JAVA COURSE

Course Curriculum and Duration:

We provide both Class-room Training and Offline Training.
Duration: 60Hrs.
Week days (Mon- Fri 2Hrs per day)
Weekend batches (Sat-Sun 4Hrs per day)

About INNOVATIVE ACADEMY

INNOVATIVE ACADEMY is a best training institute in Bangalore. We providing classroom led training live instructor-led interactive online training and cooperate training. We cater to professionals and students across the globe in categories like AWS, Angular JS, JAVA, DOT NET, MCSA, CCNA, A+, N+, Databases, VMware, Mobile Technologies, Project Management and Programming.

About course

Learn and expertise the basic and advanced concepts of core Java & Java EE. You will also gain expertise in the concepts like Java Array, Java OOPs, Java Function, Java Collections, Java Thread, Java Servlet and Jsp.

JAVA SYLLABUS

Chapter 1: Java Introduction

Learning Objectives – In this module you will learn core java concepts, java architecture, java features, java advantages and data types.
Topics – History and overview of java, Features of java, Java virtual machine, Variables and data types, Array, conditional and looping constructs
Practical's to be covered-java installation, java path setup and some basic java programs.

Chapter 2: OOPS Concept

Learning Objectives – In this module you will learn oops concepts.
Topics – Object and class, Encapsulation, Abstraction, Polymorphism, Interface, Static, Final keyword, Constructor, Method overloading, constructor overloading and hands on exercises
Practical's to be covered-programs on class, object, encapsulation, Constructor, overloading and overriding.

Chapter 3: Inheritance

Learning Objectives – In this module you will learn inheritance, scope specifies of java and packages in java and hands on exercises.
Topics – Inheritance and its types, Access modifiers, Polymorphism, abstract, Interface and Package
Practical's to be covered- programs on inheritance, access modifiers, Polymorphism, abstract, Interface and Package

Chapter 4: Exception handling

Learning Objectives – In this module you will learn how exception handing works in java
Topics – Exceptions and types Try and catch block, finally, throw, throws and Custom exception and hands on exercises
Practical's to be covered- Programs without exception handling and with exception handling

Chapter 5: Multithreading

Learning Objectives –In this module you will learn how multi threading works in java
Topics – Multithreading, Life cycle of a thread, creating thread, naming thread, Thread scheduler, Synchronization and hands on exercises
Practical's to be covered-programs on creating thread, thread scheduler, synchronization

Chapter 6: Object class

Learning Objectives – In this module you will learn how to code string and string buffer in java.

Topics – Cloning objects, String, String methods, String buffer and Inner class and hands on exercises
Practical's to be covered- programs on strings, inner class and cloning objects.

Chapter 7: Data conversion

Learning Objectives –In this module you will learn how data conversion works in java
Topics –Data conversion, Boxing and unboxing and hands on exercises
Practical's to be covered- programs on data conversion, boxing and unboxing.

Chapter 8: Input/output

Learning Objectives – In this module you will learn about how to use I/O in java program. You will learn how to work with file handling in java
Topics – File Input and output, File writer and File Reader, Buffered Reader, Console and Scanner and hands on exercises
Practical's to be covered- programs on File handling

Chapter 9: Networking

Learning Objectives – In this module you will learn about how to write a code to work with networking
Topics – Network concept, Socket programming, URL, HTTPURL and hands on exercises
Practical's to be covered-programs on networking terminologies and socket

Chapter 10: AWT and Swings

Learning Objectives –In this module you will learn how to use AWT in windows based java application. You will learn about how to work use swing in java
Topics – Frame, Panel, Event handling, Swings and hands on exercises
Practical's to be covered- programs on frame, panel, event handling and swing

Chapter 11: Collection

Learning Objectives –In this module you will learn how to use collection API in java
Topics – Collection framework, Array list, Linked list, Hash set, Linkedhashset, Tree set, Map interface, hash Map, linkedHashmap, tree map, properties classes and hands on exercises
Practical's to be covered- programs on array list, linked list, hash set, hash map and properties etc

Chapter 12: Working with types: Wrapper classes

Learning Objectives – In this module you will learn how to work with wrapper classes and enumeration and hands on exercises
Topics – Wrapper classes, Enumeration
Practical's to be covered-programs on wrapper classes and enumeration

J2EE SYLLABUS

Unit 1: J2EE introduction

Learning Objectives – In this module you will learn about j2ee architecture , different tiers. You will learn how apache tomcat server is used in web application
Topics –What is J2EE?, J2EE comprise' Installing apache tomcat server and Mysql server
Practical's to be covered-apache tomcat server installation, mysql server installation

Unit 2: JDBC

Learning Objectives – In this module you will learn jdbc architecture and how to work with jdbc drivers. You will learn to write code jdbc to communicate with databases
Topics – Introduction to jdbc, Jdbc drivers and architecture, CRUD operation using JDBC , batch processing, transaction management and hands on exercises
Practical's to be covered- how to connect databases using jdbc drivers, CRUD operation

Unit 3: EJB

Learning Objectives – In this module you will learn how to work with EJB
Topics – EJB basics, Entity beans, Stateless Session Beans and hands on exercises
Practical's to be covered- programs on Entity beans,stateless session beans

Unit 4: Servlet

Learning Objectives – In this module you will learn how to use servlet in web application,content of web.xml . How to use request and response in servlet
Topics – Web application basics, Introduction to servlet, Servlet life cycle, Deploying servlet
Exploring servlet, Descriptor(web.xml), Handling request and response, CRUD operations in servlet program and hands on exercises
Practical's to be covered- programs on servlet and creating simple web application

Unit 5: JSP

Learning Objectives – In this module you will learn how to use jsp in creating dynamic web application, difference between servlet and jsp.
Topics – Introduction to JSP, Life cycle of JSP, Scripting Element, Implicit objects, Directive Elements, JSP CRUD Example and hands on exercises
Practical's to be covered- programs on jsp and creating simple dynamic web application

Unit 6: Struts
Learning Objectives – In this module you will learn how to use
Topics –Introduction to the Apache Struts , MVC Architecture ,Struts Architecture , How Struts Works? , Actions, Interceptors, Value stack, Validations, Exception handling
Practical's to be covered- creating struct application, string length validation example etc