



# ***Programming in JAVA***

# About Us

InternsForge is the bridge that takes you from books to the on-field application of any and everything you want to learn. You should be trained to apply all your learnings in the real world right from the start. This not only makes your learning process a lot more fun but sets you apart from the dense competition through your exceptional skills from our holistic learning approach.



“We're not here to just teach;  
we're here to transform”

30,000+ Students Turned Industry-Ready Professionals

4.5+ Star rating on Google from 325+ Happy customers

Have our presence in over 4000+ colleges including top IITs, IIMs, NITs, IIITs etc

Students from InternsForge are working in Top MNCs like IBM, Accenture, Innodata, Cognizant etc



# PROGRAMMING IN JAVA



## What is JAVA ??

Ah, Java! The programming language that's been powering our computers longer than some of us have been alive. Picture this: You're sitting in front of your computer, pondering the mysteries of the universe, when suddenly, a cup of steaming coffee materializes on your desk. No, it's not magic (well, maybe a little), it's Java!

Java is like the Swiss Army knife of programming languages. Need to build a website? Java's got your back. Want to create a mobile app that'll take the world by storm? Java's there for you. Dreaming of developing software that can run on anything from a toaster to a supercomputer? Yep, you guessed it, Java's your trusty companion.

## Scope of JAVA ??

Congrats!! 🎉  
You just made a great  
choice



## Did You Know ??

- According to data from job portals such as **Naukri.com, Indeed, and LinkedIn** Java developer roles consistently rank among the top job postings in the Indian IT sector. Indian IT companies and software service providers heavily rely on Java for developing enterprise applications, web services, and backend systems for clients across various industries, including **finance, healthcare, e-commerce, and telecommunications**. Many leading Indian IT companies, including **Tata Consultancy Services (TCS), Infosys, Wipro, and Tech Mahindra**, rely heavily on Java for developing enterprise software solutions and providing IT services to clients worldwide.

# Are We Really Different ??



‘This is NOT a Course, This is a Commitment’

*The internet is full of online courses- free as well as paid, college students have access to top professors and high quality study materials.*

*Still our unemployment ratio continues to grow.*

*At the same time, the stress and worry faced by today's college students reach the sky!*



“ Now it's time to leave all your worries up to us and experience a transformed way to learning ”



# 4 Gaps That We Fill for You

## 1 Learn From Your Idols

- **Learn from Your Idols Currently Working At Your Dream Jobs**

You are already getting trained by top quality college professors, now time to cover the gap between theory and actual industry work. Get trained by professionals working at your dream jobs, get inspired, get guided, and get ready to reach your dreams.

- **Interactive-Live Classes**

90% of the students never finish the online courses they enroll in. Get ready of an entirely different experience, where you learn while interacting with your mentors in a motivational environment where you can't wait for the next session. Get Inspired! Get Going!



## 2 Certifications

- **Course Completion Certificate & Project completion certificate in collaboration with E-Cell IIT Indore**

At the end of course you will get some time to submit your project report. After submission of your project report you will get a course completion certificate and project completion certificate in collaboration with E-Cell IIT Indore.

- **Internship certificate from our partnered companies :**

We have some of our partnered Companies like Datex, Corevo, Smart swift Innovation etc which operates in different type of technologies. You will get a chance to work on some live-projects from these companies and after the completion of project and submission of project report; you will be awarded with an internship certificate from these companies.





# 3 Experience Working on Live Industry Level Projects

- **4 Live Industry Level Projects**

There is a humongous difference between learning from your classroom, books, notes vs. having industry experience where you know the current industry demands and are an expert at fulfilling those demands.

At InternsForge we make sure that your learning runs parallel to the applications of your learning, i.e right from the start till the end you are consistently applying everything you are learning in form of 4 main projects that are going on in the current industry



- **Projects Assigned and Guided by Industrial Mentors**

Since the purpose of this program is to get you industry ready. You will be assigned projects through your mentors who are working in the industry. You get to work on the projects that are highest in demand as per the industry requirements of the time you are taking the course.

You get consistent guidance from your mentors with additional doubt clearing sessions as per your demand for the smooth running of your projects.



# ROADMAP

## Introduction Webinar

Between 20 to 25th of the month, you will have your introduction webinar where you will get expert insights on the scope of the subject and your growth graph with the selected career.

## During 2 Months of Intensive Training

During your training the following will be covered:

- 25+ hrs of interactive-live sessions with industry experts
- 2 Industry Level Projects

## Orientation Session

Within the first week of initial payment you will have your first orientation session where you will get an in-depth introduction to our process.

