

ANSH INFOTECH

Development | Training | Consultancy
An ISO Certified company 9001:2015

Course Name – Full stack **Java**

Category - **Professional**

Duration - **2 Months**

PRE REQUISITES

- Web design and development
- JSPs and servlets
- Java Beans
- Basic SQL operations with JSP & servlets
- Hibernate

COURSE CONTENT

Spring 5

Getting Started

- Setting up the required software
- Project setup on Spring Tool Suite

Inversion of control

- Dependency Injection

Autowire

- Introduction
- Autowire Scenarios
- Qualifier annotation

Spring Bean

- Spring bean
- Constructor injection

Spring MVC

- Spring MVC minimal setup
- Basic form with Spring MVC
- Request param and Model under Spring MVC
- ModelAndView and foreach on data

Spring Forms

- Basic form elements

Spring Framework

Form validations

- Form Validation using HTML
- Hibernate validator introduction
- Repopulate form data
- ModelMap - Simplifying controller

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- Show error messages
- Validation rules

Database Connectivity using JDBC

- Maven Setup for hibernate and MySQL
- Dynamic web project approach
- Working with MySQL
- Defining Annotations
- Updating the Controller
- Adding the Validation
- Adding Data

Exception handling under Spring MVC

- Exception handling

Restful API (JAX-RS)

Web Services – Restful API

- Introduction
- REST webservices overview
- Resource based URIs
- Rest response
- Status codes
- Idempotence of HTTP Methods
- Hypermedia as the Engine of Application State (HATEOAS)
- The Richardson Maturity Model
- JAX-RS and implementations overview

Database Connectivity (Hibernate)

- Installing MySQL
- Creating sample database
- Setting up service
- Integrating hibernate
- Add DAO layer
- XML response
- JSON response

Spring Boot

Getting started

- Setup maven project
- Webapp with Spring boot
- JSP support
- Application properties
- ServletInitializer

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Restful microservices

- Add view all posts functionality
- Add view specific post functionality
- Postman
- Add post functionality
- Update and Delete functionality

Restful microservices with database connectivity

- Setting up
- Installing MySQL
- Setting up connection
- Create database table
- Configuring entity class
- Update Service layer
- Curd operations

JUnit 5

- JUnit architecture
- JUnit project on eclipse
- Set Junit test method
- Assertions
- Assertion documentation and message param
- Testing exceptions
- JUnit hooks - cover after each
- BeforeAll and AfterAll
- AssertAll and Disable
- Assume
- SureFire plugin
- JUnit with IntelliJ
- JUnit in action on IntelliJ
- Tagging
- Repetitions and Lazy message

Exercise's

- Injecting dependencies and autowiring
- CRUD operations with XML configuration
- CRUD operations with annotations
- Creating Restful web services for CRUD
- Testing application using JUnit 5