From Desktop to Enterprise Java to the Cloud

Sander Mak
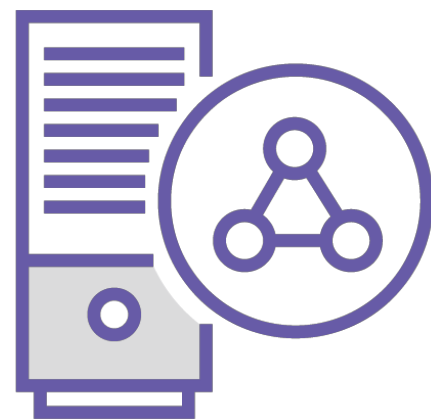
FELLOW & SOFTWARE ARCHITECT
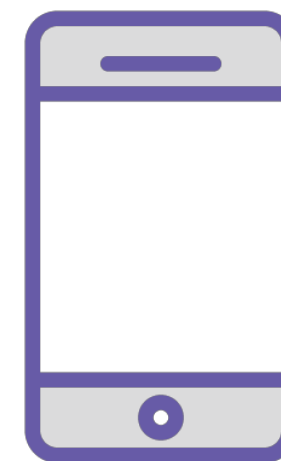
@Sander_Mak
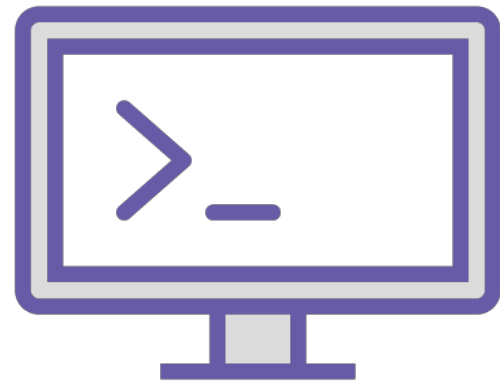
Overview

