

Deploying Spring Framework 6 Applications Playbook

Utilizing Virtual Machines



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Deploying Spring Framework 6 Applications Playbook

Version Check



Version Check



This course was created by using:

- Spring Framework 6.0.4
- Spring Boot 3.0.2
- Java 17



Version Check



This course is 100% applicable to:

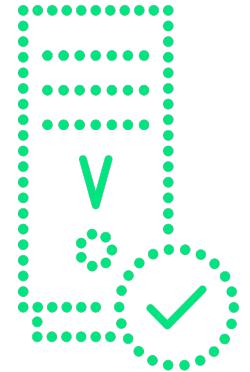
- Spring Framework 6
- Spring Boot 3
- Java 17



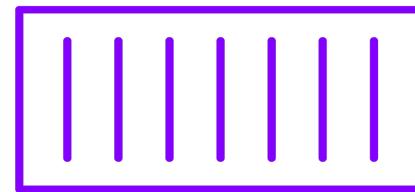
Deploying Spring Framework 6 Applications Playbook



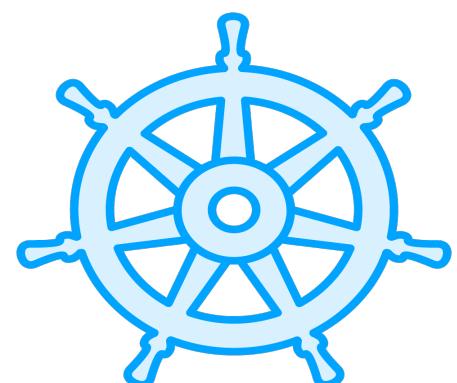
Independent Course Modules



Utilizing Virtual Machines



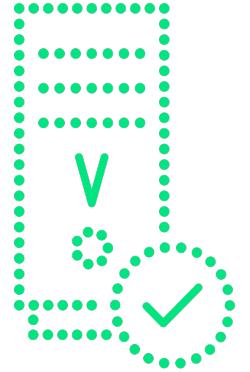
Deploying using Docker



Orchestrating using Kubernetes

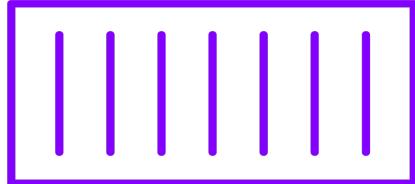


Prerequisites



Java 17

Spring
Framework 6



Java 17

Spring
Framework 6

Docker



Java 17

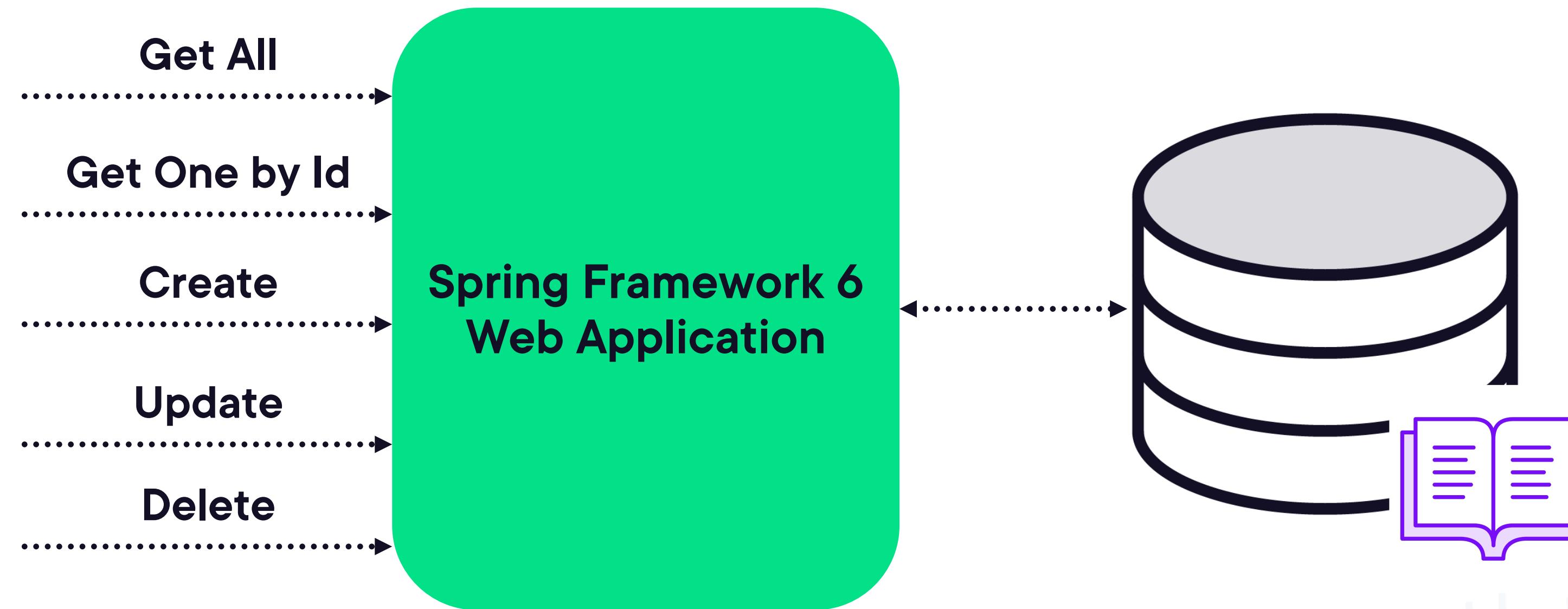
Spring
Framework 6

Docker

Kubernetes



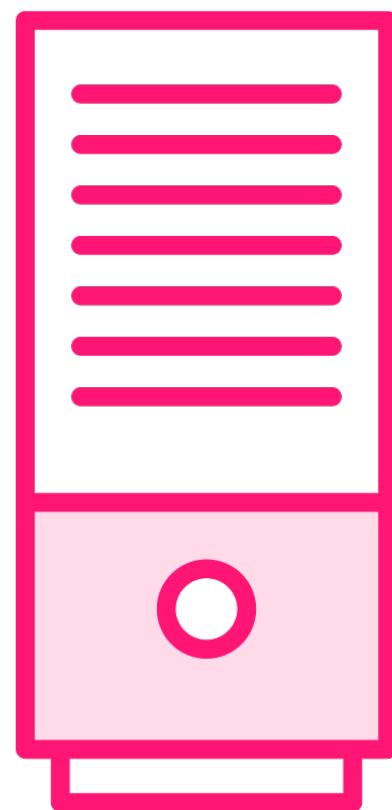
Spring Framework 6 Application



Virtual Machines

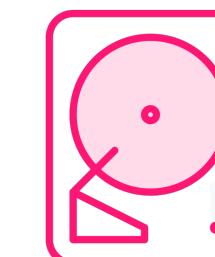
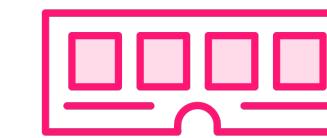
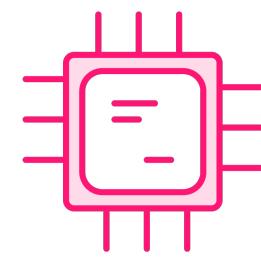


