

JAVA ADVANCED

Training Overview

Learn all about Java Virtual machine and Memory management. Java Syntax and basic programming specifications. Object oriented programming in java. Polymorphism and Abstraction in Java. Exception Handling , Generics, Design patterns and Code Reuse. Java Stream, concurrency, Java deployment and Tools.

Pre-Requisites : Students, Working Professionals and anyone who has basic Computer Knowledge and wants to enter in IT Industry.

Participant Fee : On Request

Training Name : JAVA

Description : Java is an object-oriented programming language developed by Sun Microsystems. Java is a platform-independent, multi-threaded programming environment designed for creating programs and applications for the Internet and Intranets. With Java Support for Microsoft Internet Explorer, Microsoft provides Java implementation that supports running Java programs in Microsoft Internet Explorer.

Weekend Batch : Available

Duration : 40 Hrs

Venue : No: 96 G.S.T Road Guduvanchery – 603202

Training Content:

Introduction

- What is Java?
- History
- Versioning
- The Java Virtual Machine
- Writing a Java Program
- Packages
- Simple Java Programs

Language Components

- Primitive Data Types
- Comments
- The for Statement

- The if Statement
- The while and do while Statements
- The switch Statement
- The break Statement
- The continue Statement
- Operators
- Casts and Conversions
- Keywords

Object-Oriented Programming

- Defining New Data Types
- Constructors
- The String Class
- String Literals
- Documentation
- Packages
- The StringBuffer Class
- Naming Conventions
- The Date Class
- The import Statement
- Deprecation
- The StringTokenizer Class
- The DecimalFormat Class

Methods

- Introduction
- Method Signatures
- Arguments and Parameters
- Passing Objects to Methods
- Method Overloading
- Static Methods
- The Math Class
- The System Class
- Wrapper Classes

Arrays

- Introduction
- Processing Arrays
- Copying Arrays
- Passing Arrays to Methods
- Arrays of Objects
- The Arrays Class
- Command Line Arguments
- Multidimensional Arrays

Encapsulation

- Introduction
- Constructors
- The this Reference
- Data Hiding
- Public and Private Members
- Access Levels
- Composition
- Static Data Members

Inheritance & Polymorphism

- Introduction
- A Simple Example
- The Object Class
- Method Overriding
- Polymorphism
- Additional Inheritance Examples
- Other Inheritance Issues

Abstract Classes and Interfaces

- Introduction
- Abstract Classes
- Abstract Class Example
- Extending an Abstract Class
- Interfaces

Exceptions

- Introduction
- Exception Handling
- The Exception Hierarchy
- Checked Exceptions
- Advertising Exceptions with throws
- Developing Your Own Exception Classes
- The finally Block

Input and Output in Java

- Introduction
- The File Class
- Standard Streams
- Keyboard Input
- File I/O Using Byte Streams
- Character Streams
- File I/O Using Character Streams
- Buffered Streams

- File I/O Using a Buffered Stream
- Keyboard Input Using a Buffered Stream
- Writing Text Files

Threads

- Threads vs. Processes
- Creating Threads by Extending Thread
- Creating Threads by Implementing Runnable
- Advantages of Using Threads
- Daemon Threads
- Thread States
- Thread Problems
- Synchronization

Collections

- Introduction
- Vectors
- Hash tables
- Enumerations
- Properties
- Collection Framework Hierarchy
- Lists
- Sets
- Maps
- The Collections Class

Networking

- Networking Fundamentals
- The Client/Server Model
- InetAddress
- URLs
- Sockets
- A Time-of-Day Client
- Writing Servers
- Client/Server Example