Java Course

Introduction to Java Learning Objectives: In this module, you will learn about Java architecture, advantages of Java, develop the code with various data types, conditions, and loops.

Topics: Introduction to Java Bytecode Class Files Compilation Process Data types, and Operations if conditions Loops – for while and do while

Data Handling and Functions Learning Objectives:

In this module, you will learn how to code with arrays, functions, and strings.

Topics: Arrays - Single Dimensional and Multidimensional arrays Functions Function with Arguments Function Overloading The concept of Static Polymorphism String Handling - String StringBuffer Classes

Object Oriented Programming in Java

Learning Objectives: In this module, you will learn object-oriented programming through Java using Classes, Objects and various Java concepts like Abstract, Final etc.

Topics: OOPS in Java: Concept of Object Orientation Attributes, and Methods, Classes and Objects Methods and Constructors – Default Constructors and Constructors with Arguments Inheritance Abstract Final Static

Packages and Multi Threading Learning Objectives:

In this module, you will learn about packages in Java and scope specifiers of Java. You will also learn exception handling and how multi-threading works in Java.

Topics: Packages and Interfaces Access Specifiers: Public, Private, Protected and Package Exception Handling: Try, Catch, Finally, Throw and Throws Multi-Threading: Runnable Interface, Extending a Thread Class, Synchronization in Threads

Java Collections Learning Objectives: In this module, you will learn how to write code with Wrapper Classes, Inner Classes, and Applet Programs. How to use io.lang and util packages of Java and the very important topic of Java which is Collections.

Topics: Wrapper Classes and Inner Classes: Integer, Character, Boolean, Float etc Applet Programs: How to write UI programs with Applet, Java.lang, Java.io, Java.util Collections: ArrayList, Vector, HashSet, TreeSet, HashMap, HashTable

XML Learning Objectives: In this module, you will learn how to write XML files and how to parse XML files using DOM and SAX in Java.

Topics: Introduction to XML Writing XML files DOM Parser – Writing into an XML file and Parsing an XML file SAX Parser, XSL

JDBC Learning Objectives: In this module, you will learn SQL, Architecture of JDBC, Different drivers of JDBC and to write code in JDBC to communicate with Database.

Topics: Introduction to SQL: Connect, Insert, Update, Delete, Select Introduction to JDBC and Architecture of JDBC Types of Drivers: Type 1/2/3/4 drivers Insert/Update/Delete/Select Operations using JDBC Batch Processing Transaction Management: Commit and Rollback

Servlets Learning Objectives: In this module, you will learn Web Technologies and developing applications using Servlet.

Topics: Introduction to Web Technologies Type of Servlets: Generic and Http Servlet Request Dispatchers: Forward and Include 4 types of Session Tracking and Filters

JSP Learning Objectives: In this module, you will learn how to develop code with JSP.

Topics: Introduction to JSP Architecture of JSP, tags (Scripts, declarative, expression) implicit objects JSP Directives JSP and JDBC