



Java: Intermediate-Advanced Java 8

Course ID #: 7000-492-ZZ-Z

Hours: 35

Course Content

Course Description:

Intermediate/Advanced Java 8 includes an accelerated, yet thorough hands-on review of Java foundational concepts, with attention given to OO design and implementation principles. It then moves on to comprehensive coverage of more advanced topics in Java and OO development to provide participants with a strong grounding to use Java in a sophisticated and productive manner.

At Course Completion:

This course covers far more than an introductory course, including important topics such as UML and Design Patterns, and using composition vs. inheritance, which are all key to creating well-structured OO systems. After these important areas, it moves on to advanced Java topics such as inner classes, reflection, writing generic classes, and functional programming with lambdas and streams. It teaches several useful techniques that enhance productivity and good system design - which may otherwise take Java developers years to absorb on their own. The course concludes with build tools and logging. Unit testing is stressed throughout the course, with most labs implemented as JUnit tests. All labs are done with the Eclipse IDE Java EE version, and the lab instructions include detailed directions for using it.

Prerequisites:

This is a fast-paced course suitable for developers with some previous experience in working with Java and Object-Oriented (OO) programming. The course can also be delivered to developers experienced in other OO languages (Python, C++, C#) but with limited Java exposure, as well as used as an advanced Java course for more experienced developers. There are numerous optional parts allowing you to tailor the coverage to your group.

Target Student:

Programmers who are ready to move beyond the basics of Java 8 and Object-Oriented programming.