

Java Programming – 40 Hours

Course Overview

A full and comprehensive course about the Java programming language and environment. The course is intended for beginning developers and not seasoned developers. The course explains the basic workings of the JVM, how to write code in Java, how to structure your code and how to use the basic libraries. It also teaches the basics of multi-threading in Java.

Prerequisites

- Tech affinity.
- Any experience in any other programming language is an advantage.

Target Audience

This course is intended for developers who wish to study the basics of the Java programming language.

Topics

Introduction to Java

- Java technology
- Java application structure
- Identifiers, keywords and types

Your very first program

- Using development environments
- Eclipse
- IntelliJ
- Using the command line
- Compiling
- Running
- Debugging

Types

- Built in types
- Integers
- Floats and Doubles
- Strings
- References
- primitives vs objects

Flow control

- Methods
- Conditionals
- Loops
- Expressions

- Recursion
- Uses of
- Limitations

Principles of Object Oriented programming

- Inheritance
- Interfaces
- Abstract classes
- Referencs
- The problems of inheritance

Collections

- Arrays
- Types of arrays
- Linked Lists
- Two way linked lists
- Arrays
- Their performance
- Stacks
- Queues
- HashMaps
- Performance of various data structures
- Sorting and searching algorithms

Input and output

- The File class
- The Stream abstraction

- Basic file manipulation
- Dealing with directories
- Stream decorators

JDBC

- Introduction
- Basics

Handling errors

- Exceptions
- The problems with exceptions
- Assertions

More advanced topics:

- JFC
- Latest syntax enhancements
- Generics
- Regular expressions

The java memory model

- The garbage collector
- How to help the garbage collector

Introduction to Java concurrency

- Java threads
- Mutexes
- Thread local storage
- Daemons
- Passing messages between threads

מבין לקוחותינו:

J.P.Morgan



דיסקונט



Cal.



Google

ebay



SONY

בנק הפועלים

Qualcomm



BROADCOM

harmonic