Bare Metal Machines

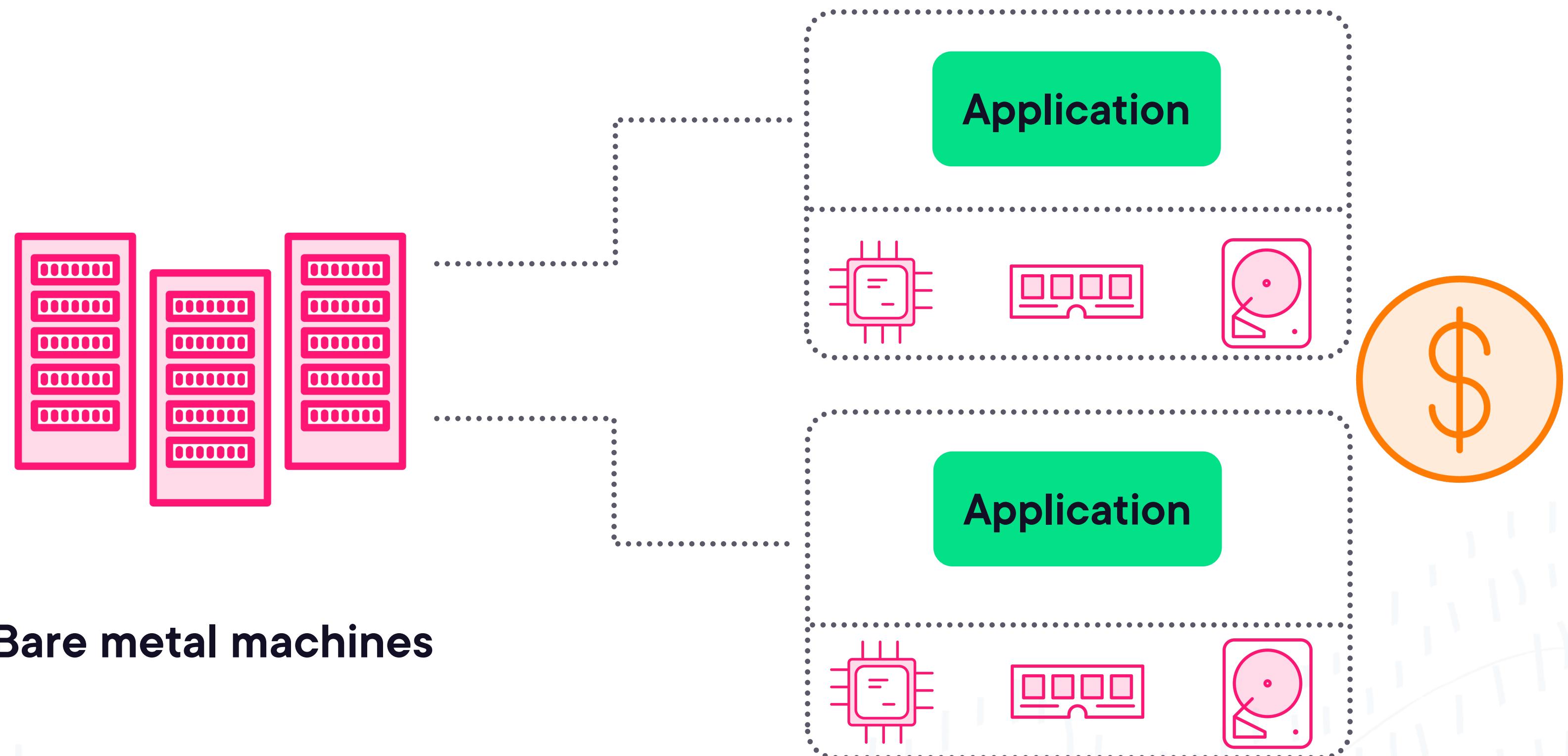


Bare metal machine

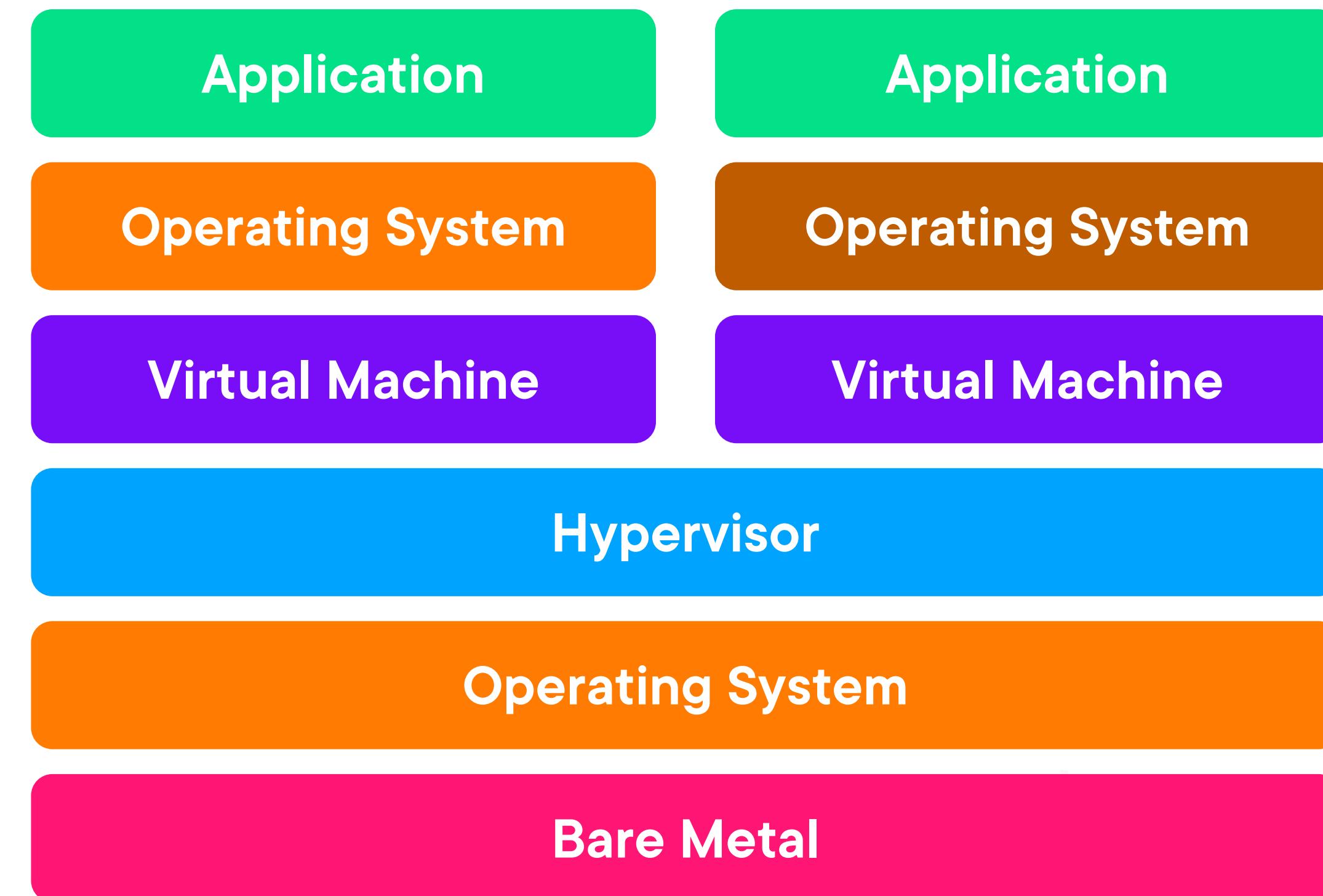
Application



