

## **Lesson 8**

REST (implementation in Java, no XML config)

- Annotations
- Json/xml

AJAX (what is it, what are the characteristics and how does it work. No implementation)

Websockets (what is it, what are the characteristics and how does it work. No implementation)

## **Lesson 9 Spring WebFlow**

Different states

Flow.xml file (implementation in XML)

Different scopes

## **Lesson 11 Angular**

SPA

Difference between SpringMVC and SPA with Angular

Typescript

Dependency injection

One and two way data binding

Reactive and template driven forms

Validation

(what is it, what are the characteristics and how does it work. No implementation)

## **Lesson 12 JPA**

Spring data repository (implementation in Java, no XML config)

Entity mapping (implementation in Java, no XML config)

Transactions (implementation in Java, no XML config)

Immediate fetching, lazy fetching

Relation mapping: 1-1, 1-\*, \*-\* (what is it, what are the characteristics and how does it work. No implementation)

## **Lesson 13 Security and cross cutting concerns**

Cross cutting technologies (what is it, what are the characteristics and how does it work. Understand the implementation, but you do not need to implement it yourself)

- Servlet filter
- Interceptor
- AOP

Security (what is it, what are the characteristics and how does it work. Understand the implementation, but you do not need to implement it yourself)

- Authentication
- Authorization
- HTTPS
- CSRF

## **Lesson 14 Spring Boot**

@SpringBootApplication

@Configuration

@EnableAutoConfiguration

@ComponentScan

Embedded container

applications.properties

You should be able to write a simple spring boot application.