

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

Hands-on course of 4 days - 28h

Ref.: OZH - Price 2024: CHF2 490 (excl. taxes)

## EDUCATIONAL OBJECTIVES

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

Program with abstract classes and methods

Master the creation of queries and read the results from the database

Manage date- and time-related events

Use the Java APIs

## CERTIFICATION

This course includes the voucher needed to register for and take certification exam 1Z0-809 from Oracle's partner, Pearson Vue.

## THE PROGRAMME

last updated: 06/2022

### 1) Creating Java classes

- Encapsulation and inheritance concepts.
- Polymorphism and methods.
- Singleton classes, immutable classes.
- Nested classes, enumerated types and lambda expressions.

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

### 2) Collections and genericity

- Generic classes.
- The java.util.Comparator and java.lang.Comparable interfaces, filters and the Stream API.
- The forEach method of Stream.
- The Stream interface and the sequences of operations.
- Method references with the Stream API.

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

### 3) Predefined functional interfaces

- Predefined interfaces of the java.util.function package.
- Primitive versions of functional interfaces.
- Binary versions of functional interfaces.
- The UnaryOperator interface.

### 4) The Java Stream API

- Extracting and searching for data using Stream API methods.
- The Optional class. Treatment methods.
- Sorting a collection. Storing the results.
- flatMap() methods.

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

### 5) Exceptions, assertions and the Java SE 8 API: date/time

- The try-catch, throw and catch clauses.
- Auto-closeable resources.
- Custom exceptions and Auto-closeable resources.

## 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 to review your request and its feasibility.

- Invariants and events related to dates and time.
- Creating and managing date- and time-related events.

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

### 6) Inputs and outputs

- The data on the console. The classes of the java.io package.
- The Path interface. The Files class.
- Using the Stream API with NIO.2.

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

### 7) Competing accesses

- Creating threads.
- The keyword synchronized and the java.util.concurrent.atomic package.
- The java.util.concurrent collections.
- The Fork/Join framework and parallel streams.

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

### 8) Database access with JDBC and internationalization

- The interfaces that form the core of APIs.
- Components for the database.
- Creating queries and reading the results.
- Configuring the language with a "Locale" object.
- Creating and reading a Properties file and creating a resource bundle.

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

## DATES

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Contact us