Java SE 17: Programming Complete

🕐 Duration: 10 Days
🈂 Available Languages: English

Audience

Software Developers.

Precondition

Knowledge of programming in general.

Goals

Write programs in Java and be prepared for the Oracle Certification Exam Java SE 17 Developer (1Z0-829).

Contents

- Introduction to Java
    - # Object-Oriented Principles
    - # Inheritance and Polymorphism
    - # Access Modifiers
- Primitive Types, Operators, and Flow Control
    - # Assignment and Arithmetic Operators
    - # Binary Number Representation
    - # Selection using ?:, if-else, and switch
- Text, Date, Time, and Numeric Objects
    - # Text Blocks
    - # Wrapper Classes for Primitives
    - # Boxing, Unboxing, and Autoboxing
    - # Local Date and Time
    - # Locale: Languages and Countries
    - # Formatting and Parsing Date and Time Values
    - # BigDecimal and BigInteger
- Arrays and Loops
    - # Primitive Arrays
    - # Object Arrays
    - # Arrays of Arrays
    - # The Arrays Class
    - # while, for, and do-while loops
    - # foreach-loops
- Classes, Objects, and Class Design
    - # Local Variable Inference
    - # Access Modifiers Revisited
    - # Inheritance

- # Records
- # Type verification instanceof
- # Method Overloading
- # Method Overriding
- # Polymorphism
- # Sealed Classes and Controlled Inheritance
- # Factory Method Design Pattern
- # Template Method Design Pattern
- # Builder Design Pattern
- Interfaces and Generics
  - # Interfaces
  - # Default, Private, and Static Methods in Interfaces
  - # Generics
  - # Type Inference for Generics
  - # Upper Bound Wildcard
- Collections
  - # Sets
  - # Lists
  - # Maps
  - # Enumerations and Iterators
  - # Concurrent Access
- Nested Classes and Lambda Expressions
  - # Nested Classes
  - # Anonymous Classes
  - # Lambda Expressions
  - # Method References
- Java Streams API
  - # Functional Interfaces
  - # Object Streams
  - # Other Streams
  - # Filters
  - # Mappings
  - # Reductions
  - # Parallel Stream Processing
  - # Spliterators
- Exception and Error Handling
  - # Exceptions
  - # Handle-or-Declare Rule
  - # try-catch-finally
  - # AutoCloseable, try with resources
- Java I/O
  - # Binary I/O
  - # Text I/O, Unicode, UTF-8, UTF-16
  - # Working with FileSystems
  - # Creating, Renaming, Deleting Files
  - # Temporary Files
  - # Traversing Directory Trees
  - # Serialization
- Java Modules

- # JPMS Module Categories
- # module-info.java
- # Multi-Release Module Archives
- Annotations
  - # Meta Annotations
  - # Popular Annotations
  - # Annotation Processing
- JDBC
  - # Creating Connections
  - # Working with Statements, Prepared Statements, and Callable Statements
  - # Processing ResultSets
- Java Security
  - # Providers
  - # Interaction with the SecurityManager and AccessController
  - # Executing Privileged Code
  - # Guarding code from erroneous values

The course content covers the Java 17 and prepares for the Oracle Certification Exam Java SE 17 Developer (1Z0-829) with the exception/exclusion of one topic: Oracle Cloud Deployment.

Disclaimer: The course content is completely developed by Nelkinda Software Craft Pvt Ltd and is not the same as the official training from Oracle.

Booking

Contact Siddhesh Nikude, +91-95-52572354, training@nelkinda.com