

Spring MVC and Web flow, its new features and Integration in Project Scenarios

Workshop Details:

Duration :	3 Days
Objectives and Take away :	Addressing challenges of integrating Spring MVC with variety of products and technologies, enhancing performance and scalability of project using core and new features of Spring 4. Take Away : Smooth implementation of Spring 4 MVC and its integration with variety of products and technologies. Spring WebFlow for next level.
Participants' Entry Profile :	For developers experienced in Spring DI & IoC, MVC and Web Development. All participants should have completed Level 1 training on Spring 4 MVC or posses equivalent level of knowledge/experience.
Training Methodology :	The workshop will follow Synergetics methodology of Concept Visualization Active Experimentation Application Development The workshop will be 100% Hands-On with each participant having access to system during the session

Setup Requirements

Hardware and Software Requirements :	Participant's as well as Trainer's Machine are required to have : Hardware Intel Core i3 2.2 GHz 80 GB HDD LCD Color Monitor 2 GB RAM Internet Connectivity for Maven dependencies Software Windows XP or 7 Internet Explorer 10 or above/Chrome/Firefox Eclipse J2EE Luna with STS plugins Oracle 10g/11g Express Edition Oracle JDBC Driver [ojdbc6.jar] Hibernate 3.6.x/4.x (All Jars) Spring Framework 4.0 (All Jars) Spring web and web-mvc(All Jars) Spring Web-Flow 2.4 (All Jars) Apache Axis2 for SOAP Web Services RestEasy / Jearsey for RESTful Web Services Apache Tomcat 7.0 Apache Maven (Included in Eclipse Luna) <ul style="list-style-type: none"> • The installable must match in bits architecture of the machine. • A shared disk-space among participants and trainer for trainer to share training stuff with participants. • Internet connection to fetch maven dependencies .
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Training Lab Requirements:	Whiteboard 6 feet by 4 feet (minimum) Whiteboard markers – Red, Blue, Green, Black Video Projector (1024 X 768 resolutions)
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Pre-requisite for training

A skill-set equivalent to Synergetics-Spring 4 MVC- Web Application Development(L1_05_SprngMVC4)

- Spring MVC architecture
- Data binding, Converters and Validation support
- Spring forms
- Basic security

Course Content

Day 1	<ul style="list-style-type: none"> ➤ Module 1: Integration with Other Frameworks <ul style="list-style-type: none"> ▪ Using Third party ORM solution [Hibernate / JPA] ▪ Built-in Templates available for third party ORM Solutions ▪ Using JTA Transactions ▪ Using Third Party Web Services ▪ Consuming SOAP based Web Services ▪ Consuming RESTful Services ▪ Integration with Apache Tiles ▪ Support for Multi-Part File Uploads
Day 2	<ul style="list-style-type: none"> ➤ Module 2: Securing Spring MVC Application <ul style="list-style-type: none"> ▪ Spring Security Overview ▪ Spring Security API ▪ Authentication Managers & Providers ▪ Form Based Authentication ▪ Integration with Hibernate for Credentials ▪ Integration of LDAP, CAS, OpenID for Credentials ➤ Module 3: Overview of Spring Web-Flow <ul style="list-style-type: none"> ▪ Understanding MVC & common problems in Web. ▪ Limitations of Stateless HTTP ▪ Introduction of Web Flows ➤ Module 4: Defining Flow <ul style="list-style-type: none"> ▪ Working with States and Transitions ▪ Defining & Working with Actions ▪ Using variables & scopes ▪ Using Expression Language [EL]
Day 3	<ul style="list-style-type: none"> ➤ Module 5: Sub-Flows <ul style="list-style-type: none"> ▪ Need for subflow ▪ Subflow input and output mapping ➤ Module 6: Inheriting and Securing Flows <ul style="list-style-type: none"> ▪ Flow Inheritance

- State Inheritance
- Using Spring Security to secure web flow

➤ **Module 7: Views in Flow**

- Rendering Views
- Specifying Identifiers
- Managing View scopes

➤ **Module 8: Spring Web Testing Framework**

- Importance of Unit Test & Integration Test
- Spring Mock objects
- Mock for WEB, JNDI, Spring Environment & Servlet API
- Testing Spring Web MVC Application in JUnit