



# Become a professional Java Full Stack Developer

with Average Salary Package of INR 6,00,000

**Curriculum Brochure** 

# Java Full Stack Development

As a Full Stack developer, you have the skills to develop both the front-end and backend components of a web application, making you a valuable asset to any organization that requires web & mobile app development services.

Full Stack developers can work in a variety of industries, including finance, healthcare, education, e-commerce, and more. With experience, Full Stack developers can also move into leadership roles such as Technical Lead or Architect, where they are responsible for designing and leading the development of large-scale web applications.

The demand for Full Stack developers is high as companies are increasingly looking for individuals who can work on both the front-end and back-end of web applications. This demand is expected to continue to grow as more businesses move online and require robust web applications that can handle large amounts of data and traffic.

To advance in a Full Stack development career, it is essential to stay up to date with the latest technologies and tools. This includes learning programming new languages, frameworks, and libraries as they are introduced. Full Stack developers should also have excellent problem-solving skills, be able to work independently and as part of a team, and be able to manage multiple projects simultaneously. With the right skills and experience, a Full Stack developer can build a fulfilling and rewarding career in web & mobile app development.

As a java full stack developer, you have different specialisations to work so you will have different options to start your career.

#### Middle Level Career Options

After successfully completion of training, you can apply for various job roles, like

- Java Software Developer
- Java Application Developer
- Java Web Developer
- Java Architect
- API Developer
- Java Trainer or Instructor, etc.

#### **Top Level Career Options**

After two to five years of experience, you can apply for job roles, like

- Java Full Stack Developer
- Java Cloud Developer
- Java Technical Lead
- Java Consultant
- Java Test Automation Engineer
- Project Head

In summary, Java Full Stack development is a promising career field with a variety of opportunities for growth and advancement. The salaries for Full Stack developers are also quite competitive, with entry-level positions can vary based on factors such as location, industry, and experience.

There are diverse Career Options in Java Full Stack

# TRAINING

#### Why, You should choose

#### Java Full Stack – As Career Option

Universal Demand	Java is the top and widely used programming language used to develop highly secured and reliable applications. The demand of java professionals are always high which leads to more job opportunities and high salaries.
Versatility	Java is a versatile language because it is used in back-end development, API's & micro services development, handling business logics and can be integrated with a variety of databases and development frameworks.
Large Community & Resources	There is a large community of java developers around the globe and a great wealth of resources available online, including documentation, blogs, tutorials and forums which are beneficial for learning and professional development of individuals.
Future Proof Technology	Since its birth, java is still a widely used language which proves that it is a stable and future proof technology so it is best suit for those who want to build a long term career in a specific domain.

# Training Roadmap Java Full Stack Development

Java Full Stack Development provides a wide range of career opportunities like job security, high demand, versatility and professional development which makes it best option for those candidates who are interested in pursuing a career in technology by building most reliable and secure software or applications. A strong understanding of these technologies is essential for building complex and scalable web applications that meet the needs of modern businesses.



## Available Training Programs to become a Java Full Stack Developer

Program	Associate Program	Professional Program	
Duration Required	3-4 Months	6 Months	
Level	Intermediate	Expert	
Working Experience	Not Applicable	3 Months	
Timings	Week-days (Mon - Fri)		
Activities	Live Classes (Online / Offline), Doubts Sessions, Presentations, Minor Projects, Training, Assignments.	Live Classes (Online / Offline), Doubts Sessions, Presentations, Training, Assignments, Mock Interviews, Capstone Projects	
Amenities	Video Resume, Portfolio, Working Experience* (based upon projects), Interview Questions, Technical Support, Job Notifications.		
Outcome	Valid Certifications Valid Certification & Experience		

## Benefits / Perks with Learn2Earn Labs Training Program

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Hands-On Training	Working Experience	Valid Certification	Corporate Connections

# Java Full Stack Training Program

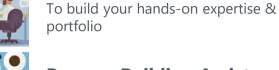
This program is designed train to students with the skills and experience to work with Object oriented programming, Java, Web Technologies, Database and popular Java frameworks like Spring & Hibernate..



