SETC Training Corporate Logo

Java Training: Programming Techniques & Performance Tuning (JAV201, 4 jours)

Description

The course Programming Techniques & Performance Tuning (Java Training) explores Java development from architecture to implementation. The training covers everything from the internal architecture of the JVM to Java performance tuning. Inheritance, polymorphism, data structures, algorithms & multi-threading are also discussed. The course concludes with an overview of refactoring techniques and of the use and design of design patterns in Java.

Tarifs

- Tarification: $3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Java Architecture

- Symptoms and Root Causes of Software Development Problems
- Choosing a Methodology
- The Rational Unified Process
- Symptoms and Root Causes of Software Development Problems
- The Application Tiers: 1, 2 and 3-tiered applications
- Distributed Applications: Technology and Infrastructure
- Web Applications: Technology and Infrastructure.
- Packages and Files
- Logging with Java
- Exception Handling
- Performance Implications
- Performance Tuning Considerations

JVM Architecture

- The Java Runtime: Internal Architecture
- Java Internal Architecture
- Memory Architecture
- Object Allocation
- Garbage Collection
- Reference Types

Inheritance and Polymorphism

- Inheritance
- Polymorphism
- Abstract Functions and Classes
- Interfaces
- Performance Implications

Data Structures and Algorithms

- About Java Collections
- Hashtables and Hashmaps
- Cached Access
- Working with Strings
- Generics

Java Threading

Inversion of Control

J2EE Security

Authorization vs Authentication

Adding Groups

Adding Users

Creating Roles

Creating Policies

Implementing Declarative Security

Client Application Security