Java SE 8 Programming

This Java SE 8 Programming training covers the core language features and Application Programming Interfaces (API) you will use to design object-oriented applications with Java Standard Edition 8 (Java SE 8) Platform.

Learn To:

- Create Java technology applications with the latest JDK Technology
- Develop your object-oriented skills
- Identify good practices in the use of the language to create robust Java application
- Use Lambda expressions in Java applications
- Store and manipulate data using collections
- Manipulate files, directories and file systems
- Connect to databases using standard SQL queries through JDBC
- Create high-performance multi-threaded applications

Benefits to You

You can use this course to further develop your skills with the Java language and prepare for the Oracle Certified Professional, Java SE 8 Programmer Exam!

Prerequisites

Required Prerequisite

- Java SE 8 Fundamentals Ed 1

Audience

- Developer

Objectives

- Creating high-performing multi-threaded applications
- Creating Java technology applications that leverage the object-oriented features of the Java language, such as encapsulation, inheritance, and polymorphism
- Implementing input/output (I/O) functionality to read from and write to data and text files and understand advanced I/O streams
- Executing a Java technology application from the command line
- Manipulating files, directories and file systems using the JDK NIO.2 specification
- Creating applications that use the Java Collections framework
- Performing multiple operations on database tables, including creating, reading, updating and deleting using both JDBC and JPA technology
- Searching and filter collections using Lambda Expressions
- Implementing error-handling techniques using exception handling
- Using Lambda Expression concurrency features

Topics

- Java Platform Overview
- Java Syntax and Class Review
- Encapsulation and Subclassing
- Overriding Methods, Polymorphism, and Static Classes
- Abstract and Nested Classes
- Interfaces and Lambda Expressions
- Collections and Generics
- Collections Streams, and Filters
- Lambda Built-in Functional Interfaces
- Lambda Operations
- Exceptions and Assertions
- Java Date/Time API
- I/O Fundamentals
- File I/O (NIO.2)
- Concurrency
- The Fork-Join Framework
- Parallel Streams
- Database Applications with JDBC
- Localization