#### **Practical Based Sessions**

Training program available in four months & six months duration





**Dummy Projects** 

**Resume Building Assistance** To create an attractive resume for your candidature



#### **Interview Preparation** So you can present your skills in a better way



Mentoring & Job Assistance To help you in getting good career or placements

#### Who can join

Any graduate or post graduate student from B.Tech or M.Tech (any specialization), BCA or MCA, B.Sc. or M.Sc. (CS / IT) can join the Java Full Stack training program . The student must have basic knowledge of computer and have interest in software development.

Any working professional, belongs to computer science or IT specialization, having some experience in software industry or related industry and now looking for department switch, salary hike or promotions can also join the Java Full Stack training program.

### **Training Mode**

# Online Live Classes are available

- 4x more effective way of learning
- Hands-on experience with projects & assignments
- Virtual class with real interaction with trainer
- Monitoring support & troubleshooting issues
- Masterclass from industry experts & leaders
- Live class recordings for revision purpose

## Java Full Stack Development Training in Agra



#### Learn2Earn Labs

F-4, First Floor, Anna Ikon Complex, In Front of Deviram Food Circle, Sikandra-Bodla Road, Sikandra, Agra, Uttar Pradesh – 282007 Call : +91-9548868337

# **Training Modules**

#### **Objectives** :

The objective of this Java Full Stack development training program is to provide learners with a comprehensive understanding of Java programming basics, web technologies, and popular Java frameworks such as Spring and Hibernate. By the end of the training, learners will have the skills and knowledge needed to develop full-stack web applications using Java technologies. The program will cover topics such as object-oriented programming with java core concepts, as well as HTML, CSS, JavaScript, and popular web frameworks. Additionally, learners will gain hands-on experience with Spring and Hibernate frameworks, including dependency injection, aspect-oriented programming, object-relational mapping, and data access. The goal is to prepare learners for a successful career in Java Full Stack development.

#### Module 1: Introduction to Software Development & Object Oriented Programming

Introduction to Software Development, Software Development Life Cycle, Software Development Models, DFD, ER Diagram, Unified Modelling Language, Software Types, Programming Languages & Types, Object Oriented Programming.

#### Module 2 : Java Core Programming

Introduction to Object Oriented Programming & Java, methods, variables, constructor & blocks, control flow (if-else, switch, while loop, do while loop, for loop, return, break, continue, etc.), OOPS concepts (Inheritance, Polymorphism, Encapsulation & abstraction), Inner classes (regular, method local, static, & anonymous), Inner interfaces, Wrapper classes, String Handling, Exception Handling, Multithreading, File Handling, Input-Output.

Introduction to GUI, component, container, AWT, Java Foundation Classes (swing), Layout Managers, Event Handling, Event Listeners and Handlers, Adapter Classes, Lambda Expression, Serialization, Regular Expression.

#### Module 3 : Collection Framework, Generics & Concurrency

Introduction to Collection Framework, Arrays vs Collections, Key Interfaces, List, Set, SortedSet, NavigableSet, Queue, Map, SortedMap, NavigableMap, ArrayList and Vector, Stack, LinkedList, Iterator, ListIterator, HashSet, LinkedHashSet, SortedSet, TreeSet, Concurrent Collections.

Introduction to Enumeration, Enum examples & use cases, Introduction to Generics, Time Safety, Type Casting, Generic Methods.

Introduction to Concurrency & Thread Enhancement, Thread Group, java.util.concurrent packages, thread synchronization mechanism & java locks, java thread pools, java thread local, execution mechanism & case studies.