Desktop Enterprise Java Cloud Android

Desktop Java

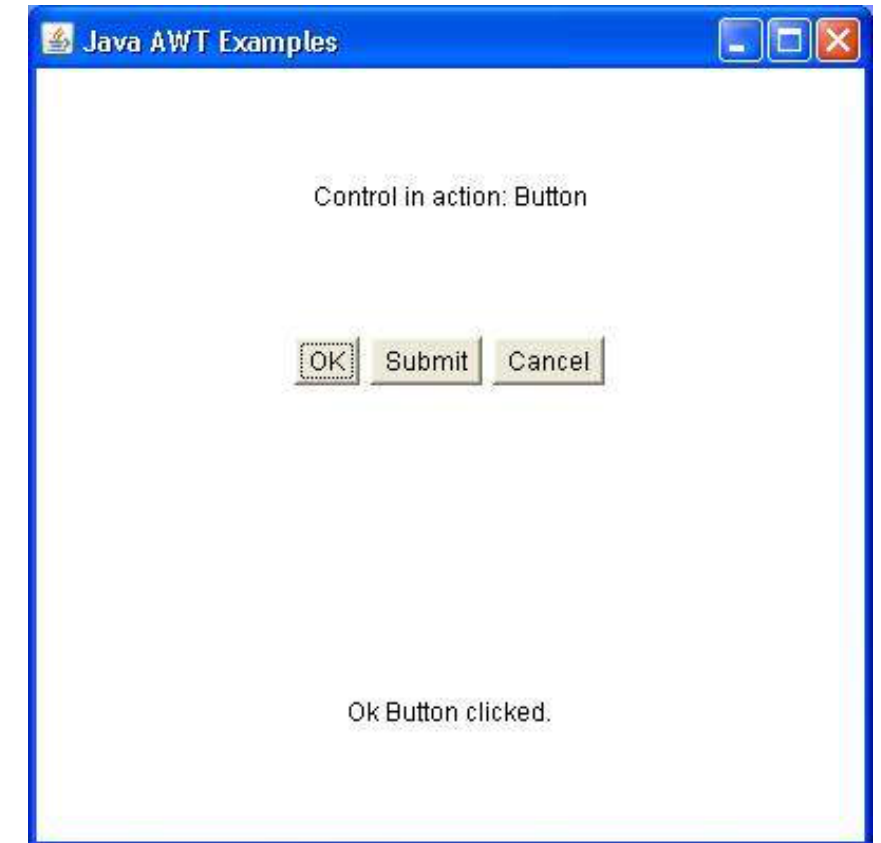Single machine, interactive applications

AWT

Abstract Windowing Toolkit

Native OS controls

