JAVA SE 17 Programming II

Description

The **JAVA SE 17 Programming II** course is designed for developers who want to strengthen and deepen their Java skills. It is the logical continuation of the introductory module and covers the advanced aspects of the language. Participants learn to write safer, more efficient, and better-structured code.

The **JAVA SE training** also covers essential topics such as concurrent programming, secure coding, and database access with JDBC. You will learn how to leverage modern Java APIs and improve the readability and maintainability of your code. The goal is clear: to make you fully autonomous in developing robust and scalable Java applications.

Course Content
Module 1: Functional programming

- Functional interfaces and lambda expressions
- Stream collections and filters
- Built-in functional interfaces

Module 2: Modular programming

- Introduction to modular programming in Java
- Services in a modular application
- Migration to a modular application

Module 3: Streams and parallel streams

- Concurrency
- Parallel streams
- Terminal operations: collectors
- Creating custom streams

Module 4: Java API programming concepts and secure coding

- I/O (Fundamentals and NIO2)
- Secure coding
- Database applications with JDBC
- Localization

Module 5: Collections and generics

- What is the Collections framework?
- Iterators
- Wrapper classes
- What are generics?

Module 6: Exception handling and assertions

- Exceptions
- Error handling

- Assertions

Lab / Exercises

- During the course participants are encouraged to actively participate in the learning experience by running example files during lectures and performing coding challenges during labs
- Each lab session allows you to compare your solution to the instructor's

Documentation

- Digital courseware included

Exam

- This course prepares you to the 1Z0-829 exam. If you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you

Participant profiles

- Java Developers
- Software Engineers
- Application Architects
- Advanced Computer Science Students

Prerequisites

- Know the basics of the Java language
- Understand the principles of object-oriented programming
- Have completed or mastered the content of Java SE 17 I

Objectives

- Create object-oriented Java applications
- Use functional programming and lambda expressions
- Apply modular programming in Java
- Leverage parallel streams and collectors
- Develop with the Collections framework and generics
- Implement input, output, and file management
- Write secure code and handle exceptions
- Access databases with JDBC

Description
JAVA SE 17 Programming II Training
Niveau
Intermédiaire
Classroom Registration Price (CHF)
3800
Virtual Classroom Registration Price (CHF)
3550
Duration (in Days)
5
Reference
JAVA17-02