

Spring Framework

Introduction to Spring

- What is Spring
- How Spring fits into the Enterprise world
- Spring Modules

Spring Core(Basic Concepts) Theory/Practical

- What is a Core Container
- Introduction to IOC
- Types of DI
- Setter VS Constructor
- Resolving Constructor Confusion
- Collection DI
- Bean Inheritance
- Collection Merging
- Inner Beans
- Using IDRef
- Bean Aliasing
- Bean Scopes
- Inner Beans
- Null String
- Bean Auto wiring
- Nested Bean Factories

Spring Core(Advanced Concepts) Theory/Practical

- Request Dispatcher
- Resend Redirect
- P – Namespace

- Dependency Check
- Depends On
- Factory Beans
- Static Factory Method
- Instance Factory Method
- Aware Interfaces
- Bean Lifecycle
- Method Replacement
- Lookup Method Injection
- Property Editors
- Bean Factory Postprocess

Spring Core(3.0 Annotations) Theory/Practical

- Spring VS Java Config Project annotations
- @Required
- @Autowired
- @PostConstruct
- @PreDestroy
- @Qualifier
- @Resource
- @Component
- @Service
- @Controller
- @Named
- Various Annotation based Post Processors(AutowiredAnnotationBeanPostProcessor, CommonAnnotationBeanPostProcessor, PersistenceAnnotationBeanPostProcessor, RequiredAnnotationBeanPostProcessor)

Spring AOP Theory/Practical

- AOP Concepts
- Programmatic VS Declarative AOP
- Programmatic AOP
 - ◆ Types of Advices
 - ◆ Types of Pointcuts
 - ◆ Working with proxies
- Declarative AOP
 - ◆ Using AOP 2.0 Config element
 - ◆ OGNL Expressions
- Aspect J AOP

Spring Tx Theory/Practical

- Aop 2.0 Configuration driven Transaction Management
- Aspect J annotation based Transaction Management

Spring JDBC Theory/Practical

- What is the DAO pattern?
- Ways to implement Spring DAO
- Choosing an approach for JDBC database access
- JDBC Template
- Executing Statements
- Running Queries
- SQL Parameters

Spring MVC Theory/Practical

- Spring 3.0 features
- Introduction to Spring MVC
- Handler Mapping
- Controllers
- Validations
- Handler Interceptors
- Views
- Form tags
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Spring ORM

- Spring Integration with ORM
- Integrating with Hibernate
- Creating and Injecting Hibernate Session Factory
- Managing Transaction

