



JAVA TRAINING

Full Stack Java Developer Course

Master full-stack Java development. Build robust web applications using Spring Boot, React, and more.

DURATION

200 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

-
- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

Embark on an immersive journey to become a proficient Full Stack Java Developer with Computer Pride's comprehensive 200-hour intermediate course. This program is meticulously designed to equip you with the essential skills to architect, develop, and deploy robust, scalable, and interactive web applications from end to end. You'll master the entire development stack, transforming concepts into fully functional enterprise-grade solutions.

This course dives deep into core Java programming, object-oriented principles, and advanced features, laying a strong foundation. You will then transition to building powerful backend services using the industry-standard Spring Boot framework, crafting RESTful APIs that power modern applications. Concurrently, you'll gain expertise in front-end development using cutting-edge JavaScript frameworks like React, enabling you to create dynamic and responsive user interfaces. The curriculum also covers essential database management with SQL and ORM tools like JPA/Hibernate, along with vital DevOps practices for seamless deployment.

Upon completion, you will possess a versatile skill set highly sought after in today's competitive tech landscape. You will be capable of building complex web applications, contributing to large-scale projects, and confidently navigating both client-side and server-side development challenges. This certification empowers you to launch or accelerate your career, positioning you as a valuable asset ready to contribute to any development team.

Duration	200 hours
Level	Intermediate
Vendor	Java

COURSE CURRICULUM

01 Module 1: Core Java & Object-Oriented Programming Fundamentals

- Java Language Syntax and Data Types
- Object-Oriented Programming (OOP) Concepts: Classes, Objects, Inheritance, Polymorphism
- Abstraction and Encapsulation
- Java Collections Framework (Lists, Sets, Maps)
- Exception Handling and Multithreading
- Input/Output Streams and File Handling
- Lambda Expressions and Stream API in Java 8+

02 Module 2: Front-End Web Development with React

- HTML5 and CSS3 Essentials (Semantic HTML, Responsive Design)
- JavaScript ES6+ Fundamentals (Variables, Functions, Asynchronous JavaScript)
- Introduction to React: Components, JSX, Props, State
- React Hooks (useState, useEffect, useContext)
- React Router for Navigation
- State Management with Context API or Redux Basics
- Consuming RESTful APIs in React Applications

03 Module 3: Back-End Development with Spring Boot

- Introduction to Spring Framework and Spring Boot Architecture
- Dependency Injection and Inversion of Control (IoC)
- Building RESTful Web Services with Spring Boot

- Spring Data JPA for Database Interaction
- Request Mapping, Controllers, and Services
- Data Validation and Exception Handling in Spring
- Introduction to Spring Security (Authentication and Authorization)

04 Module 4: Database Management & Persistence with SQL and Hibernate

- Relational Database Concepts and SQL Queries (CRUD, Joins, Subqueries)
- Database Design Principles and Normalization
- Java Database Connectivity (JDBC)
- JPA (Java Persistence API) and Hibernate Framework
- Spring Data JPA Repositories
- Transaction Management
- Introduction to NoSQL Databases (e.g., MongoDB basics) and Spring Data MongoDB

05 Module 5: Testing, Deployment & DevOps Fundamentals

- Unit Testing with JUnit and Mockito
- Integration Testing for Spring Boot Applications
- Build Automation Tools: Maven and Gradle
- Version Control with Git and GitHub
- Containerization with Docker Fundamentals
- Introduction to Cloud Deployment (e.g., AWS EC2, Heroku)
- CI/CD Pipeline Concepts (Continuous Integration/Continuous Deployment)
- Logging and Monitoring Best Practices

06 Module 6: Capstone Project & Advanced Java Ecosystem

- End-to-End Full Stack Application Development Project
- Advanced Spring Boot Features (Caching, Aspect-Oriented Programming)
- Introduction to Microservices Architecture Patterns
- Message Queues (e.g., Kafka or RabbitMQ basics)
- Performance Optimization Techniques
- Secure Coding Practices and Best Design Patterns
- Interview Preparation and Portfolio Building Strategies

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Enterprise Java Developer**
- > **Senior Web Application Engineer**
- > **Cloud-Native Backend Developer**

FREQUENTLY ASKED QUESTIONS

Q: What specific front-end JavaScript framework will I master in this Full Stack Java Developer Course, and how will it integrate with the Java backend?

This course focuses on mastering React.js for the front-end. You will learn to build dynamic and responsive user interfaces, manage application state, and effectively consume RESTful APIs developed using Spring Boot. We will cover practical integration strategies, ensuring you can build seamless, data-driven full-stack applications where the front-end

and back-end communicate efficiently and securely, often utilizing tools like Axios for HTTP requests and managing CORS.

Q: What kind of real-world projects will I undertake during the course to showcase my Full Stack Java development skills?

Throughout this Full Stack Java Developer Course, you will work on multiple practical projects, culminating in a comprehensive capstone project. These projects are designed to simulate real-world scenarios, allowing you to apply your knowledge in building database-driven web applications, RESTful services, and interactive front-ends. Examples include an e-commerce platform with secure transactions, a social media dashboard with real-time updates, or a robust task management system, all integrated end-to-end to build a strong professional portfolio.

Q: Given this is an 'Intermediate' level course, what are the essential prerequisites for enrolling in the Full Stack Java Developer Course?

To ensure success in this intermediate Full Stack Java Developer Course, participants should have a foundational understanding of programming concepts, ideally with some prior exposure to Java (e.g., basic syntax, variables, control structures). Familiarity with basic web technologies like HTML and CSS is also highly beneficial. While we will review core Java and web fundamentals, the pace assumes a basic grasp of programming logic and syntax. Strong problem-solving skills and a keen interest in building complex web applications are key.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location

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