

# Agenda Java Training

## • Object-Oriented Programming

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- Syntax and Semantics
- Types of programming languages
- Advantages of object-oriented programming

## • Java Basics

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- Variables and assignments
- Using primitive types
- Type hierarchy and conversions
- Expressions and arithmetic
- Operators
- Control flow
- Basic data structures

## • Object-Oriented Concepts

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- Learning the base concepts of Java with fields, constructors, etc.
- Using inheritance
- Using immutable data structures
- Call by value and call by reference

## • Advanced OOs

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- Checked and unchecked Exceptions
- Abstract classes and interfaces
- Polymorphism
- Interfaces
- Equality and identity
- Using Generics
- Collections & Sets
- Using the reflection API
- Information hiding

## • Optional: Efficiently using the Eclipse IDE

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- Using the debugger
- Testing with JUnit