

Spring & Hibernate Syllabus

Spring is a general purpose framework that can be used in parts or collectively. Main concepts proposed by Spring are Inversion of Control (IOC) and Aspect Oriented Programming (AOP). Apart from this, Spring provides Transaction Management support, Implementation of MVC for developing web applications, Template implementations for JDBC and ORM frameworks, facility to integrate enterprise services etc. The purpose of this course is to train Trainee in IOC and AOP implementation of Spring as well to introduce them to Template and MVC implementation.

Course Contents:-

Introduction to Spring

- Understanding Inversion of Control (IOC) and Dependency Injection (DI)
- Spring Architecture
- Implementation IOC in Spring
- Understanding Aspect Oriented Programming (AOP)
- Implementing AOP in Spring
- Introducing the Template Design Pattern
- Simplifying Data Access using JDBC Template
- Abstract Data Access Layer using DAO
- Introduction to Spring MVC

Hibernate Content

Duration: 6 Week / 1.5 Months

Hibernate is widely used ORM framework. Basic functionality of an ORM framework is to persist objects of an application into database i.e. ORM frameworks free application developers from persistence logic so that they can concentrate on implementing the business logic. The purpose of this course is to provide in depth knowledge of Hibernate to the Trainees.

Course Contents:-

- Introduction to ORM and Hibernate
- Hibernate Architecture
- Hibernate Configuration
- Introduction to Session and SessionFactory
- Persisting Objects using Hibernate
- Inheritance Mapping
- Bidirectional Association Mapping
- Hibernate Query Language
- Caching Introduction
- Implementing Second Level Caching using EHCACHE
- Integrating Spring & Hibernate
- Integrating Struts & Hibernate
- Integrating JPA & Hibernate