Bare Metal Machines



Virtual Machines



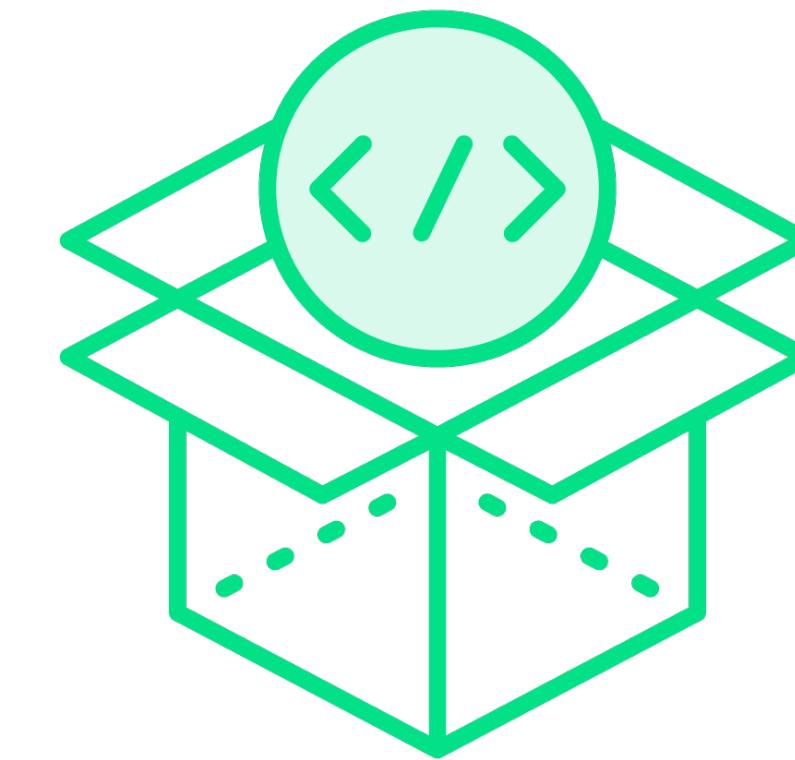
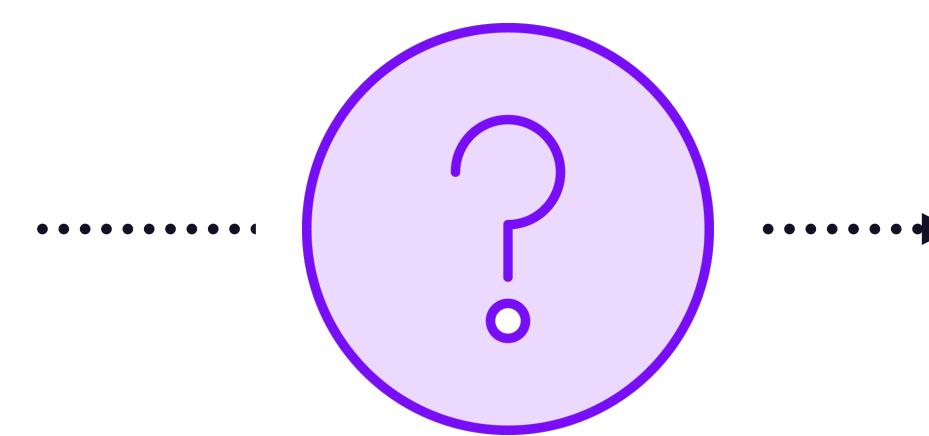
Package Spring Applications



