Java™ Programming

★ *About Java Programming* ★

Java is an Object Oriented, General, Multi-Purpose and one of the most trending programming language. Java evolved in year 1995 and till now has always topped the Tiobe Index. Although many new technologies are eveloved but more than 9000 companies still rely on Java Programming including companies such as Airbnb, Uber, Netflix, Spotify, Amazon etc. A senior Java Developer gets a salary of around 10 lakhs p.a.

★ *Whom is this course for?* ★

✓ Professionals seeking Job in IT Industry. This course helps to get clear idea about ample of programming concepts and makes you confident for Job Interviews.

✓ Students seeking Diploma/Degree in Engineering and have Java as a part of their syllabus.

✓ Any student curious to gain practical knowledge on programming with Hands-on training.

★ *Prerequisites* ★

✓ Basic Computer Knowledge & Mathematics Knowledge is expected

✓ No programming or any kind of professional course knowledge is expected

★ *Syllabus* ★

1. Introduction to Java   ⏰ 6 hrs

1.1 What is Java? History of Java.

1.2 Features of Java

1.3 Character Set, Identifiers & Keywords.

1.4 Datatypes, Variables & Constant.

1.5 Java Operators

2. Control Structures   ⏰ 8 hrs

2.1 **Branching:** If Statement, If-else, else-if, Switch Case.

2.2 **Looping:** For loop, while, do-while.

2.3 Continue & Break statement.

2.4 Pattern Programs

2.5 Programs for Practice

3. Methods in Java   ⏰ 8 hrs

3.1 Why Methods? Method Definition, Calling Conventions.

3.2 Parameters & Return Types

3.3 Recursive Methods

4. Class and Objects (OOP's Concept)   ⏰ 12 hrs

4.1 Class Concept, Definition,Structure of a class, __init__ method.

4.2 What is Object? Application of Objects, Call methods on objects.

4.3 Constructor

4.4 Method & Constructor Overloading

4.5 Abstract Classes

5. Inheritance ⏰ 8 hrs

5.1 What is Inheritance?
5.2 Types of Inheirtance & Access Specifiers
5.3 Method Overriding
5.4 Interface & Multiple Inheritance

6. Array & Vector ⏰ 8 hrs

6.1 **Array:** Basics of Array, 2-D Array, 3-D Array. Accessing Array.
6.2 **Vector:** Declaring a Structure, Accessing Structure Array of Structure.

7. String, StringBuffer & StringBuilder ⏰ 8 hrs

7.1 Define String Class, Methods of String.
7.2 Java String Processing.
7.3 Java StringBuffer Class and StringBuilder Class.

8. Exception Handling ⏰ 8 hrs

8.1 Define Exception, Runtime Exception, Try-Catch Block,
8.2 User Defined Exception, Throws an Exception.
8.3 Nested Try and Multiple Catch Block.
8.4 Finally Block

9. Threads & Packages ⏰ 8 hrs

9.1 Create and use the Thread, Runnable interface.
9.2 Synchronize thread access to shared data.
9.3 Java Package Concept.
9.4 Java Package Programming Method in Easy way

⭐ *Final Examination* ⭐

- ❯ **Syllabus:** All Modules
- ❯ **Marks:** 100 Marks
- ❯ **Minimum Passing Marks:** 60
- ❯ **Time Limit:** 3 Hours
- ❯ **Paper Pattern:** MCQ's + Problem Statements
- ❯ **Type of Exam:** Online

⭐ *Internship* ⭐

Opportunity to work on any of the live ongoing project in Hertzsoft Technologies Pvt. Ltd. only if candidate clear Final Examination.

(Offer Letter, Experience Letter & Certificate of Internship Provided)

Hertzsoft Technologies Pvt. Ltd.

Address: Room No. 14, Grnd Floor, 15-B Siddika Manzil, Mohammed Umer Kokil Marg, Nishanpada Road, Opp. Bombay Hotel, Near DCB Bank, Dongri, Mumbai: 400 009

Contact: +91 022 23700053 / +91 8657 2427 57

Email: contact@hertzsoft.com

Website: www.hertzsoft.com