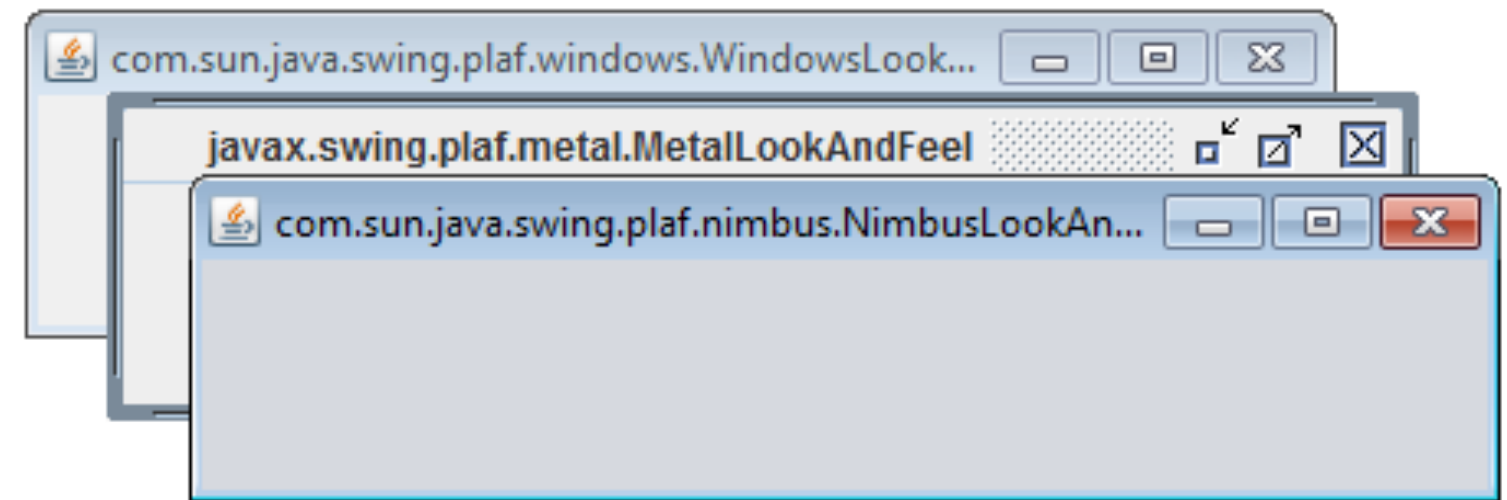Simple graphics primitives

Swing

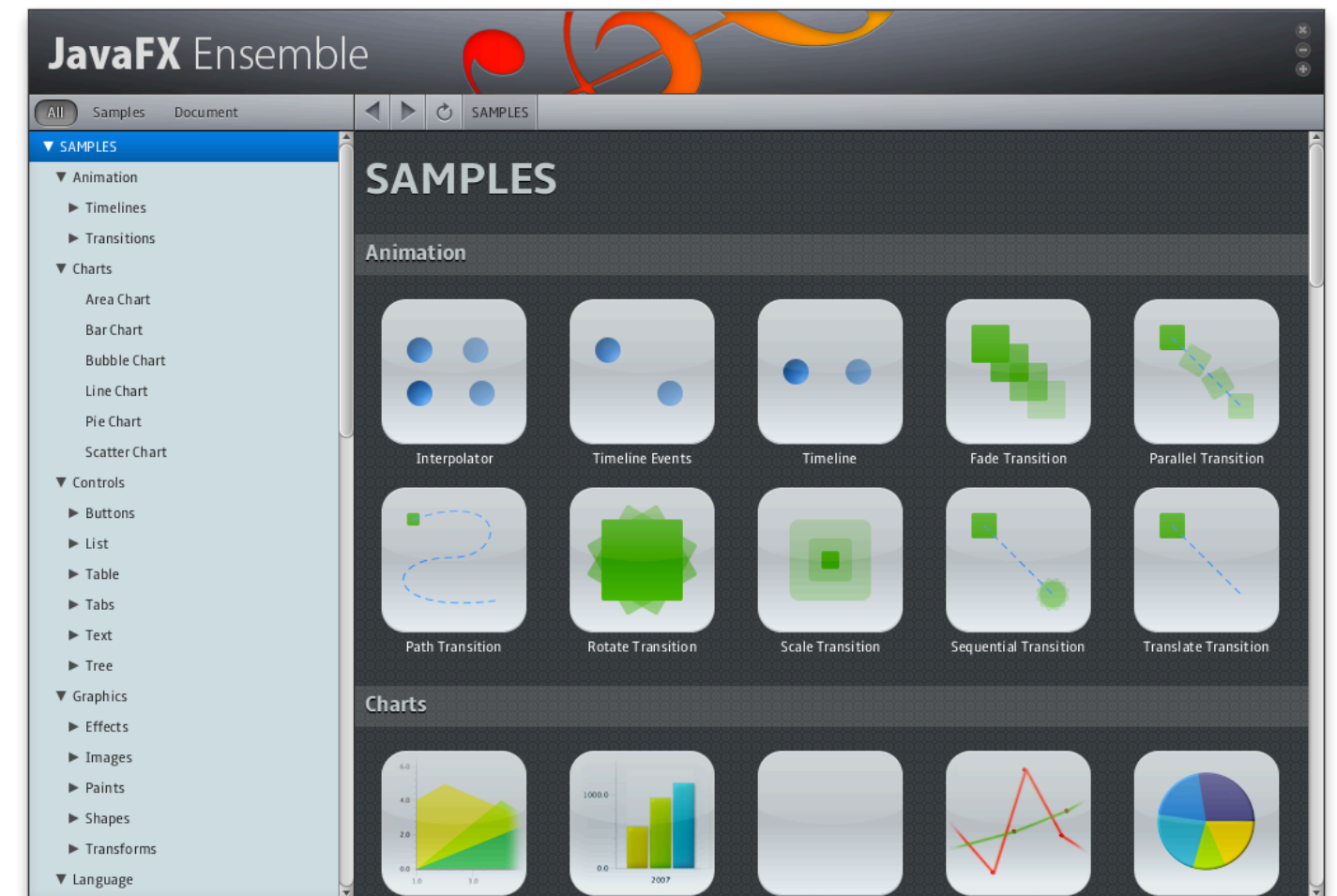Pure Java GUI

Cross-platform look & feels

Model-view-controller