Package Spring Applications



Java code



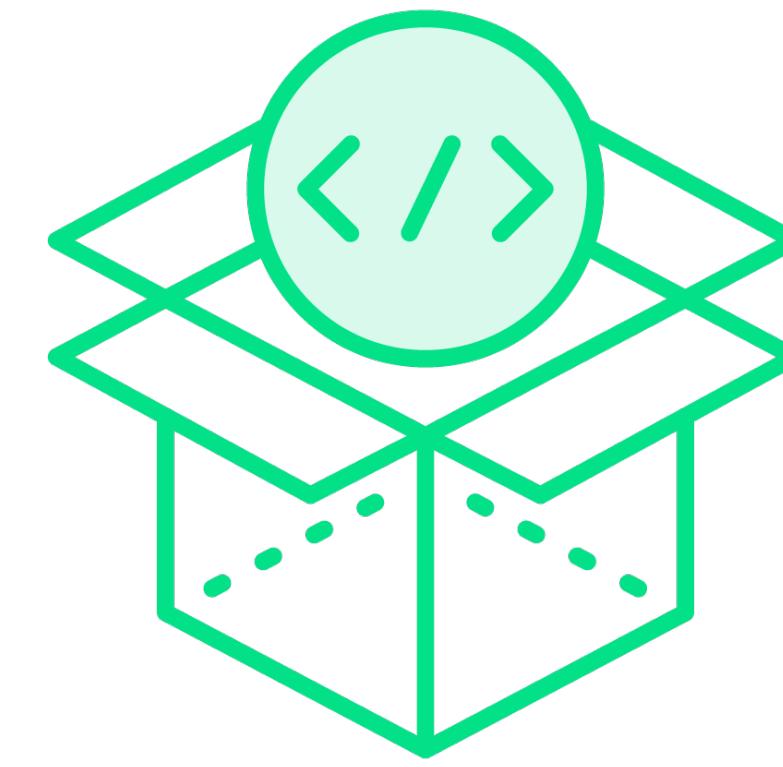
JAR



Package Spring Applications



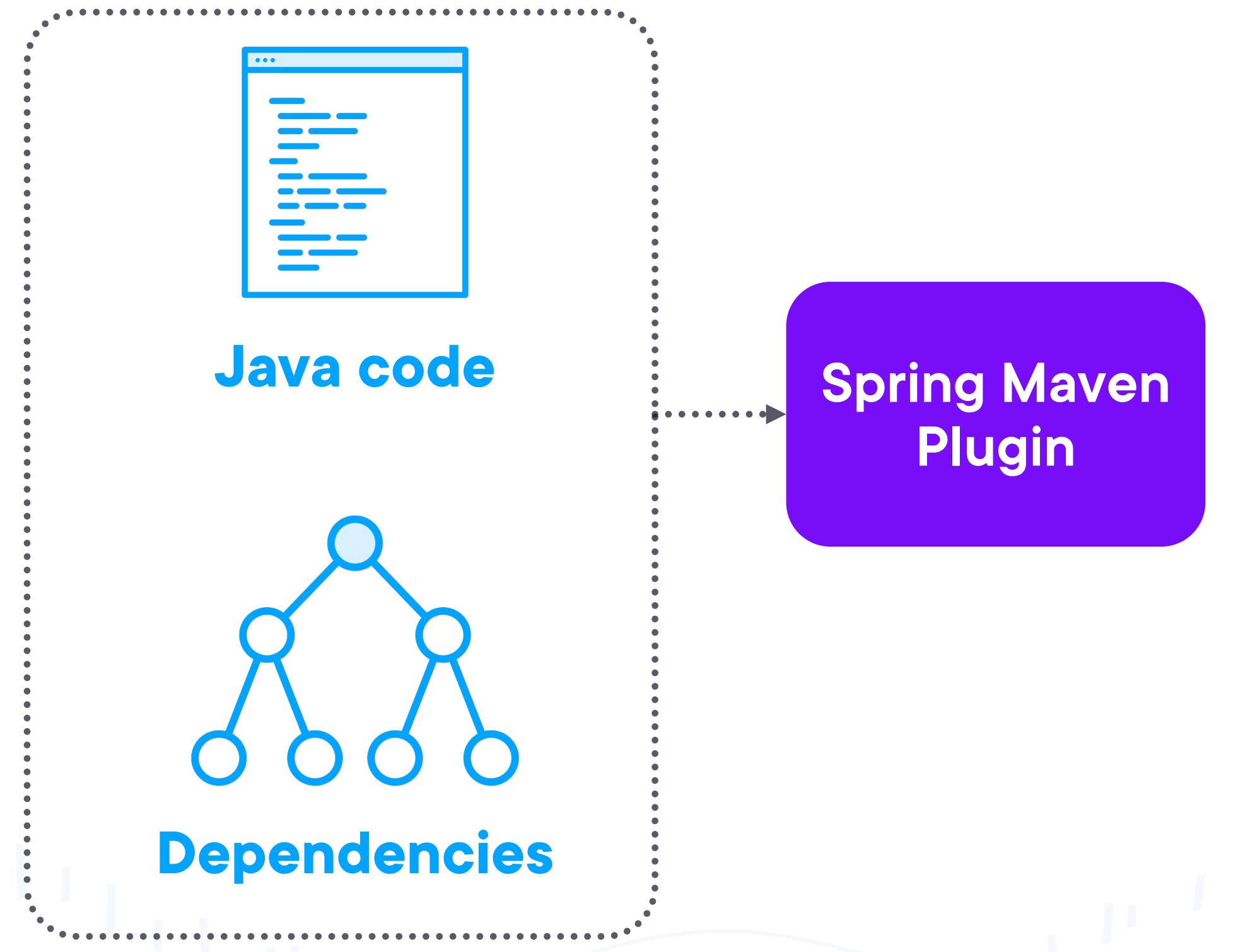
Java code



