

J2EE

1. Enterprise Java Beans (EJB 3.0)

- EJB 3.0 overview & Architecture
- Features of EJB 3.0
- About Session Beans
- EJB 3.0 Persistence Programming Model
- Java EE Application Assembly and Deployment – Anatomy of EJB Module & Packaging
- Java Persistence API
- Designing a Java Enterprise Application

2. FRAMEWORKS

Struts2 FRAMEWORK

- Struts2 Basics & Architecture
- Struts Request Handling Life Cycle
- Struts2 Configuration, Struts2 Actions, Struts2 Interceptors, Struts2 Results, Struts2 Value Stack/OGNL
 - Practical (Building Struts2 Framework Application)
- Struts2 Tag Libraries
- Struts2 XML Based Validations
 - Practical (Building Struts2 XML based Validation Application)
- Struts2 Database Access

3. Hibernate

- Introduction to Hibernate, ORM Overview, Hibernate Environment
- Hibernate Architecture & API, Hibernate Configuration, Hibernate Sessions, Persistent Class & Mapping Files
- Building Hibernate application, Hibernate Query Language (HQL)
- Hibernate O/R Mappings – Collection & Association Mappings
 - Many-to-One
 - One-to-One
 - One-to-Many
 - Many-to-Many
 - Hibernate Annotations

4. Spring

- Introduction to Spring Framework Architecture
- Bean Definition, Bean Scopes & Bean Definition Inheritance

- Spring IoC Containers, Understanding inversion of control (IoC) – Dependency Injection(DI)
- Spring Setter Injection, Spring Constructor Injection
- IoC in Action
- Architecture of Spring Web MVC Framework
- Spring MVC Getting Started – constructing web MVC application using Spring Framework, AbstractController in Spring MVC
- Spring MVC Controllers hierarchy
- SimpleFormController, Spring DAO design pattern