

Intermediate Java Programming

Description

The course is suitable for Java Developers getting ready to move to the next level. The course assumes some familiarity with the Java Language but does revisit language features and some of the more common APIs with supporting Java™ code examples and demonstrations.

Format

4.5 days lecture, labs, demonstration and discussions

Participants

This course is aimed at Intermediate (6 -18 months) Java Developers

Prerequisites

Delegates need good general computing experience and preferably should have had 6 -18 months Java programming experience.

Although not essential a working knowledge of Windows® or Linux®/Unix® operating systems is a useful background

Presentation Requirements

The maximum number of delegates for the course is 12

A room that allows delegates to both work freely at their workstation and view a screen

Direct project from computer system for Tutor for display of slides and demonstration of Programming
PC to screen projector
Whiteboard or flipchart

Course Outline

Introduction

Overview of course, introduction to delegates and tutor

Background

Brief resume of Java history and evolution

Language Fundamentals

- Declarations and Access Control
- Flow Control
- Exception Handling
- Garbage Collection
- Operators and Assignments
- Overloading, Overriding,
- Runtime Type Information (Reflection)
- Threads and Threading

Core Library Packages

java.awt, java.lang, java.util, java.io

Java GUI's

Java Applets
Frames, Panels etc.. (AWT and SWING)

JNDI (Naming and Directory Interface)

LDAP Manipulation with JNDI
Connecting to LDAP Servers
Searching LDAP Servers
Adding, Deleting and Modifying LDAP Server entries

Development Kit Compatibility Issues

1.2-1.3, 1.3-1.4

Code Refactoring

Design Patterns and Idioms

XML Manipulation from Java

- Intro to XML
- DOM
- SAX
- XSL

Course Materials

Course notes are supplied in Paper Notes, slides and exercises are supplied in Adobe Acrobat format files
(Suitable for PC, Mac, and Unix)

On-Site Equipment Requirements

The course is based on the Java language as described by The Java Language Specification and associated documents

To deliver the course each delegate should have individual access to a system, the system shall have:

(1) A 1.3 Java compiler and runtime virtual machine

- (2) A text editor
- (3) Adobe Acrobat Reader
- (4) An Account on the system that allows a user to compile and execute programs
- (5) TCP/IP network to other delegates and Tutor machine

Additionally it must be possible for the course materials including lab exercises to be transferred onto the system from an ISO 9660 CD-ROM

If no suitable equipment is available then TFJ can arrange for the hire of equipment for the duration of the course.