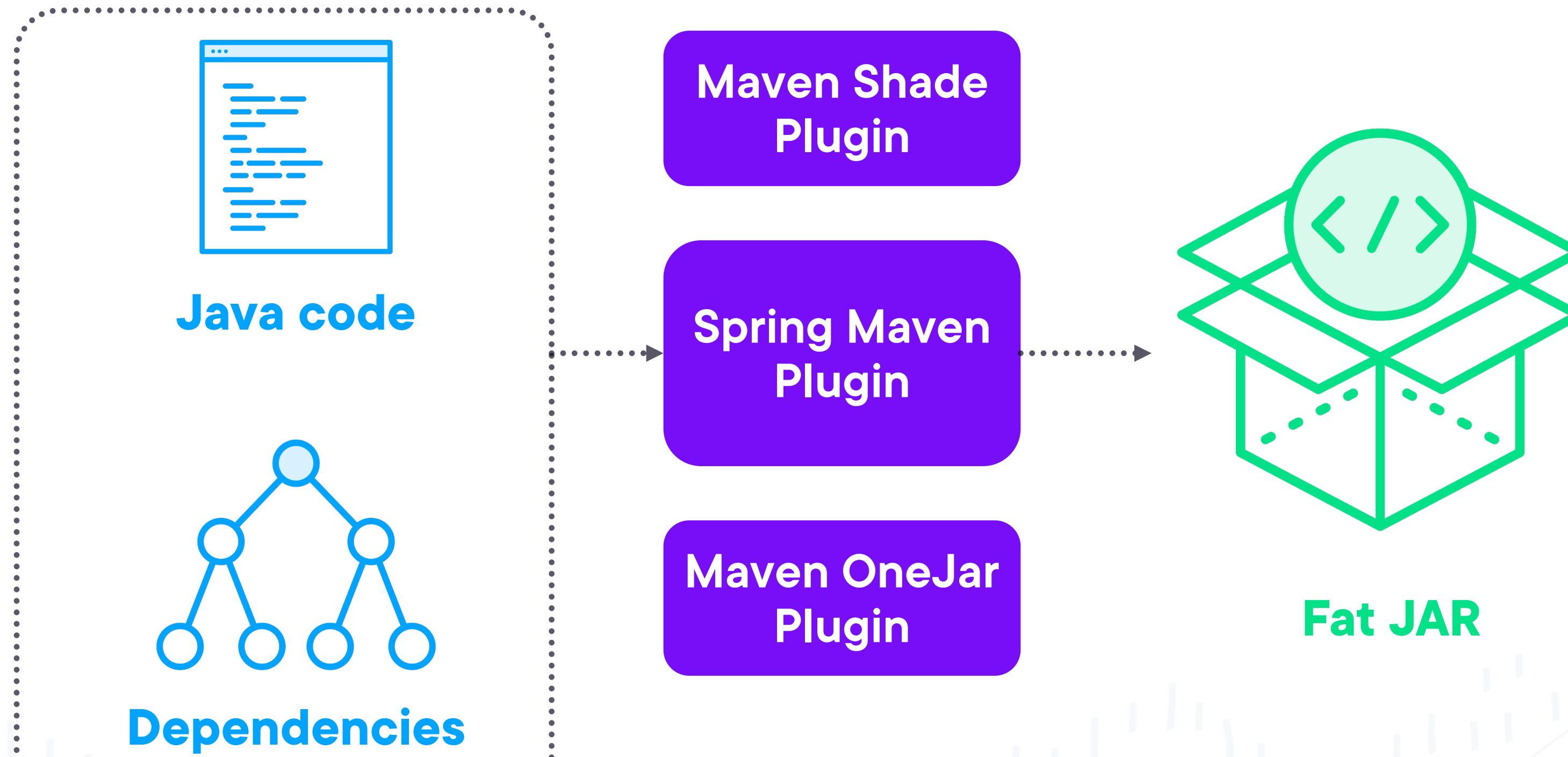
JAR



Package Spring Applications



Package Spring Applications



Demo



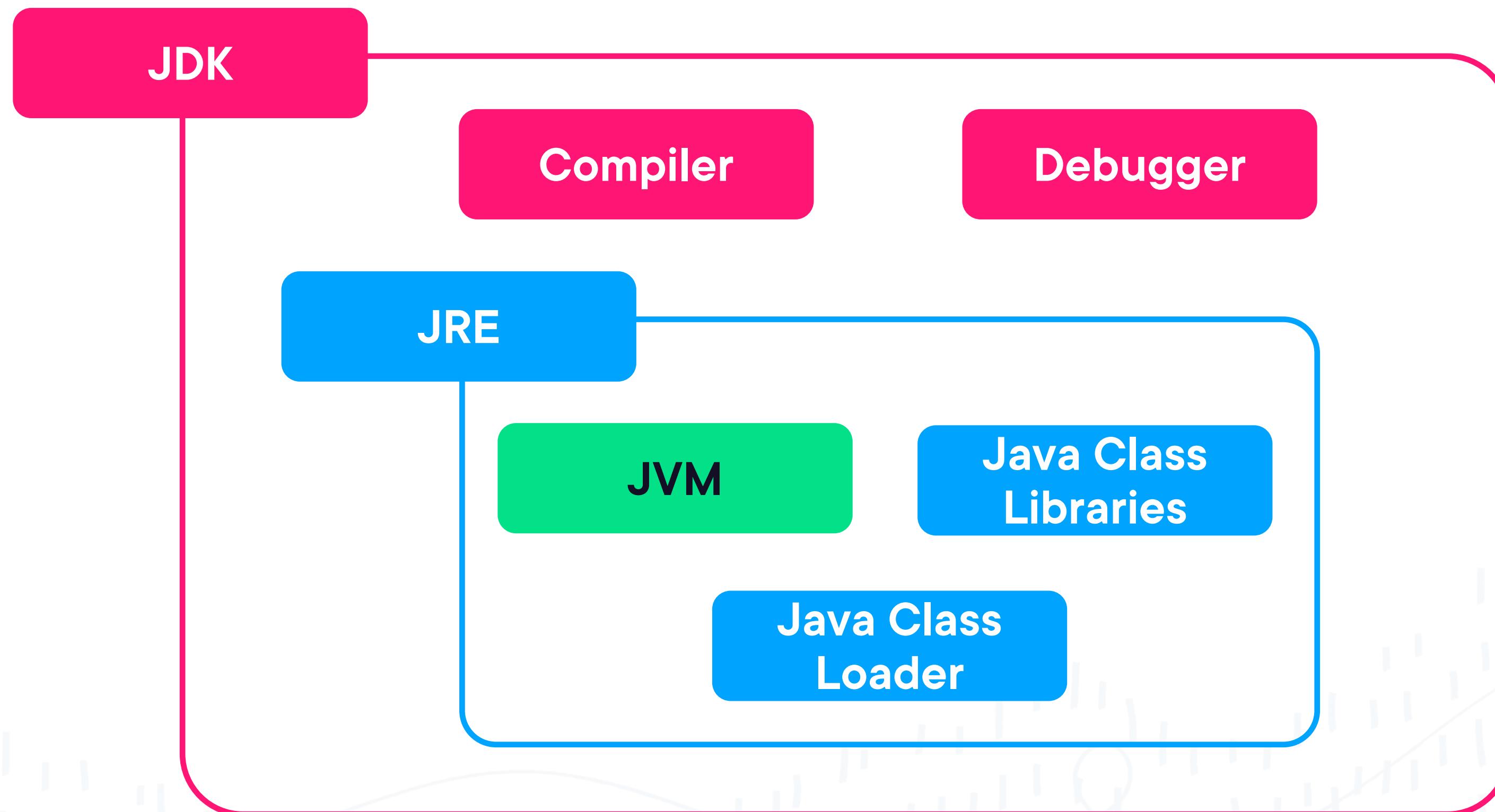
Package FAT JAR
Explore Spring Boot Maven Plugin



