Spring MVC

Duration: 15 Hours
Skill Level: Intermediate
Hands-On: Extensive hands-on programming labs
Delivery Format: Virtual
Customizable: Yes

Description:
The Spring framework is an application framework that provides a lightweight container that supports the creation of simple-to-complex components in a non-invasive fashion. Spring's flexibility and transparency is congruent and supportive of incremental development and testing. The framework's structure supports the layering of functionality such as persistence, transactions, view-oriented frameworks, and enterprise systems and capabilities.

Students who attend **Spring MVC** will leave the course armed with the required skills to design and implement Spring-based web applications that effectively and transparently separate presentation from business, navigation, and validation logic.

Course Objectives:
After completing this course, the student should be able to:
- Describe the new features in Spring 3.0
- Explain Spring MVC architecture
- Create presentation layer for your web application using Spring MVC
- Create web applications using Spring MVC

Prerequisites:
A working knowledge of Java, Spring, and web applications is required.

Who Should Attend:
This course should be attended by software architects, designers, and developers.

Outline:
Spring 3.0 Features
- Describe the basic principles and concepts of Spring 3.0
- List the key features of Spring 3.0
- Review the basics of dependency injection
- Examine the Spring Expression Language (EL)
- Cover conversion and validation capabilities

Spring MVC Introduction
- Explain the Spring MVC architecture
- Describe Various components in the Spring MVC
- Configure DispatcherServlet in web.xml

HandleMapping

- Map request to the request handlers (Controllers) using @RequestMapping annotations
- Mapping at class or method level
- Implementing custom HanlderMapping in your DispatcherServlet context

Controllers

- Understand Spring Controller hierarchy
- Write different type of Controller using Annotation model
- Learn different annotation elements with examples
- Write exception handling and testing with Controller

Validation

- Write programmatic validators
- Write declarative validators
- Work with the Validator and Errors interfaces
- Implement declarative validation with JSR-303 (Bean Validation) annotations

Handler Interceptors

- Write customized Handler Interceptors.
- Use Spring supplied implementation of Handler Interceptor
- Understand what you can implement using Handler Interceptors

Views

- Configure different view resolvers
    - BeanNameViewResolver
    - XmlViewResolver
    - InternalResourceViewResolver
- Integrate with different view technologies
    - JSP and JSTL
    - Velocity and FreeMarker
    - Tiles
    - XSLT
    - Excel and PDF

Spring's form tag library

- Use spring’s form tag to develop user interface for a Web application
- Work with tags to generate HTML tags that are HTML 4.X compliant.
- Understand data-binding aware tags