). The JVM will interpret the bytecode generated by the compilation. The JVM along with external libraries form the **R**untime **E**nvironment **(JRE)**. The JRE contains the minimum configuration to execute Java programs.

In order to develop Java programs, some additional elements are needed (compiler, debugger …). The JRE + these tools form the **J**ava **D**evelopment **K**it (**JDK**).

Go to the official oracle web Page on order to download the latest JDK version (Java 17 - released in september 2021 avoid Java 20 which is not stable yet) and follow the instructions: https://docs.oracle.com/en/java/javase/17/install/

## 2. IDE

Even if it is possible to write Java code using whatever text editor, the use of an **IDE** (**I**ntegrated **D**evelopment **E**nvironment) is greatly comfortable.
IDE are programs you can use to compose, debug, and compile code. The two most common IDEs to develop in Java are Eclipse and Netbeans.

You can choose the one you prefer, but i recommend using Netbeans. Down and install the 19 version here : https://netbeans.apache.org/
Any other version car work also.

## 3. Github

For programming, you may want to collaborate with another student. Instead of sending files or code lines by e-mail, look out about how to configure a GitHub Desktop environment: https://desktop.github.com/