Java Runtime Environment



Java Runtime Environment



Demo



Deploy JAR to Virtual Machine

Install JRE

Deploy MySQL



Demo



Deploy MySQL



JVM Tuning



JVM Tuning

Java Memory

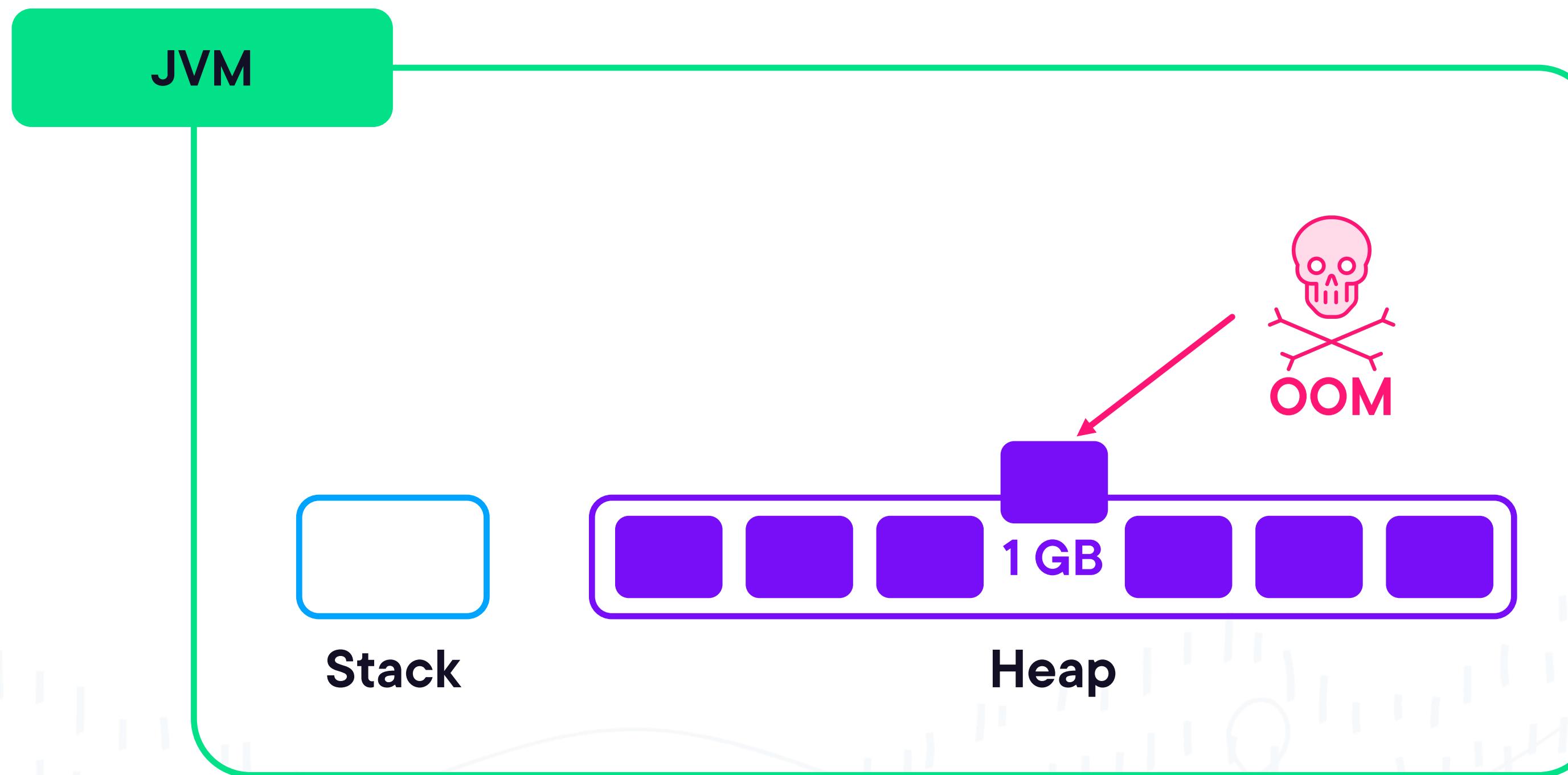
Garbage Collection



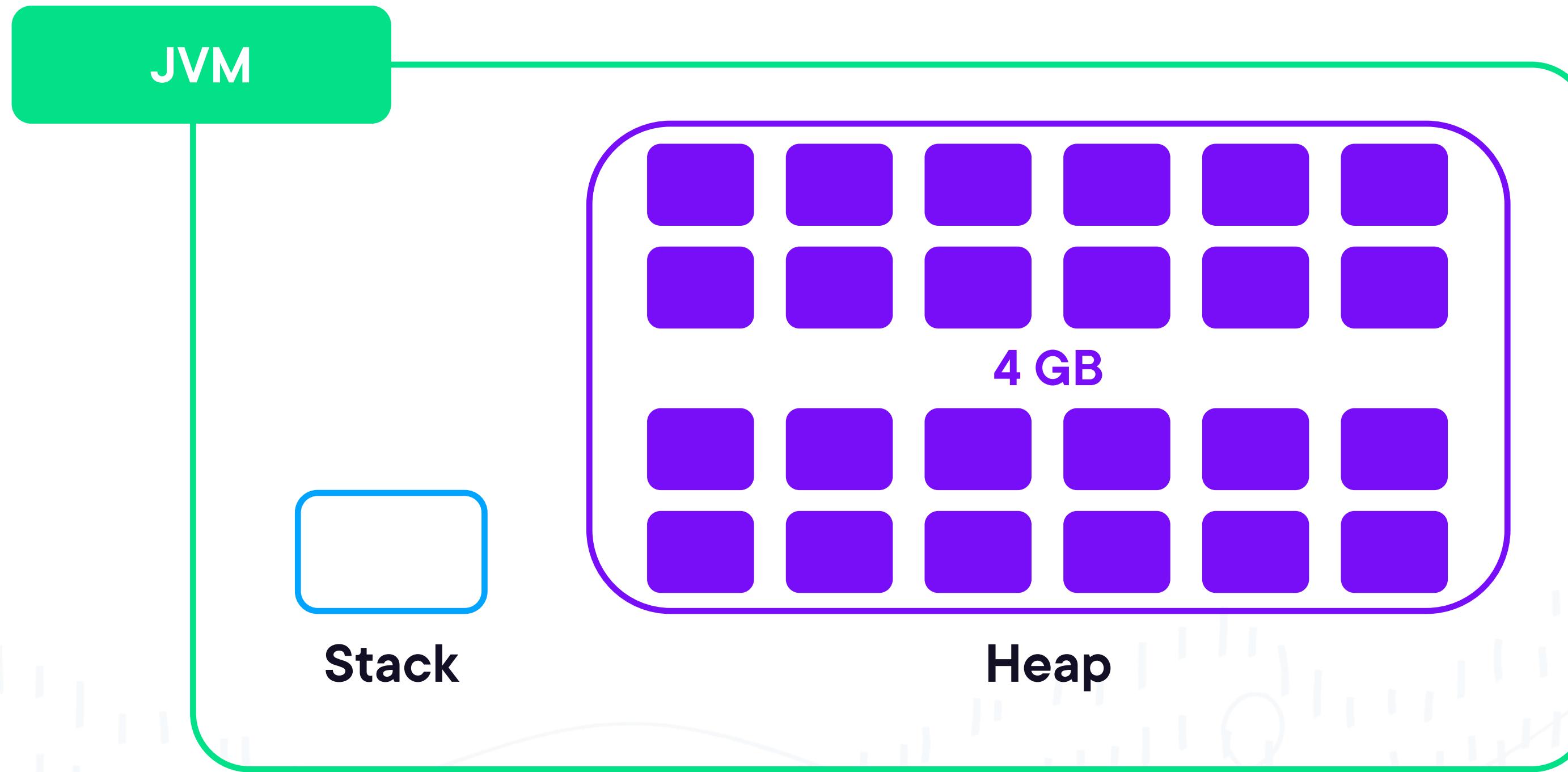
Java Memory Management



Java Memory Management



Java Memory Management



Garbage Collection

**Serial Garbage
Collector**

**Parallel Garbage
Collector**

**CMS Garbage
Collector**

G1 Garbage Collector

Z Garbage Collector



Demo



JVM Tuning

Common operations:

