



Java Course

Java Entry Level Programming

A Java programmer will be able to: Write software on one platform and run it on virtually any other platform, Create programs to run within a Web browser and Web services, Develop server-side applications for online forums, stores, polls, HTML forms processing, Combine applications or services using the Java language to create highly customised applications or services, Write powerful and efficient applications for mobile phones, remote processors, low-cost consumer products, and practically any other device with a digital heartbeat.

This Course introduces the learner to the fundamentals of Java programming. It starts with the basics, such as how to compile and run a Java program; discusses Java language keywords; and concludes with advanced features such as multithreaded programming, generics, and applets.

Overview

This section gives a foundation of Java fundamentals upon which to build. The course introduces the use of the Java language and the Java Virtual Machine, the basics of syntax and control flow, compiling and running a Java application, and other fundamental topics.

Object-Oriented Concepts

This course teaches the fundamentals of object-oriented programming concepts and their application in a Java environment.

Java Core Packages

Describe how Java classes are organized into packages. Estimate the lifetime of a Java object. Explain the difference between Java applications and applets

Java AWT and JFC

This course gives a foundation of Java fundamentals upon which to build. The course introduces the use of the Java language and the Java Virtual Machine, the basics of syntax and control flow, compiling and running a Java application, and other fundamental topics.

File Input/Output

Manipulate files, directories and their contents from within Java applications. Identify how to open and close files from within a Java application. Describe how to read and write files from within a Java application. Describe how to use formatting specifiers to construct custom output

Object Serialization

This course teaches how to use classes and methods in the java.io package to serialize object data.

Threads, Exception Handling and Assertions

This course teaches how to create applications that use threads to simultaneously carry out multiple tasks, and how to use exceptions and assertions to detect and handle unexpected run-time conditions.

Dates and Numbers

This course teaches how to work with dates, numbers and currencies in Java. It also covers how to create applications that search text strings and files for patterns of text, or tokens.

Networking Java Applications

This course teaches how to how to create client/server applications and use the java.net package to create networking applications in Java.

Generics and Collections

This course teaches how to create groupings of objects using collections and how to use generics to assign some type safety to those collections. The course covers the four major categories of collections, type safety and type erasure, sorting and searching in collections and arrays, and the use of polymorphism with generics.

Database Connectivity Fundamentals

This course teaches how to create Java applications that communicate with databases using Open Data Base Connectivity (ODBC) technology

