



Java Programming

Audience

Programmers needing a good introduction to the Java programming language.

Prerequisites

The ability to program in another language is useful but not an essential prerequisite. No previous knowledge of Java is expected or required.

Duration

5 days. Hands-on.

Course Objectives

Many courses teach the Java programming language without giving delegates the benefit of a solid grounding in Object-Oriented techniques. Likewise, an OO course can be somewhat dry and theoretical without the benefit of implementation within the framework of a current programming language. In this course we cover the main OO concepts and, as each new concept is introduced, its implementation in the Java programming language is shown. The course is heavily practical and approximately half of the delegates time will be spent on design and programming exercises. The course is maintained at the most recent release level of Java.

Course Content

History and development of Java.
Java tools.
Overview of OO concepts and terminology.
Syntax of the Java language.
Basic types, objects and references.
Storage management and garbage collection.



Java classes and packages.
Basic I/O in Java.
Inheritance v aggregation and association.
More complex Java structures.
Java Collections Framework.
Object persistence.
I/O streams and file handling.
Strings and tokenisers.
Errors and exceptions.
Concurrency (threads).
Graphical applications and applets.
Graphics and component libraries.
Layout managers.
Event-driven Programming.
The Security Manager.