

# Oracle Certified Associate, Java SE 8 Programmer: Certification Prep

Hands-on course of 3 days - 21h

Ref.: OUG - Price 2024: €2 240 (excl. taxes)

## EDUCATIONAL OBJECTIVES

At the end of the training, the trainee will be able to:

Describe the different Java technologies (Java EE, JVM, embedded Java, etc.)

Become proficient in Eclipse and understand the benefits of an IDE in general

Understand the concepts of object-oriented programming and apply them to Java

Master the Java syntax and know how to use data types

Create Java packages and handle exceptions in Java

## THE PROGRAMME

last updated: 06/2022

### 1) Overview of Java 8 technologies

- The Java 8 language and application types.
- Vocabulary and portability.
- Java and memory management.
- Security, Java 8 programs and multithreading concepts.
- Overview of Javadoc and compiling.
- Getting started with Eclipse.

*Hands-on work* : Mock test and answer key.

### 2) Object-oriented programming with Java 8

- Basic data types in Java.
- How to declare a class with its methods.
- Instantiation, constructor.
- Data manipulation by methods.
- How to access methods.

*Hands-on work* : Mock test and answer key.

### 3) Syntax of the Java language

- Structure of a .java file.
- Instantiation process.
- The concept of Object identity, the declaration of variables and initialization.
- How to access methods and primitive types and classes of the java.lang package.
- Constants and assignment operators.
- Instruction of controls, loops and iterations.

*Hands-on work* : Mock test and answer key.

### 4) Advanced object-oriented programming and arrays

- Tables and collections.

## TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

## ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

## TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@ORSYS.fr](mailto:psh-accueil@ORSYS.fr) to review your request and its feasibility.

- Creating and initializing an ArrayList and how to access the elements (loops).
- Simple inheritance in Java.
- Method overloads.
- Superclasses, subclasses and interfaces in Java.

*Hands-on work : Mock test and answer key.*

### 5) Managing errors

- All types of errors in Java.
- How to manage error types.
- Find the exceptions of the basic class methods in the documentation.
- Implementing exception handling in Java.
- What is a package?
- The CLASSPATH variable and naming conventions.
- Customizing your own package.

*Hands-on work : Mock test and answer key.*

### 6) Overview of some Java APIs

- StringBuilder and its methods, use of the class.
- Creating and working with strings.
- Creating and working with calendar data.
- Writing a simple lambda expression.

*Hands-on work : Mock test and answer key.*

### 7) Preparing for Java 8 certification

- Summaries of recurring questions.
- Tips for the certification exam.

## DATES

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REMOTE CLASS

2024 : 10 Jul, 04 Nov