Macrosoft

Vzdelávanie s trvalým efektom

DOCUMENT

Course syllabus

CATEGORY

Java, Python courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

650,00 €

PRICE INCL. VAT

799,50 €

including 23 % VAT

Macrosoft školiace centrum
Aktuálne informácie na Macrosoft.sk

PDF SYLLABUS

JAVA Programmer

Clear overview of course topics, training scope and key information.

The retraining course JAVA Programmer is intended for programmers who want to find employment on the labor market with the aim of increasing their qualification and applying for the position of Java Programmer. Course participants will go step by step through programming in the Java environment and the NetBeans development environment. They will gain knowledge and skills adequate for creating applications in Java and learn to write more complex programs that will implement some network or database mechanisms. This is a package of courses: Java Language Basics I course, Java II course. The day shown is the start day of the first course; we will inform you about the other dates.

COURSE CONTENT

01 **Java Language Basics I Course**

02 **Java Language**

characteristics and history of Java JRE, JDK installation of JDK and NetBeans IDE

03 **Lexical Structure of Java**

comments and white spaces identifiers and literals operators and separators keywords

04 **Data Types and Variables**

primitive types reference types

05 **Working with Strings**

initialization of strings basic operations with strings String and StringBuilder string formatting

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06 **Arrays**

initialization of arrays operations with arrays iterating through array elements multidimensional arrays

07 **Operators and Expressions**

types of operators (logical, relational, arithmetic) lambda operator precedence and associativity of operators

08 **Program Flow Control**

conditions and loops

09 **Object-Oriented Programming**

objects and classes data and methods constructors inheritance and interfaces

10 **Packages**

role of packages package import packages and directory structure

11 **Working with Exceptions**

checked exceptions unchecked exceptions custom exceptions

12 **Collections**

lists, maps, trees, sets

13 **Java II Training Syllabus**

14 **Sorting and Ordering Data**

Comparing and sorting basic data types Comparing and sorting objects Comparable and Comparator

15 **Generics**

need for generic programming type erasure automatic type inference

16 **Functional Java**

functional interfaces Function, Predicate, Consumer, Supplier FunctionalInterface lambda expressions

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17 **Streams and Lambda Expressions**

characteristics of streams filtering, mapping sorting, reductions

18 **Input-Output Operations**

I/O operations in Java Reader and Writer FileInputStream, InputStreamReader working with CSV files

19 **Working with Date and Time**

LocalDate, LocalTime, LocalDateTime, Instant date arithmetic date and time formatting time zones

20 **Regular Expressions**

use of regular expressions quantifiers, boundaries, anchors practical examples

21 **Kotlin**

introduction to the Kotlin language use of the language simple programs.

This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

https://www.macrosoft.sk/en/courses/java-programmer