

# API Workshop

Build REST APIs with Spring Boot

O'REILLY®

Software  
Architecture

# Agenda

- What are RESTful web services?
- Intro to Spring Boot
- Overview of Lab 1

# RESTFUL WEB SERVICES

- RESTful Web Service APIs adhere to REST constraints
- HTTP - commonly used as the transport layer
- URLs identify resources
  - <http://www.api-workshop.com/todos>
  - <http://www.api-workshop.com/todos/1>
- Operations
  - Create, Read, Update, Delete supported by HTTP Methods

# REST OVER HTTP


- HTTP verbs for operations
  - POST, GET, PUT, DELETE
- HTTP status codes represent the result of a request
  - HTTP 2xx - Success
  - HTTP 3xx - Redirection
  - HTTP 4xx - Client errors
  - HTTP 5xx - Server errors

# RESTFUL WEB SERVICES WITH SPRING BOOT

- SpringBoot makes it straightforward to build and deploy HTTP based web services

<b>Spring Web</b> spring-boot-starter-web	Starter for building web applications using Spring MVC. Uses Tomcat as the default embedded servlet container
<b>Spring Reactive Web</b> spring-boot-starter-webflux	Starter for building event-driven reactive web applications with Spring WebFlux and Netty

# Spring Initializr - <http://start.spring.io>



**Project**  
☒ Gradle Project ☐ Maven Project

**Language**  
☒ Java ☐ Kotlin ☐ Groovy

**Spring Boot**  
☐ 3.0.0 (SNAPSHOT) ☐ 3.0.0 (RC2) ☐ 2.7.6 (SNAPSHOT) ☒ 2.7.5  
☐ 2.6.14 (SNAPSHOT) ☐ 2.6.13

**Project Metadata**  

Group

Artifact

Name

Description

Package name



Packaging ☒ Jar ☐ War

Java ☐ 19 ☒ 17 ☐ 11 ☐ 8

**Dependencies**  

ADD DEPENDENCIES... ⌘ + B

No dependency selected



GENERATE ⌘ + ↵

EXPLORE CTRL + SPACE

SHARE...

# Lab 1 - Spring Boot

<https://github.com/nickebbitt/api-workshop>