## 2 Months of Intensive Training

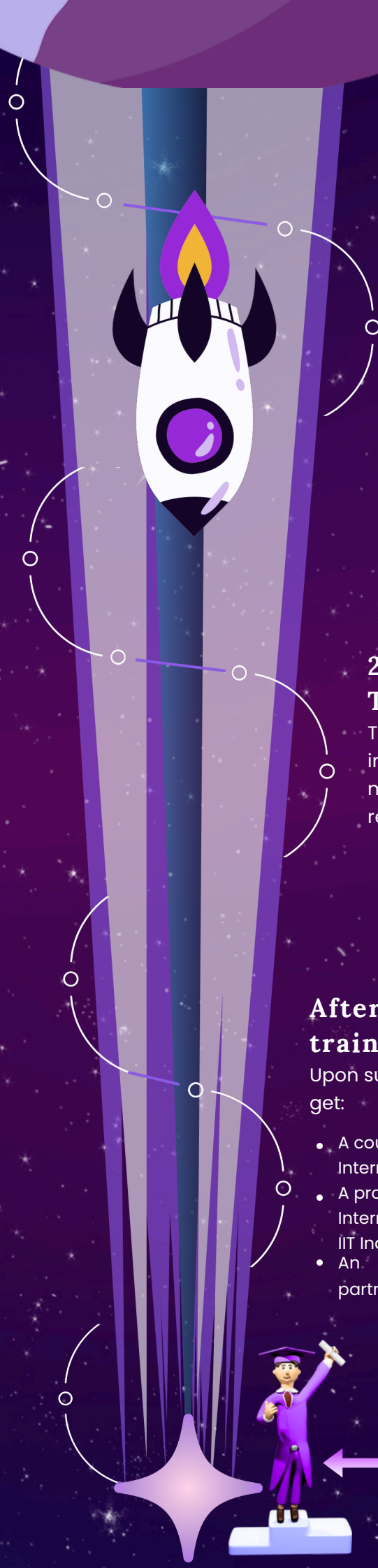
Then we will start your 25+ hrs of intensive training. Where we make sure you are industry-ready.

## After Completion of training:

Upon submission of project report You will get:

- A course completion certificate from InternsForge
- A project completion certificate from InternsForge in collaboration with E-cell of IIT Indore
- An internship certificate from our partnered companies

“The best version of you  
all set to conquer your  
Dreams”



# Curriculum

## MODULE 1

### **Introduction to JAVA :**

- **Overview and Features of Java Programming Language**
- **Architecture Of Java**
- **JDK, JVM, JRE overview**
- **Discussion on Source Code and Bytecode**
- **"Hello World" on JAVA**
- **Editors and Eclipse IDE**

## MODULE 2

### **Basics of JAVA programming language :**

- **Data types and Variables**
- **Keywords in JAVA**
- **Common Operators in JAVA**
- **Primitive Datatypes**
- **Introduction to Strings datatype**
- **Datatypes Casting - Widening & Narrowing Conversions**
- **For, While loops**
- **Switch case and if blocks**
- **Basic Programs using the learned concepts.**

## MODULE 3

### **Methods/Functional programming in JAVA :**

- **Methods, & Classes overview**
- **Discussion on industry standards**
- **Method Structure Declaration**
- **Method calls type and return type.**
- **Method Parameters Scope**
- **Static methods and Intro to static keyword**
- **Packages and Static imports**





# Curriculum

## MODULE 4

### ***Arrays and Strings :***

- ***Intro to Arrays***
- ***Properties and functionality of an array***
- ***Strings Methods and Properties***
- ***Basic Programs on Strings and Arrays***
- ***Mutable and Immutable Strings***
- ***String Buffer and String Builder***
- ***Command-line arguments using args[]***

## MODULE 5

### ***OOPs (Object Orientation Programming) :***

- ***Introduction to Google Ads***
- ***Types of Ad Campaigns***
- ***Ad Campaign Creation***
- ***Optimization & Reporting***
- ***Bidding Strategies & Terminologies***
- ***Case Studies***



## MODULE 6

### ***Pillar 1: Encapsulation :***

- ***Access modifiers***
- ***Setter and getters***
- ***Final keyword***



# Curriculum

## MODULE 7

### ***Pillar 2: Inheritance :***

- ***Importance of Inheritance and Types of Inheritance***
- ***Single Inheritance Multi-Level Inheritance Hierarchical Inheritance***
- ***Super keyword w.r.t. to Inheritance***
- ***Access modifier w.r.t. to Inheritance***
- ***Intro to Object Class Methods***