#### Module 4 : MySQL Database & Java Database Connectivity

Introduction to Database & MySQL, MySQL Installation, MySQL Structure, Schema (Create, Drop & User Database), Table Operations, Create, Drop, Alter, Rename, Update, Add, Column Insert, Update, Delete, Select, Where, AND, OR, NOT, In, Between, Limit, Order By, Offset, Count, Sum, Avg, Min, Max, Nested Queries, Clause, Search Pattern, Foreign Key & Joins.

Introduction to JDBC, JDBC drivers, Required Interfaces, Execute methods, CRUD operations, Aggregate functions, Transaction Management, PreparedStatement, stored procedures, callable statement, batch updates, date values, BLOB & CLOB, connection pooling, transaction management & savepoints, MetaData, ResultSet types, RowSets and RowID

#### Module 5 : Hypertext Markup Language (HTML)

Introduction to HTML5, Environmental setup of HTML5, HTML tags, elements and attributes, Syntax of HTML, Custom Attributes, Line Breaks, Spacing & Comments, HTML head tag, Setting Website Icon & Title, Background Images & Colors, Block & Inline Level Elements, Text Formatting Tags, Heading & Quotes, Images, Linking Web Pages, Creating Lists, Play Audio & Video, Embedding External Content, Creating Tables, Forms & Inputs, Semantic Elements, Using Emoji, Entities & Symbols in Website.

#### Module 6 : Cascading Style Sheets (CSS)

Introduction to CSS3, CSS3 Environmental Setup with HTML5, Linking CSS3 with HTML5, Priority of CSS3 Stylesheets, Comments in CSS3 Properties & Selectors in CSS3, CSS "IMPORTANT" Rule, Priority of CSS Stylesheets according to Selectors, Text Colors & Transparency in CSS3, CSS Dimensions & Units, Shorthand Properties Backgrounds, Gradients Properties, Text Styling, Text Fonts, Google Fonts & Icons.

CSS3 Box Model (Border, Margin, Padding, Shadowing, Redefining box-width, outlines etc.) Floats, Clear & Overflow, CSS3 Display Property, CSS Element Visibility, Position & Layering, Transitions & Animations, Creating Column Layouts, CSS Counters, Creating Tables Using CSS, Transforming CSS Elements, Clipping, Shaping, Masking & Filters.

#### Module 7 : JavaScript

Introductions to JavaScript, Variables, let & const keyword, string handling, operators, control flow (if-else, switch, while loop, do while loop, for loop, break, continue, etc.), Array operations, objects & functions, scopes, methods (forEach, sort, find, some, fill, splice, map, filter, reduce, call, apply, bind, etc.). Object cloning, keyword (this, new, class, extends & super), arrow functions, function declarations & expressions, getter & setter methods, static methods, closures, Document Object Model, DOM Manipulation using JavaScript, attributes, Lists, JavaScript Events, callbacks, promise, Introduction of AJAX & ES6.

#### Module 8 : Servlet & Java Server Pages

Introduction to Servlet, Application types, web application directory structure, servlet execution, important methods, servlet communications, CRUD Operations, RequestDispatcher, Servlet Filters, Session Tracking, URL Rewriting, cookies, hidden form fields, Servlet Listeners & Events, Annotations in Servlet.

Introduction to JSP, Servlet vs JSP, Model Architecture, Scripting Elements (Scriptlets, Expression, Declarations, Comments), JSP Implicit Object, JSP Directives (page, include, taglib), JSP scopes (Page, Request, Session, Application), JSP Actions (standard, custom), Exception handling, JSTL (Core tags, SQL tags, xml tags, function tags, etc

#### Module 9 : MongoDB Database

Introduction to MongoDB, MongoDB Terminology, MongoDB client-server connection, MongoDB Installation, CRUD (create, read, update, delete) operations.

Data Modelling overview & approaches, data modelling in MongoDB, Types of Data Models, Flat Schema, Star Schema, Hierarchical Schema, Relational Schema, Object Relational Schema, Introduction to MongoDB Architecture, Distributed database, MongoDB instance, Introduction to MongoDB Compass, MongoDB Compass Dashboard, code implementation, Cursors, Query Optimization, Distributed queries.

