



Advanced Program in Java Full Stack Development

✉ info@dvoc.in

☎ +91 7021733916





About

Digital Vocational Program (DVOC) is a specialized online training platform for students to develop technical skills by learning from our industry experts. We focus on delivering practical knowledge, as it is the key to a successful digital world career. With our skill-enhancing courses, students can learn the latest technologies that will help them to grow beyond primary education and learn some real-life skills.

DVOC will help the schools, colleges, and universities establish vocational programs to help their students be employable for the Industry.

At DVOC, we believe in quality education that all students should receive apart from the formal education they receive from their schools and colleges to be ready for the Industry.

Objective

Our Full Stack Development course will completely transform your web development journey. It is the need of the hour as most companies are looking for full-stack developers to develop and manage their web projects. A full-stack developer can independently complete a project by using the variety of skills required for a project. The goal of our Full Stack Development course is to equip you with the unique skills required to build database-backed APIs and web applications. You will learn to work with the latest frontend and backend technologies, debugging web applications and websites, and case studies.

Kick-start your Career with Advanced Program in Java Full Stack Development from DVOC.

Term 1: Foundation

- **Working with Microsoft Office**
 - Microsoft Word, Microsoft Excel, Microsoft PowerPoint
- **Logic Building using Flowcharts and Pseudocode**
 - Introduction to Flowcharts and Pseudocodes
 - Operators and Data Types
 - Decision making and Control Statements
 - Implement iterative processes using Loops
 - Solve problems using flowcharts and pseudocode



- **Implementing OOPS using Java**

- Identify the features of object orientation
- Create object-oriented Java applications
- Use decision-making constructs and loop constructs
- Implement collection frameworks
- Inheritance and Polymorphism
- Implement error handling

- **Database Management using SQL**

- Retrieve, summarize, and group data
- Use functions to customize the result set
- Query data by using joins and subqueries
- Manage databases, tables, and result sets
- Manipulate data by using DML statements
- Create and manage indexes and views

- **Building GUI Applications using Java**

- Programming GUI with AWT
- AWT Event-Handling
- Validations using Regular Expressions
- Implement multi-threading
- File IO and NIO in Java
- JDBC Application Building using SQL

- **Project**



Term 2: Professional

- **Software Development Methodology –Agile Model**

- Software Development Models: Traditional Models
- Agile Model and Practices

- **HTML5, CSS, JQuery and Bootstrap**

- Create an HTML Web page
- Enhance Web pages
- Work with tables and frames
- Add interactivity to Web pages
- Create dynamic and responsive Web pages
- Work with graphics
- Add visual effects to Web pages

- **Testing Framework –JUnit**

- Fundamental Concepts and Theory of Testing
- Architecture and Extension Model
- Advanced Techniques and Features of JUnit

- **Web Development using JSP and Servlets**

- Understand HTTP request/response cycle and servlet lifecycle
- Identify services provided by the Web container
- Implement the MVC design pattern
- Implement servlet request dispatcher, filters and servlet listeners
- Handle errors and exceptions
- Develop JSP pages using EL and JSTL
- Implement JDBC, Java persistence API and session management
- Create asynchronous Web applications
- Implement security: Role based security, encryption and JAAS
- Implement the Struts framework and Java EE design patterns

- **Professional Resume Building and Interview Preparation**

- **Project**



Term 3: Advanced

- **Hibernate and Spring Framework**

- Overview of Spring
- Implementing Dependency Injection
- Integrating Spring with Web Layer
- Implementing AOP
- Integrating Spring with Business and Presentation Layers
- Implementing Spring Security and Spring Validation

- **Node JS**

- Introduction to Node.js
- Exploring the Node Package Manager
- Asynchronous Programming in Node
- Managing User Interactivity

- **REST API with Spring**

- Implementing REST Using Spring Boot
- Basics of Rest API
- Building RESTful Web Services in Spring 5 with Maven
- Flux and Mono (Reactor Support) in Spring
- CRUD Operations in Spring REST
- Spring Security and JWT (JSON Web Token)
- Testing RESTful Web Services
- Building a REST Client and Error Handling
- Advanced CRUD Operation (Project based)

- **REACT**

- Introducing React and UI Design
- Creating Components
- Managing User Interactivity



- **Angular**

- Introduction to Typescript
- Angular basics
- Building Our First App
- Exploring Single Page Application capabilities
- Angular forms
- Supporting Server Data Persistence
- Angular and server interactions
- Angular Directives in Depth

- **Final Project**



Career Prospects

Full Stack Developer

Web Designer

Back End Developer

Web Developer

Software Developer

UI Developer

Front End Developer

Application Developer

Course Highlights

Concept and Practical Oriented Training

Expert Faculty

In-depth Curriculum to meet Industry Demand

DVOC Certificate

Case Studies and Project Based Learning

Placement Assistance*

Projects in Every Term

Small Batch Size