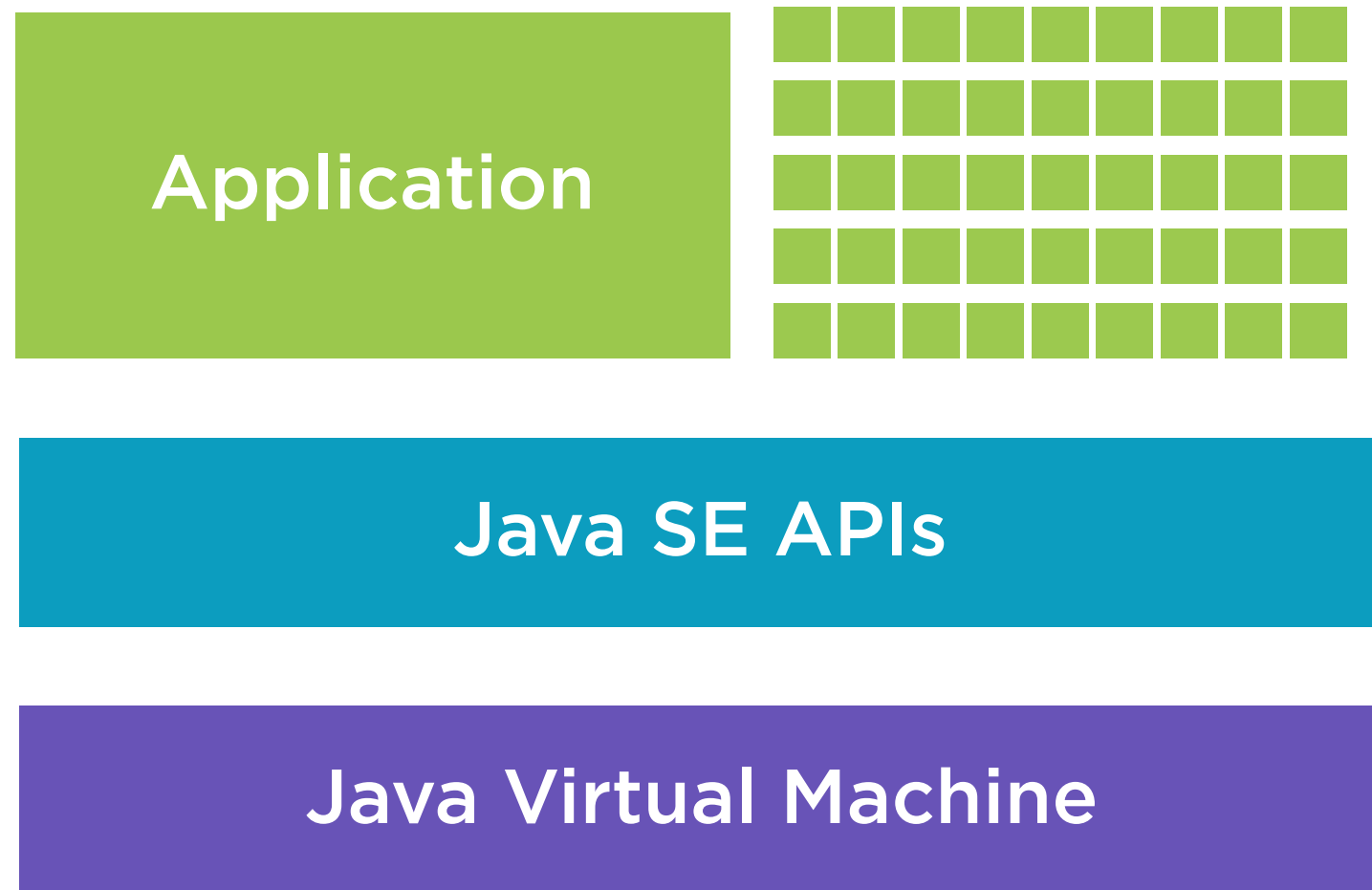
JavaFX

Declarative UIs: FXML

Advanced components

Skinnable with CSS

3D graphics

OpenJFX
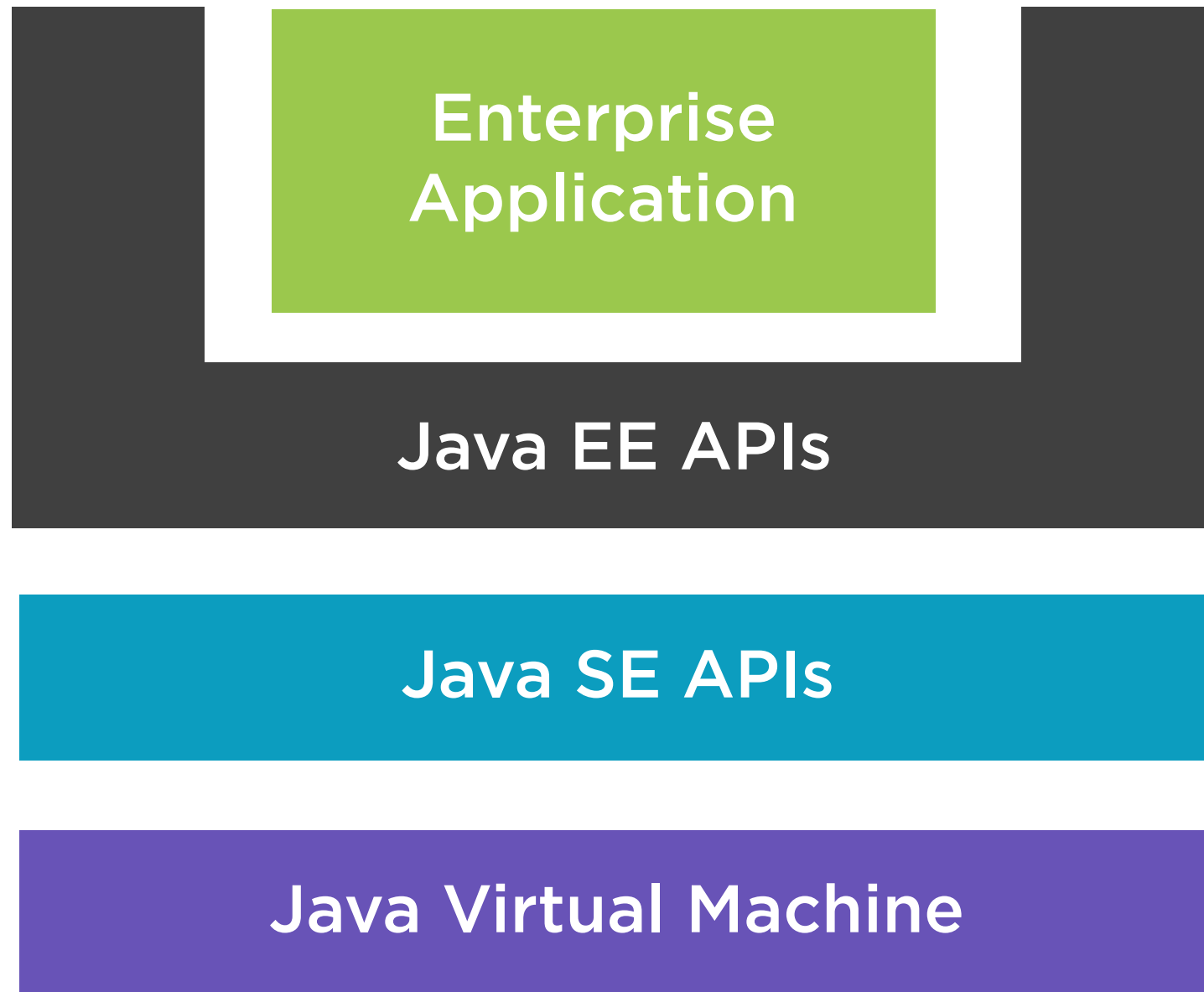
Java EE

Application

