

Summary

Duration: 5 days

This course describes the fundamental concepts of the Java Programming language, and takes you from the very basic concepts through to production-standard coding.

The course is tailored according to your needs. We assume no previous knowledge of Object Orientation and introduce the OO concepts as part of the course. However, if the group is already familiar with OO then we move more quickly through the basic concepts and add some advanced material on the last day.

As standard, we use the Eclipse Integrated Development Environment (IDE), but we are happy to work with any IDE that you may have already selected for your project.

Detailed Course Description

- The Basics of the Java Language
- Object Orientation and Java
- Going Further with Java's Library
- The principles of Inheritance
- Polymorphism and Interfaces
- Inner Classes
- Exception Handling
- Building Graphical User Interfaces (Swing or SWT)
- The Java Collections Library
- Unit Testing with JUnit
- Threading in Java (pre and post Java 5)

Objectives

By the end of the course attendees will:

- Be able to program in Java using a modern Integrated Development Environment (IDE)
- Understand all of the standard Java syntax used in professional Java Programming
- Be able to apply Object Oriented concepts to Java Programming
- Have used a small part of the Java Library, and have gained some experience in some of the fundamental packages
- Be able to use packaging to partition a class design
- Be able to effectively handle and use Exceptions
- Understand the principles of Javadoc and be able to write their own javadocs
- Be able to write unit tests using the JUnit framework

Each theory session is followed by a practical session.

Prerequisites

Experience in a high level language such as Basic, Pascal, Ada, etc will be assumed. When booking for a whole group, we are happy to cater for less experienced delegates, but some of the later topics might be omitted to give us time to get to grips with the fundamentals.