

# Full Stack Web Development!!

## About the Program

This Post Graduate Program, designed in collaboration with the infort technology ind pvt ltd, will prepare you for a high-growth career path in software development. You will be taken on a journey of end-to-end software development through a mix of theory, case studies, and extensive hands-on practice through labs. Students also have access to mentorship sessions, providing a high-engagement learning experience; and real-world applications to help you master essential full stack web development skills.

The course curriculum is designed with a special emphasis on a practical learning experience. You will hone your programming continuously through regular practice in high-quality virtual labs. The course includes a Capstone project where learners can choose from four different fields and build high quality applications using the latest technologies which will become a part of their portfolios.

At the end of this course, learners will be able to work on both front-end and back-end Java technologies. In addition, relevant concepts from DevOps and testing are covered. The course begins with the basic concepts and progressively takes you to advanced aspects of web development. Gaining expertise in technologies such as Angular, Spring Boot, Hibernate, Servlets, JSPs, MVC, and web services will open multiple career avenues for you.

Fees: Rs 55,000

Duration: 6 Month for Syllabus completion + Till Job Placement

## Program Eligibility Criteria

- For admission to this Post Graduate Program candidates: Should have a Bachelor's degree in any discipline with an average of 50% or higher marks.
- Require basic programming knowledge.
- Do not require prior work experience.

## **The ideal students for this course:**

- New graduates who are ready to take the plunge into the job market.
- Developers who are working in front-end or back-end development and want to shift to full stack web development.
- Test engineers, system engineers, and others who want to make a career shift to development.

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### **Step1: Develop a web application Using the Front-end Stack**

Create industry-standard applications and websites using the front- end stack technologies such as HTML, CSS, JavaScript, and Angular. Employ a range of data types to handle your applications efficiently using MongoDB.

#### **Key Learning Objectives**

Learn HTML, CSS, Javascript, Typescript, Angular, and MongoDB,Configure Jasmine, test source codes, and test your Angular application

#### **Course curriculum**

Lesson 01: Front-end Web Developer Masterclass using HTML, CSS, and JavaScript

Lesson 02: Build Real-world Websites from Scratch Using HTML and CSS3

Lesson 03: Full JavaScript Masterclass Course: ES6 Modern Development

Lesson 04: Introduction to Typescript

Lesson 05: Angular Training

Lesson 06: MongoDB Developer and Administrator Certification Training

### **Step2: Implement OOPS Using JAVA with Data Structures**

Revisit the basics of software development with this introductory phase of our Full Stack Web Development program. Learn Agile and Scrum methodologies to deliver projects on time, and learn the building blocks of Java data structures and their application in object- oriented programming. Develop a comprehensive understanding of GIT to manage version control systems; and Maven to manage project dependencies.

#### **Key Learning Objectives**

- Learn the underlying principles of Agile and Scrum
- Gain an understanding of Git, GitHub, and Git Rebase

- Learn about Java and its basic concepts such as methods, constructors, strings, inheritance, multi-threading, and arrays

### **Course curriculum**

Lesson 01 - Agile Scrum Foundation

Lesson 02 – Git

Lesson 03 - Core Java Training

Lesson 04 - Data Structures and Algorithms

Lesson 05 – Maven

### **Step3: Become a Back-end Expert**

Learn all aspects of back-end technologies by acquiring in-depth skills of SQL, Java servlets, and the relational database ORM with Hibernate. Learn to connect databases with JDBC and gain an understanding of RESTful web services.

### **Key Learning Objectives**

Gain an understanding of servlets and basics of SQL including DDL and DML

Learn JDBC, JSP, REST, and Hibernate in depth

### **Course curriculum**

Lesson 01 - Java Certification Course

a.) Java Servlet

b.) Java Server Pages

c.) Hibernate

d.) Spring

Lesson 02 - SQL Training

a.) Relational Databases

b.) Querying

c.) Joining Tables

d.) Creating Databases and Adding Business Logic

## **Step4: Implement Frameworks the DevOps Way**

Develop advanced UI skills with HTML and CSS, and build 3-tier applications with practical front-end features using the Spring framework, Angular, JUnit5, and SoapUI. You will also get to learn how to deploy continuous integration and automation using Jenkins.

### **Key Learning Objectives**

- Learn the basics of the Spring framework, including its architecture
- Handle exceptions using Spring Boot
- Build RESTful web services
- Understand the JUnit 5 platform and architecture and SoapUI features
- Deploy continuous integration and automation with Jenkins Pipelines

### **Course curriculum**

Lesson 01 - Spring 5.0 Core Training

Lesson 02 - Master Hibernate and JPA with Spring Boot in 100 Steps

Lesson 03 - DevOps: CI/CD with Jenkins Pipelines, Maven, and Gradle

### **Steps5: Full Stack Web Development Capstone Project**

The Full Stack Web Developer Capstone project will introduce you to real world applications. You will be given a choice among industries such as e-commerce, food delivery, entertainment, and healthcare. Comprehensive mentoring will guide you while you work on challenging problems that these industries face today. You will work on an original problem from scratch and learn how to apply your skills in an industry-specific context. The Capstone project helps to create a portfolio which will speak for your skills to a wide audience including prospective employers.