Advance Java with Spring

Web Application Essentials
- Web Application Essentials
- Describing Java Servlet Technology
- Describing JavaServer Pages Technology
- Architecture Explaining Java EE Containers and Java Application Servers
- Describing the Web Application Development Process
- Identifying the Essential Structure of a WAR File

Developing a Servlet
- Explaining the Request and Response Processes
- Understanding the Life Cycle of a Servlet
- Request Dispatching and sendredirect
- Parameters & Attributes and their differences

Handling Form Requests in Servlets
- Using HTML Forms To Collect Data From Users
- Developing a Servlet that Retrieves Form Parameters

- Understanding and Using HttpSession Objects
- Using Cookies for Session Management
- Filters and Listeners

Developing Components with JavaServer Pages Technology
- Describing JSP Page Technology
- Writing JSP Code Using Scripting Elements
- Writing JSP Code Using the JSP Directive
- Writing JSP Code Using the Declaration tags
- JSP Objects
- Understanding JavaBeans
- Writing an Error Page by Using JSP

Spring Core
- Introduction to IOC
- Types of DI
- Setter VS Constructor
- Collection DI
- Bean Scopes
- Bean auto wiring
- Static Factory Method
- Instance Factory Method
- Bean Lifecycle

Spring AOP

- AOP Concepts
- Programmatic VS Declarative AOP
- Programmatic AOP
- Types of Advices
- Types of Pointcuts

Spring MVC

- Spring MVC architecture
- Building Spring web applications
- Following the life of a request
- Setting up Spring MVC
- Writing a simple controller
- Testing the controller
- Defining class-level request handling
- Passing model data to the view
- Accepting request input
- Taking query parameters
- Taking input via path parameters
- Processing forms
- Writing a form-handling controller
- Validating forms

Spring Boot

- Introduction to Spring Boot
- Intro to Spring Boot - What is Spring Boot and What It Does
- Spring Boot Hello World / Spring Application
- Brief maven Overview
- Spring Beans & Dependency Injection
- Configuration Properties
- Application Properties
- Spring Boot Annotations
- Embedded server and its uses

RESTFUL WEB SERVICES

- REST Overview
- Spring support for REST
- Writing RESTful Controllers / @RestController

Accessing Data with Spring Boot and Database Support

- Data Access Introduction
- Spring Data JDBC
- Basic Auto-configuration - Data source
- Spring Data JPA

Introduction to Spring Micro Services