#### Module 10 : Spring

Introduction to Spring, Dependency Injection, Data Integration, IOC Container, Maven Project for Spring & Dependencies, Spring Configuration, Injecting Collections, Injecting Reference Type & Constructor, Spring Bean, Life Cycle Methods, Annotations, Spring Bean Scope, Spring Expression Language.

Introduction to Spring JDBC, Database Setup, CRUD Operations, Row Mapper, Introduction to Spring ORM, CRUD Operations using Spring ORM, Introduction to Spring MVC, MVC Design Pattern, Tomcat Configuration, JSP Expression Language, JSTL, Handling Forms, Redirecting in Spring MVC, Error Handling, Exception Handling, Spring MVC Interceptor, Aspect Oriented Programming (AOP).

#### Module 11 : Spring Boot

Introduction to Spring Boot, Auto Configuration, Spring Initializr, Spring Tool Suite, JSP view, Introduction to JPA, Repository, DB Configuration, CRUD Operations, Custom Finder Methods, JPQL and Native Queries.

Introduction to API & Web Services, Understand REST API, Spring Boot Dev Tools, Creating REST API (get functionality, PostMapping, DeleteMapping, PutMapping, ResponseEntity), Server Side Form Validation, Spring Security, Role Based Authorization, Login Functionality, Configuration and Customization, Introduction to JWT, JWT Authentication, Unit Testing of Spring Boot Projects.

#### Module 12 : Hibernate

Introduction to Hibernate & ORM Tool, Maven Project for Hibernate & Dependencies, Hibernate Configuration, Annotations, Saving data and images, Object Fetching (get & load method), embedding objects, Hibernate Mapping (one to one, one to many & many to many), Lazy & Eager Loading, Hibernate Object States, Introduction to HQL (Hibernate Query Language), Native SQL Queries, Cascading, Cashing, Hibernate Criteria API, Hibernate Integration with Spring MVC.

#### Module 13 : Version Control, Git & GitHub

Introduction to Version Control & Git, Command Line Interface, GitHub & Repositories, initialization, status, add, staging, commit, diff, checkout, cloning, push operation, branching, fetching & merging, forking & pull requests.

#### Module 14 : Capstone Projects

Utility based major projects to increase your productivity and to build your experience.



Web Project



LMS Project



An eCommerce web project with Java, JDBC, Servlet, and JSP technologies for users to browse and purchase products or services. The project would use Java as the programming language, along with JDBC for database connectivity, and Servlets and JSPs to handle requests and generate dynamic content. The project would have a variety of features such as a product catalog, shopping cart, checkout process, user authentication and authorization, order tracking, and customer support.

A LMS (Learning Management System) web project with Java, JDBC, Servlet, and JSP technologies to provide educational resources and online training courses. The project would use Java as the programming language, along with JDBC for database connectivity, and Servlets and JSPs to handle requests and generate dynamic content. The project would have features such as user registration, course delivery & management, assessment tools, progress tracking, and communication tools.

An informative blog with Java, JDBC, Servlet, and JSP technologies to provide informative and engaging content to users. The project would use Java as the programming language, along with JDBC for database connectivity, and Servlets and JSPs to handle requests and generate dynamic content. The project would have features such as user registration, article creation, and comment section. The project's goal is to provide a user-friendly and interactive platform that enables users to access informative articles and engage in discussions.

# **Frequently Asked Questions**

#### 1. How this training program will help me to get a placement with handsome salary?

Our training program is designed as per the requirements of business industries and latest trends. During training you will get a deep practical exposure of java full stack development & related technologies along with the experience of working on dummy projects. You will be able to work on front end, back end with java & database connectivity and can also lead or supervise other people to work on those dummy projects. With your skills, experience and abilities, you can get offer from any renowned organization.

