

# Java Development

3 Days · Instructor-Led Training

## What Is Java?

Java is a widely used object-oriented programming language and software platform that runs on billions of devices, including notebook computers, mobile devices, gaming consoles, medical devices and many others.

## What You'll Learn?

You'll learn the essential Java skills needed to become employable as a Java developer.

- Creating a Java basic program
- All about the Java compiler
- Data Types, Variables, Conditional Processing, Loops, Classes, Operators, Expressions

## — Course Outline

### Introduction to Java

- What is Java?
- Download and Install The Necessary Tools
- Install and Configure IntelliJ Windows Java 11
- Install JDK

### Starting to Code

- Introduction
- Variables
- Why use Variables?

## Reading From the Console

- Introduction
- Console Input with nextLine
- Reading the Input from the HammerBitcoin Game
- Console Input Text and Numbers

## Java Types and Expressions

- Introduction
- Primitive Types
- int and long
- float and double

## Flow Control

- Introduction
- Oracle Java Documentation
- for Loops
- Nested for Loops

## Working with Classes

- Interfaces
- Exception Handling
- Exception Objects
- throw points, throws clause
- try, catch, finally

## Generics and Collections

- Why Use Generics?
- Generic Classes and Interfaces
- Generic Iterators
- Collections
- ArrayList, LinkedList, HashMap

## Threads

- Thread States
- Extending the Thread class
- Timer Thread
- Implementing the Runnable interface

## File I/O

- Input and Output Streams
- Binary and Text Files
- Files and Directory Methods