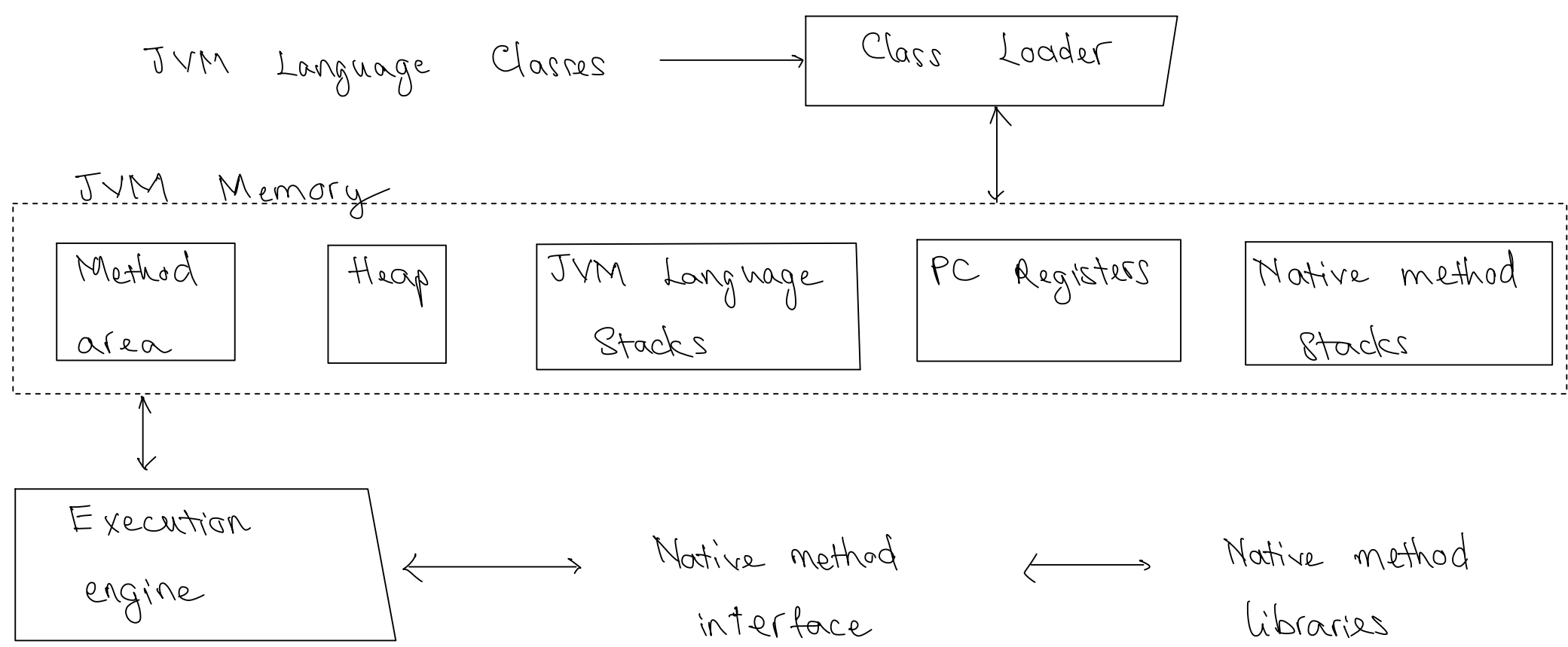


JAVA VIRTUAL MACHINE

Architecture of the JVM



Runtime Area

Name	Scope	Lifetime	Contents
The pc Register	Per-thread	Thread	Address of JVM instruction currently being executed.
Java Virtual Machine Stacks	Per-thread	Thread	Stack frames, containing local variables, partial results, operand stacks.
Heap	Global, shared across threads	Virtual machine	Class instances and arrays. Garbage-collected.
Method Area	Global, shared across threads	Virtual machine	Per-class structures such as run-time constant pool, field and method data, code for methods and constructors.
Run-Time Constant Pool	Per-class or per-interface	Class or interface	Several kinds of constants, ranging from numeric literals to field references.
Native Method Stacks (optional)	Typically per-thread	Thread	Conventional stacks to support native methods.

Concrete Example:

example.java

```
void spin() {
    int i;
    for (i=0 ; i<100 ; i++);
}
```

compiler

example.class

```
03  3C  A7  00  06  84  01  01
1B  10  64  A1  FF  FA  B1
```

javap
(for readability)

```
0: iconst_0
1: istore_1
2: goto 8
5: iinc 1 1
8: iload_1
9: bipush 100
11: if_icmplt 5
14: return
```