- Increase Heap size
- Profile JVM using VisualVM



Summary



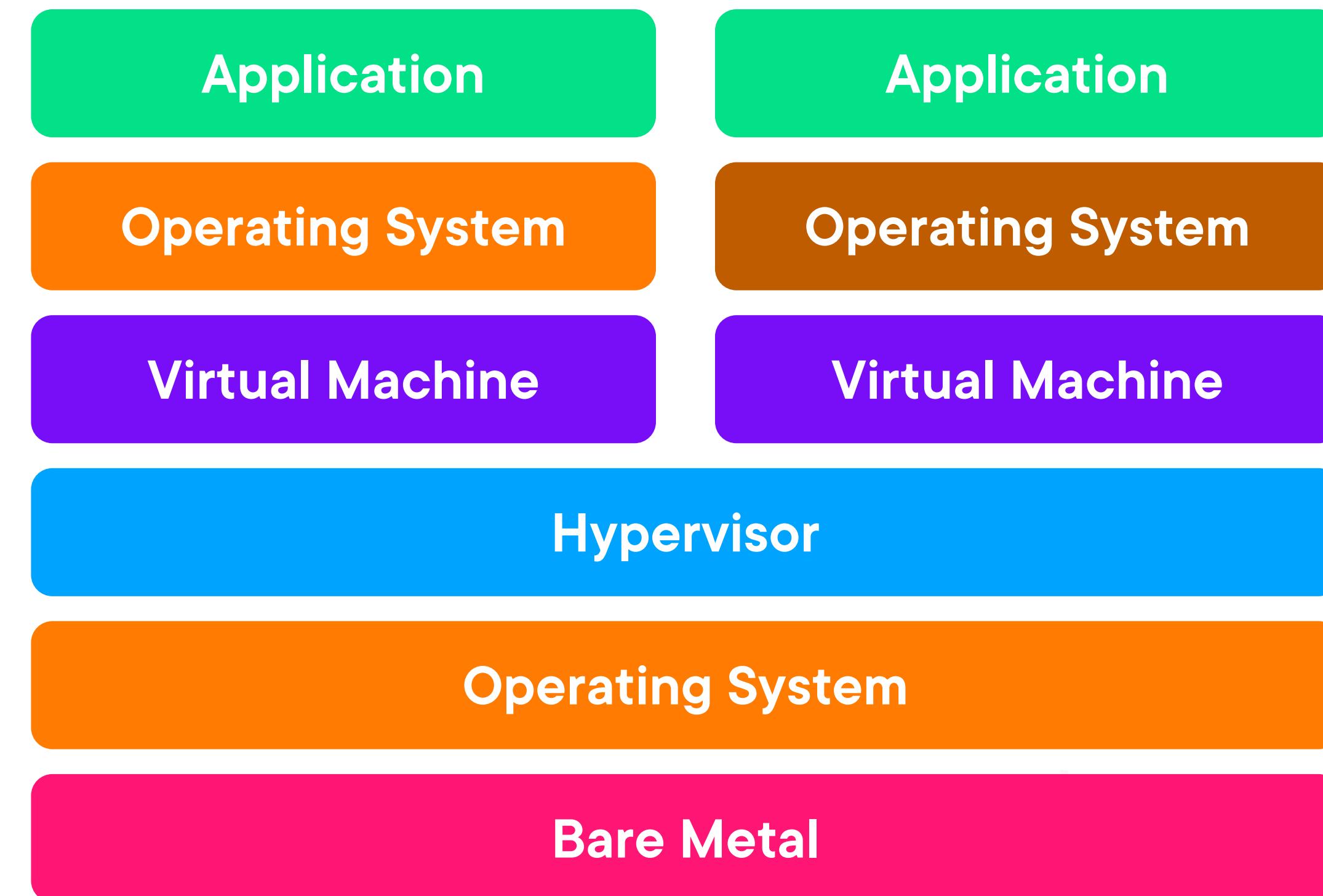
Virtual machines

JVM, JRE, and JDK

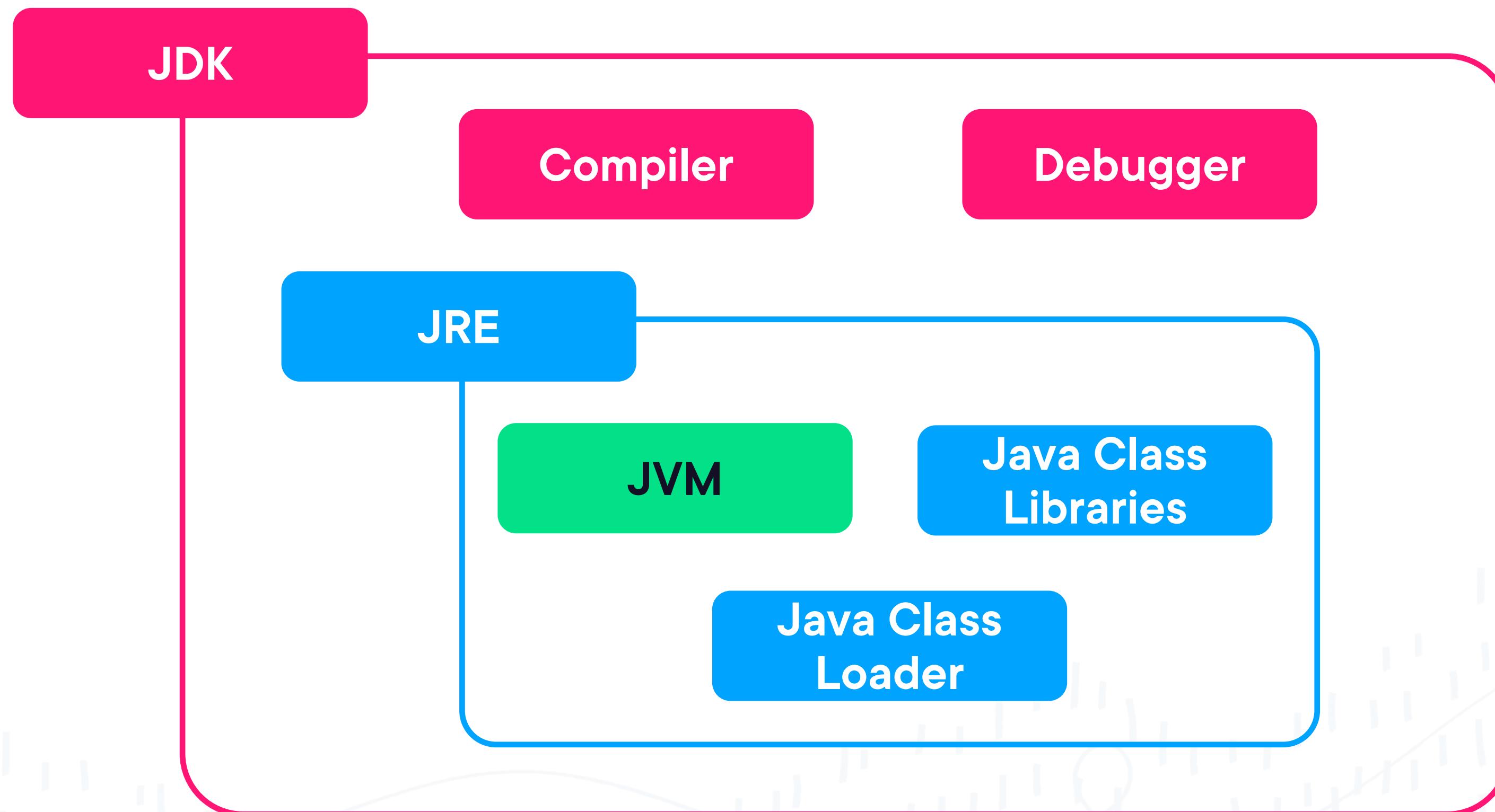