Java SE APIs

Java Virtual Machine

Java EE

Enterprise Application

Java EE APIs

Java SE APIs

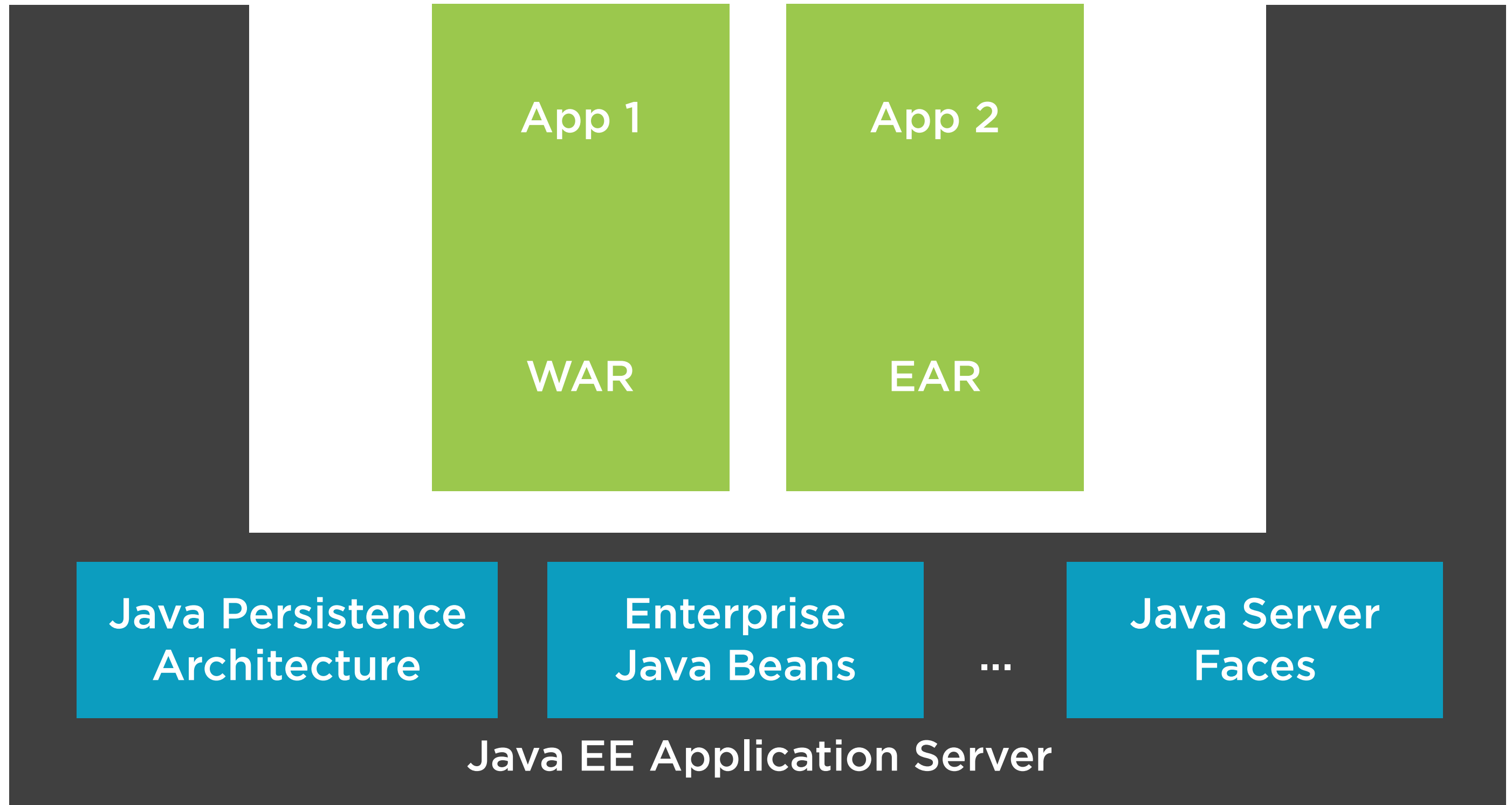**Java Virtual Machine**

Data persistence

