

# Java Programming

**Days: 5**

## **Delegates:**

This course is aimed at anyone who needs to learn how to develop in Java. In this course you will focus on the fundamentals of the Java language, object oriented development and the structure of Java applets and applications. The course covers Java Platform 2 up to version 5.0.

Building on this you will learn how to develop Java systems that use various core API packages, developing systems that support multi-threading and networking. Java has always been associated with GUI development, this course shows you how to develop graphical applets and applications using the JFC (AWT and Swing).

This course helps delegates to prepare for Sun Certified Java Programmer Exam CX-310-055 Version 5.0

## **Objectives:**

This course will enable delegates to:

- Explain the Java architecture.
- List and describe the standard Java packages in various versions.
- Create, build, and debug Java projects.
- Build and release Java applets and applications.
- Store objects using Java's Collection framework.
- Write robust applications using Exception handling.
- Perform a variety of I/O using Stream and File classes.
- Develop GUI systems using the Abstract Windowing Toolkit (AWT).
- Develop GUI systems using the Swing classes (JFC).
- Understand the JavaBeans component architecture.
- Raise and respond to events.
- Create Java programs with concurrent threads.
- Create Network aware applications.

## **Topics Covered:**

- Java Architecture including the Java Virtual Machine.
- The Java Language
- Applets & Applications
- Exception Handling and Errors
- I/O Streams & Files
- Object Serialization
- Multi-threaded development
- Collections
- Event Models
- AWT development
- Swing Classes
- Internet integration
- Building JAR files
- Creating Visual Component Beans
- Designing Business Object Beans

- Assembling Systems with Builder Applications

**Requirements:**

Before taking any exam, delegates must ensure they have the recommended experience.

A pre-requisite for this course would be experience with another programming language.