

**Weekly Plan** 

**Spring Boot** 



#### Installation & Introduction

Install Java Platform (JDK)

- Introduction To Spring Boot Framework
- 2 Downloading and install spring tool suite (sts)
- Introduction to Spring Boot

Configure Apache Tomcat

- Spring Boot vs Spring vs Spring MVC
- 4 Starting and Stopping Apache Tomcat
- Spring Boot Actuator
- Creating a new Apache Tomcat
  User
- Spring Boot Developer Tools
- Deploying Your Web Service to Apache Tomcat



#### Restful Web Services

- 1 Initializing a RESTful Web Services
- 2 Introduction to RESTful Web Services With Spring Boot
- Spring Boot Auto Configuration and Dispatcher Servlet
- 4 Enhancing the Hello World Service with a Path Variable



#### Restful Web Services With Spring Boot

- 1 Implementing the POST Method to create User Resource
- Implementing Static Filtering for RESTful Services
- Implementing Dynamic Filtering for RESTful Services
- Implementing DELETE Method to Delete a User Resource





#### Spring Boot Validation & Security

- 1 Implementing Validations for RESTful Services
- Versioning RESTful Web Services-Basic Approach With URIs
- Implementing Basic Authentication with Spring Security
- Updating POST and DELETE methods on User

Practical exam based on four week learning



Exam



#### **Exception handling**

- 1 Implementing Exception Handling-404 Resource Not Found
- 2 Implementing Generic Exception Handling for all Resources
- Implementing ErrorMessages enum
- Implementing UserServiceException
- B Handle a Specific Exception
- Return Custom Error Object Representation
- 7 Handle All Other Exceptions

#### Implementing HATEOAS for RESTful Services

- Adding HATEOAS Support to Our Project
- 6 Adding Links. Entity Model.
- Adding Links to the AddressRest Model
- Building links with methodOn()

- Adding Links to a Get Addresses
   API Call
- Returning a collection of resources with CollectionModel.

Applying HAL Format

Adding links to embedded list of addresses

#### Restful Web Service To JPA

- Introduction to JPA
  - Updating POST and DELETE methods on User Resource to use JPA
- Overview of Connecting RESTful Service to JPA
- Creating Post Entity and Many to One Relationship with User Entity
- Creating User Entity and some test data
- Implementing a GET service to retrieve all Posts of a User

Updating GET methods on User Resource to use JPA

Implementing a POST service to create a Post for a User



Deployment, Unit, Postman & Security testing.





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Exam



# Congratulations!

You have successfully completed this course!