Web applications

Security

Messaging

JSON/XML handling

Java EE

Java EE

Wildfly (Red Hat)

WebSphere (IBM)

WebLogic (Oracle)
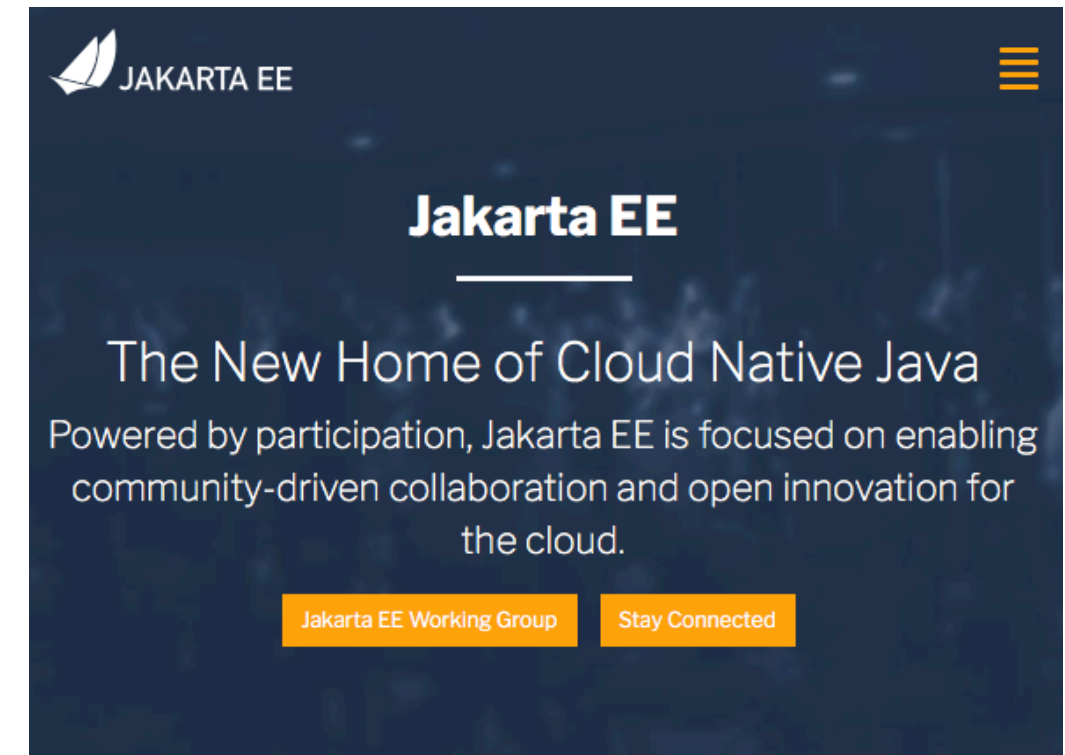
Tomcat (Apache)

