

Advanced Java 6 Programming (TT3100-J6)

Length: 4 days

Description

Students who attend Advanced Java Programming will leave this course armed with the required skills to improve their Java applications using sound coding techniques and best practices.

Audience

Programmers with prior practical java development experience

Prerequisite

This is an intermediate and beyond- level Java course, designed for **experienced** Java developers who wish to get up and running with advanced skills immediately.

Topics

JAVA VIRTUAL MACHINE

- Architecture of the JVM
- Application Execution
- Reference Objects

EXCEPTION HANDLING BEST PRACTICES

- Choosing an Exception Type
- Designing Custom Exceptions
- Managing Thrown Exceptions
- Exception Chains

THREADING AND CONCURRENCY

- Multithreading
- Working with Locks and Executors
- Concurrent Collections
- Atomic Variables

NETWORKING

- Socket Based Servers

PACKAGING APPLICATIONS

- JAR Files
- Structure and Content
- Application Entry Points
- Versioning
- Sealing Packages
- Signing and Verification of JARs

- Java 6 Enhancements for JAR processing

ADVANCED JDBC

- Recent JDBC Enhancements
- Working with ResultSet
- Working with RowSet
- Connection Pooling
- Resource Management
- Security Concerns

JAVA 6 COLLECTION FRAMEWORK

- Deque & BlockingDeque
- NavigableSet
- NavigableMap
- Updated and Modified Collection Classes

ADVANCED DEVELOPER FEATURES

- Reflection
- Working with Java 6 Security Enhancements

APPENDIX: INTERNATIONALIZATION

- Fundamentals of Localization
- Localizing Strings
- Localizing Numbers
- Localizing Dates