

Application Development with Java – Basics («JAVA04»)

This course introduces you to the basic procedure of application development with the Java programming language! The course will give you an overview of its versatile application possibilities.

Duration: 2 days

Price: 1'350.–

Course documents: Digicomp Courseware

Content

1. Abstraction and Design
 - Three Level Design
 - Implemented in interfaces
 - Composition versus inheritance
2. Generic
 - Type parameters
 - Diamond operator
 - Placeholder
 - Constraints
3. Nested
 - Static Classes
 - Membership classes
 - Local Classes
 - Anonymous classes
4. Enumerations
 - Constants
 - Class `java.lang.Enum`
 - Extensions
5. Annotations
 - Annotation types
 - Annotation types
6. Errors and exceptions
 - Class `java.lang.Throwable`
 - Class `java.lang.Error`
 - Class `java.lang.Exception`
 - Class `java.lang.RuntimeException`
 - Exception handling
7. Assurances
 - Assert
 - Invariants
8. Root
 - Class `java.lang.Object`
 - Identity versus equality
 - Instance as Text
 - Instance as number
 - Interface `java.lang.Cloneable`
 - Class `java.lang.CloneNotSupportedException`
 - Clones
 - Finalisation
9. System
 - Class `java.lang.System`
 - Class `java.lang.Runtime`

10. Texts

- Interface java.lang.CharSequence
- Class java.lang.String
- Class java.lang.StringBuffer
- Class java.lang.StringBuilder

11. Wrappers

- Wrap classes
- Class java.lang.Void
- Class java.lang.Boolean
- Class java.lang.Character
- Class java.lang.Number
- Class java.lang.Byte
- Class java.lang.Short
- Class java.lang.Integer
- Class java.lang.Long
- Class java.lang.Float
- Class java.lang.Double

12. Boxing

- Autoboxing
- Autounboxing
- Type conversion for boxing
- Value pooling

Key Learnings

- Understanding the basic process of developing applications using the Java programming language

Target audience

This course is aimed at programmers who already know the syntactic basics and the object-oriented concepts of the Java programming language and now want to learn the basic procedure for application development.

Requirements

Attendance of the following course or equivalent knowledge is required:

- [Object-Oriented Concepts in Java – Advanced \(«JAVA03»\)](#)

Further courses

- [Application Development with Java – Advanced \(«JAVA05»\)](#)

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-software-engineering/programming-languages/java-javascript/course-application-development-with-java-basics