Java EE
Application
Servers

Future of Java EE

jakarta.ee

Java EE 8 last Oracle release
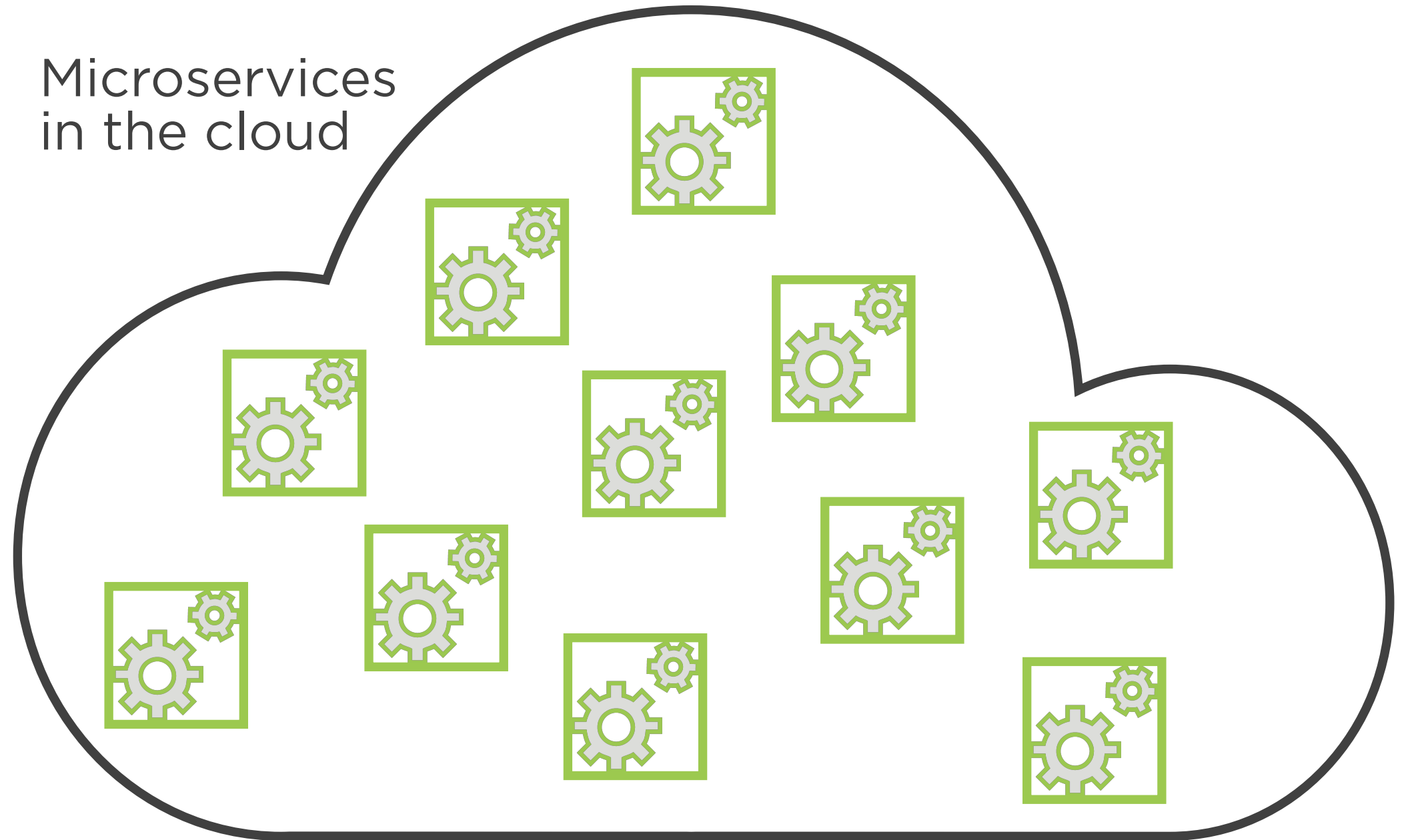
Move to Eclipse Foundation

Spring Framework

Java in the Cloud

Datacenter

Microservices in the cloud

Java in the Cloud

Microframeworks

Spring Boot Application	**Spring/ Netflix Libraries**	Spring Boot

Java SE APIs

MicroProfile

Vert.x

Java Virtual Machine

Play Framework

Android

Java primary development language

Java != Android Java

Android

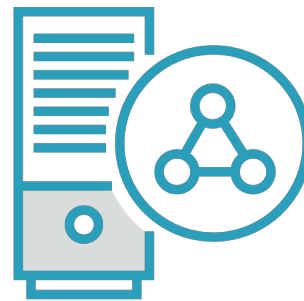| Java Language (7, subset of 8)	Java Bytecode	DEX (Dalvik Executable Format)
		Android APIs
		Java SE*ish* APIs
		Dalvik Virtual Machine

Summary

AWT, Swing and JavaFX

Java EE becomes Jakarta EE

Microframeworks: Spring Boot

Java != Android Java