Spring 3.x Training (3Days)

Day1

Spring Overview

- What is Spring
- Why use Spring
- Spring Philosophy
- Spring Architecture
- Spring Modules
- Obtaining/Setup Spring
- A First Spring Application

Dependency Injection

- Spring Containers
- BeanFactory
- ApplicationContext
- Bean Definitions
- Property Injection
- Collection/Array Wiring
- P-namespace
- Null Wiring
- Constructor Injection
- Large Configuration Files

Bean Lifecycle

- Bean Creation
- Bean Destruction
- Awareness Interfaces
- Initializing and DisposableBean Interfaces
- PostProcessors
- FactoryPostProcessors
- PropertyPlaceholderConfigurer
- ResourceBundelMessageResource
- Events and Event Handling

Wiring Alternatives

- Autowriing
- Autowiring Collections
- Pros and Cons of Autowiring

Annotations

- @Autowired

- JSR-250 Annotations
- JSR-330 Annotations
- Stereotype Annotations
- Filtering for Stereotype Annotations

Spring Expression Language (SpEL)

- Uses
- SpEl API
- Evaluating Expessions
- Language Constructs
- Operators and Method Invocation
- JavaBean Properties
- Working with Collections
- Expression Templating

Day2
Aspect Oriented Programming

- Cross Cutting Concerns
- AOP Concepts and Terminology
- Spring's AOP Support
- AOP Setup
- Aspects
- Advice
- Pointcuts
- Advice Parameters and Ordering
- Advisors

Spring MVC Overview

- What is MVC?
- Java MVC Frameworks
- Spring MVC Architecture
- A First Spring MVC Application

Spring MVC Configuration and Setup

- DispatcherServlet
- Context Configuration
- Context Loaders
- View Resolution
- InternalResourcesViewResolver
- ResourceBundleViewResolver
- Using Multiple View Resolvers

Annotation Based Controllers

- Request Mapping by Annotation
- Path Variables
- Handler Method Parameters
- Handler Method Return Types
- Command Beans and Working with Forms
- BindingResult and Errors
- Other Controller Annotations
- Exception Handling

Validation

- JSR-303 Validation

Day3

Data Access

- The DAO Pattern
- Exception Handling
- Data source configuration
- Templating
- JDBC Templates
- Callbacks
- SimpleJdbcTemplate
- SimpleJdbcInsert/SimpleJDBCCall
- Integrating with Hibernate

Spring Security

- Form Based Authentication
- Basic Authentication
- In memory Respository
- Authenticating Against Database
- Securing Methods