Understanding the Java Virtual Machine Classloading and Reflection

INTRODUCTION

Kevin Jones

@kevinrjones   www.rocksolidknowledge.com

This Module

Introduction to Classloading

Java code compiles to .class files
- these classes have to be loaded into the virtual machine

Where does Java load its classes from?
- What is the classpath?

Setting the classpath globally

Setting the classpath when running a Java application

A Note on Versions

Java 8 Still Widely used

– Course runs on Java 11

Things changed in Java 9

– Modules introduced

A Note on Demos

JetBrains Intellij Idea

All demos have Gradle build files
- Except for one
- Ant build file

Run on Java 8 and Java 11

This Course

Classloading basics

Writing our own classloader

Using classloading delegation

Hot deploying Java code

Understanding Java reflection

Using reflection to implement a simple IoC container