Java Performance Tuning Process

Duration: 1 day.
Format: Lectures with Instructor led labs.

Overview
This course provides an introduction to the process of performance tuning Java systems, including planning for performance, building a performance testing and tuning environment, tools, tuning methodology, system constraints and an overview of how performance is affected by the runtime Java environment. This course is essential in understanding how to most effectively tune any Java application.

The Course is Designed For
QA team members, developers, architects, consultants and IT specialists.

Your Prerequisites For the Course Are
A basic understanding of object oriented systems and Java.

This Course Will Teach You
- To plan for performance management of the project
- To anticipate when performance tuning will be required
- To build a performance tuning environment
- How to understand which aspects of performance tuning are affected by various project phases and components

Course Includes
- Java Runtime Environment & System Constraints
  - JVM runtime overheads, JIT costs and advantages
  - JVM memory management overheads
  - Components of Application Startup Time
  - Hardware and Operating System Constraints
- Performance Planning
- Setting Specifications
  - Performance Objectives
  - Specifying Variations and Coverage
- When To Optimize
- Benchmarks (micro and macro)
- How to optimize: the tuning process
- Profiling and Monitoring Tools: Tools for finding bottlenecks