JVM tuning



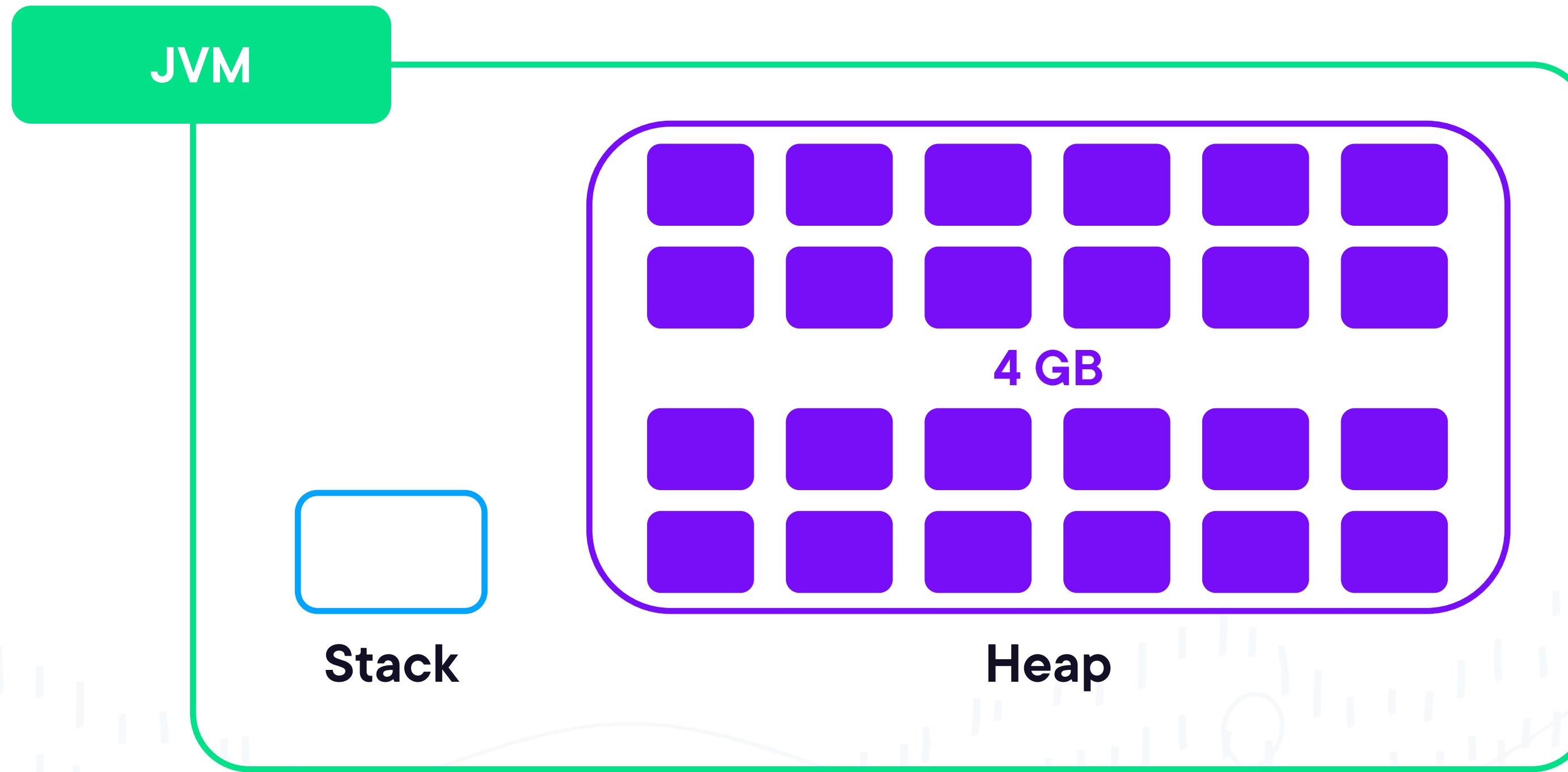
Virtual Machines



Java Runtime Environment



Java Memory Management



Up Next:

Deploying using Docker