## MODULE 8

### ***Pillar 3: Polymorphism :***

- ***Method Overloading***
- ***Method Overriding***
- ***Runtime and Compile time polymorphism***
- ***toString, equals method manual overriding***
- ***Override Annotation***

## MODULE 9

### ***Pillar 4: Abstraction :***

- ***Discussion for Abstraction***
- ***Abstract keyword***
- ***Difference between concrete and abstract Methods***
- ***Interfaces***
- ***Marker Interface and its usage***
- ***Intro to Functional Interface***
- ***Lambda /Innerclasses and Functional Interfaces***



# Curriculum

## MODULE 10

### **Exception handling :**

- **Exceptions and Errors in JAVA**
- **Exception class Hierarchy**
- **Try, catch and finally block**
- **Try with Resource and Autocloseables**
- **Throw and throws keywords**
- **Default Exception Handler**
- **Custom User Defined Exception Handler**
- **Corner cases and best practices.**

## MODULE 11

### **Collection Framework in JAVA :**

- **Collection Interface hierarchy**
- **ArrayList, Set & Linked List**
- **Traversing using Iterators**
- **Fail-Safe and Fail-Fast Way of using Collection**
- **Comparator and Comparable usage**
- **Map Interface Hierarchy**
- **HashMap**
- **Purpose of various Collection Classes**



## MODULE 12

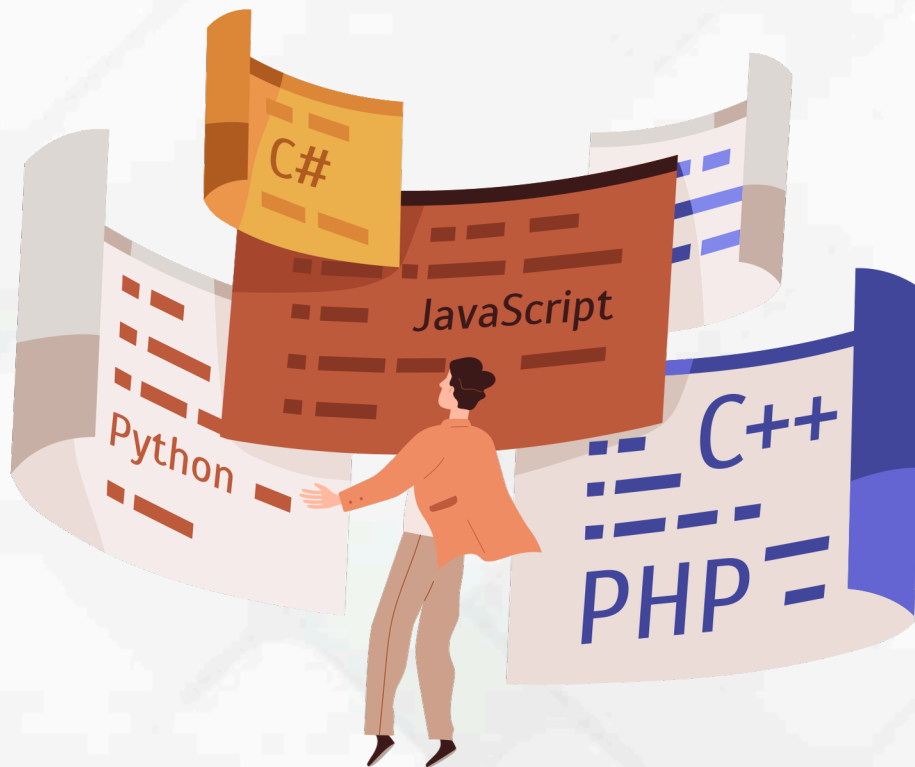
### **File Handling and I/O :**

- **Various File Types**
- **Common filetype and Usage**
- **File operations using Java**
- **InputStream and OutputStream in Java**
- **Read and Write Operation on a text file using Stream**
- **Serialization and Deserialization and best practices.**



## **Multi-Threading :**

- **Parallel Processing Computation and its Advantage**
- **Thread in JAVA**
- **Achieving Multi-Threading in JAVA using Thread class and**
- **Runnable interface**
- **Thread Pool**
- **Thread State and its Lifecycle**
- **Deadlock event**
- **Concurrency and Thread Safety**





# THANK YOU



**For More Details :**

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