BIET Davangere - 10-Day Java Full Stack Developer Training (60 Hours)

Day 1 - HTML & CSS

- Introduction to Web Development

- HTML5 Structure and Tags

- Forms and Input Types

- CSS Basics: Selectors, Box Model, Flexbox

- Styling Forms and Layouts

Day 2 - JavaScript & SQL

- JavaScript Fundamentals: Variables, Functions, Events

- DOM Manipulation

- Form Validation using JavaScript

- Introduction to SQL

- DDL & DML Commands: SELECT, INSERT, UPDATE, DELETE

- SQL Table Design and Querying using MySQL or DB Browser

Day 3 - File Handling, Multithreading, and Selenium Automation

- File Handling in Java

-   - Reading and Writing Text Files

-   - Reading and Writing Excel Files (Apache POI)

- Introduction to Threads and Multithreading

-   - Thread Class and Runnable Interface

-   - Synchronization Basics

- Introduction to Selenium Automation

-   - WebDriver Setup and Locators

-   - Automating Sample Webpages

- Hosting a Static Webpage on GitHub Pages

- Automating Hosted Page with Selenium

Day 4 - JDBC and Backend Development

- JDBC Architecture and Components

- Connection, Statement, ResultSet, PreparedStatement

- Performing CRUD Operations with JDBC

- Backend Validations

- Exception Handling in Database Operations

Day 5 - Servlets and Dynamic Web Development

- Servlet API and Life Cycle

- Handling GET and POST Requests

- Configuring web.xml and Annotation-based Setup

- Introduction to Dynamic Web Projects in Eclipse

- Creating and Managing JAR files

- GitHub Integration for Codebase Versioning

Day 6 - JSP Integration

- JSP Life Cycle

- JSP Scripting Elements: Scriptlets, Expressions, Declarations

- Integrating HTML with JSP

- Expression Language (EL) and JSTL Overview

- Combining JSP, Servlet, and JDBC in a Web Application

Day 7 - Authentication & Introduction to Spring Framework

- Building User Registration and Login with JSP and JDBC

- Session Tracking and Validation

- Introduction to Spring Framework

-   - Spring Architecture and Modules

-   - Differences between Spring and Spring Boot

Day 8 - Spring IoC and Annotations

- Understanding Inversion of Control (IoC)

- Dependency Injection using Spring

- XML-based vs Annotation-based Configuration

- Using Spring Initializr

- Core Spring Annotations: @Component, @Autowired, @Service, @Repository

Day 9 - Thymeleaf, Hibernate, JPA, and Spring Boot

- Introduction to Thymeleaf Templating Engine

- Hibernate Overview and ORM Concepts

- Java Persistence API (JPA) with Spring Data

- Using H2 Database for Development and Testing

- Setting up and Configuring a Spring Boot Application

Day 10 - Full Stack Integration and Wrap-up

- Building a Complete CRUD Application using Spring Boot, MySQL, JPA, and Thymeleaf

- Frontend-Backend Integration

- GitHub Deployment and Best Practices

- Interview Preparation and Career Guidance

- Training Wrap-up and Q&A Session