



JAVA TRAINING

Java Se 17 Programming Complete

Master Java SE 17 programming from scratch. Develop robust, high-performance applications using the latest Java features.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intensive "Java SE 17 Programming Complete" course provides an accelerated, yet thorough, deep dive into the foundational and modern aspects of Java Standard Edition 17. Designed for intermediate learners, this program rapidly equips you with the essential skills to develop robust, high-performance applications using the latest stable release of Java. You will master core Java syntax, object-oriented programming principles, and significant features introduced in Java SE 17, ensuring your proficiency in developing scalable and maintainable codebases. Upon completion, you will not only understand the "how-to" but also the "why" behind effective Java programming practices. This course emphasizes practical application, preparing you to tackle real-world development challenges. By focusing on critical APIs, modern language constructs, and best practices, you will significantly enhance your coding efficiency and problem-solving abilities, positioning you for success in the dynamic world of enterprise and application development.

Duration	2 hours
Level	Intermediate
Vendor	Java

COURSE CURRICULUM

01 Module 1: Java SE 17 Environment and Core Syntax

- JDK 17 installation and basic tooling (javac, java)
- Primitive data types, variables, and operators
- Conditional statements (if/else, switch expressions)
- Looping constructs (for, while, do-while)
- Understanding methods and basic class structure

02 Module 2: Object-Oriented Principles with Java SE 17

- Defining classes and creating objects
- Encapsulation: Access modifiers, getters, and setters
- Inheritance: Extending classes, super keyword
- Polymorphism: Overloading and overriding methods
- Interfaces and Abstract Classes

03 Module 3: Modern Java Features and Essential APIs

- Lambda expressions basics
- Stream API introduction for data processing
- Pattern Matching for instanceof (Java 16)
- Records (Java 16) for data carriers
- Basic Exception Handling
- Utilizing the Collections Framework (ArrayList, HashMap)

04 Module 4: Practical Application and Best Practices

- Introduction to Java Modules (Project Jigsaw)
- Basic File I/O operations
- Debugging strategies
- Overview of best practices for writing clean and performant Java code

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior Java Application Developer**
- > **Backend Microservices Engineer (Java)**
- > **Entry-Level Enterprise Java Programmer**

FREQUENTLY ASKED QUESTIONS

Q: What foundational programming knowledge is recommended before enrolling in the "Java SE 17 Programming Complete" course?

This intermediate-level course assumes you have a basic understanding of programming concepts such as variables, control flow (loops, conditionals), and functions from any programming language. While it covers core Java syntax, prior exposure to programming logic will allow you to maximize your learning experience and quickly grasp Java's specific implementation of these concepts, especially object-oriented principles.

Q: How does this course specifically prepare me to leverage Java SE 17's newer features in practical development scenarios?

This course introduces you to key modern features of Java SE 17, including the fundamentals of Lambda Expressions, Stream API, Records, and Pattern Matching for instanceof. You'll learn how to apply these features to write more concise, readable, and efficient code, enhancing your ability to develop contemporary Java applications and maintain existing projects that utilize these advancements.

Q: Beyond syntax, what kind of problem-solving skills will I develop that are applicable to real-world Java development roles?

This course emphasizes not just syntax but also object-oriented design principles and best practices for writing maintainable and scalable code. You will develop skills in structuring applications, handling errors gracefully, efficient data manipulation using the Collections Framework, and debugging. These skills are critical for translating complex requirements into robust Java solutions, preparing you for roles such as a Junior Java Application Developer or a Backend Microservices Engineer.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

10,000+

50+

Years of Excellence

Professionals Trained

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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