

Core Java Training

Prerequisites: Basic programming knowledge is good to have but not mandatory.

Objective: At the end of this Java certification, you will be able to: Internalize Object Oriented Programming concepts Internalize basic Java concepts Write Java programs using operators, constructors, loops, functions, conditions, etc. Implement methods and encapsulation in Java Implement multi-threading, string handling, and exception handling techniques. Apply JDBC connections Develop Java application.

Audience Profile: Anyone who wants to develop Java applications Teams getting started on Core Java projects

Duration: 3 Days

Introduction

- Why Java?
- Flavors of Java
- Java Designing Goal
- Role of Java Programming in industry
- Features of java Language
- JVM- The heart of Java
- Java's Magic Byte

codeLanguage Fundamentals

- Java Environment
- Installing JDK and Eclipse IDE
- Java Program Development
- Java Source File Structure
- Compilation
- Executions
- Java Fundamentals

- Data Types
- Variables
- Keywords
- Literals
- Comments
- Assignment

,InitializationOOPs Concepts

Introduction

- Introduction to Oops Concepts
- Inheritance - Polymorphism - Abstraction - Encapsulation
- Class Fundamentals
- Class, Object
- Global variable and member variables
- Static and final
- Inner and Anonymous Class
- Access Control Modifiers
- Constructor

sArray and String

- Defining of an Array
- Initializing and accessing an Array
- Multi-Dimensional Array
- Operation on String
- Mutable and immutable String
- Using Collection Bases loop for String
- Tokenizing a String
- Creating Strings using String

BufferInheritance

- Use of Benefits of inheritance in OOP
- Types of inheritance in Java
- Inheriting Data Member and Methods
- Role of Constructors in inheritance
- Overriding super Class methods
- Use of *Super*
- Polymorphism in inheritance
- Interfaces And Abstract Classes



- Multiple Inheritance
- Restrictions for Interfaces
- Interface Vs Abstract
- Relationship between

classesPackages and Wrapper

Classes

- Organizing Classes and interfaces in Packages
- Package as Access Protection
- Defining Package
- CLASSPATH Setting for Packages
- Import and Static Import
- Naming Convention for packages
- What is Wrapper Class
- Why Wrapper
- How to handle wrapper

ClassesException Handling

- What is Exception
- Types of Exception
- Exception Hierarchy
- Control Flow in Exception
- VM reaction to Exception
- Exception

handlingThread

- Understanding Threads

- Needs of Multi-Threaded Programming
- Thread Life-cycle
- Thread Priorities
- Synchronizing Threads
- Inter communication of Threads
- Critical Factor in thread

DeadlockThe Collection Framework

- Collection of objects
- Collection Interfaces and Hierarchy
- List And Map
- Types of List
- Types of map
- Iterator
- Generics

JDBC

Fundamentals

- Introductions to JDBC
- JDBC Drivers and architectures
- CURD operations using JDBC
- ODBC and other Drivers