#### 2. Why should I choose Java Full Stack Development as a career option?

Java is the top and widely used programming language used to develop highly secured and reliable applications. The demand of java professionals are always high which leads to more job opportunities and high salaries.

Java is a versatile language because it is used in back-end development, API's & micro services development, handling business logics and can be integrated with a variety of databases and development frameworks.

There is a large community of java developers around the globe and a great wealth of resources available online, including documentation, blogs, tutorials and forums which are beneficial for learning and professional development of individuals.

#### 3. What kind of jobs, will I get after completing this training?

After successfully completion of the training program you would be able to work with renowned companies on various roles like Java Software Developer, Java Application Developer, Java Web Developer, Java Architect, API Developer, Java Trainer or Instructor, etc.

#### 4. What would be the salary, I will receive after completing the training?

Java Full Stack Developers are one of the demanding professionals in the corporate industries and their demands are increasing every year. After successfully completing the training you would be one of them and can get an average salary of Rs. 6 LPA or more.

#### 5. Will you provide me, Job Assurance or Job Guarantee?

Yes, We can give you Job Assurance to have a decent job offer. Only you need to attend all the classes or practical session with at-least 80% attendance, complete the assignments, appear in test series, professional development sessions & mock-interviews, work on dummy projects, etc. You must be holding a valid degree in the related domain.

#### 6. Can I attend demo classes after getting enrolled for the training program?

Yes, You can attend the demo classes. Usually, we provide demo classes (up to 3 classes) for fresher and new candidates so they can understand the overall curriculum, clear their doubts, and make sure that the training would be worthy and useful. After demo classes, you can register yourself for the training program.

#### 7. Why should I join Learn2Earn Labs instead of joining any other institute?

It's always difficult to find a good institute or a mentor. At Learn2Earn Labs, its our responsibility to give you a perfect environment to learn, develop your skills & find your talent. At Learn2Earn Labs, we know that you are enough capable to do anything, only you need a guidance & support to improve your skills and practical knowledge.

Learn2Earn Labs will provide you an additional training in professional development depending upon your requirements, which will help you in getting your dream job.

#### 8. How I can pay for my training? Do you offer part payment facility & any EMI plan?

Other than Pay-In-Cash option, any mode of payment is allowed whether it would be UPI, NEFT, Account Transfer, Cheque or Demand Draft.

Yes, we offer part payment facility (with extra 15% processing fee) to reduce your one-time financial burden.

#### 9. Will you provide support or solve my queries after completion of the training?

Yes, we always provide life time assistance support to our students. Whether you want to go for a good job or interview, or want to switch your job or looking for promotion, or looking for some part time income or outsource any project/work, or thinking about to start your own coaching/training business then we will guide you and support you.

#### 10. Will you provide me working experience, If I will get enrolled with this training?

Yes, we will provide you working experience of three months so you can apply on those jobs where some experiences are required. We only provide experience letter to those who join our training programs for at-least six months duration and worked on our dummy project.

#### 11. What would be the admission criteria? How I can join this training program?

After attending the demo classes, you can ask the concern person/faculty to process your enrolment. Then you need to submit the initial amount along with the registration fee. After that you are required to fill our registration form, submit your academic marksheets & degree (scanned copies) and a declaration from to declare that all your information is correct.

#### 12. Will I get incentives, if I will work on your client's project?

Definitely, nothing is free in this world and we also know it very well. We will provide you incentives and reimbursement depending upon your performance & client reports.

#### 13. Will you provide me notes, case studies & other training material?

Yes, we will provide you digital notes for your better learning & revision, job sheets, assignment samples, project report templates, presentation templates and many more.

#### 14. Will you provide me the course completion certificate?

Yes, we will provide you an industry recognized certificate after successfully completing this "Java Full Stack Development" training program.



## Learn2Earn Labs

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