

**ENTERPRISE
BACK END
DEVELOPMENT
JAVA COURSE
CURRICULUM >>>**

CURRICULUM

GETTING STARTED WITH JAVA SE (2 days)

- What is Java?
- How to Get Java
- Compiling and Interpreting Applications
- The JDK Directory Structure
- A First Java Program
- Abstract Classes
- Interfaces
- Constructors

OBJECT ORIENTED PROGRAMMING (2 days)

- Classes and Objects
- Abstraction
- Fields and Methods
- Encapsulation
- Access Modifiers
- Inheritance
- Polymorphism
- Composition
- Auto Boxing

METHODS (1 days)

- Calling Methods
- Defining Methods
- Method Parameters
- Scope

CURRICULUM

DATA TYPES AND VARIABLES (1 days)

- Primitive Data types
- Non-Primitive Data types
- Arrays
- Logical Operators

OPERATORS AND EXPRESSIONS (02 Hrs)

USING THE PRIMITIVE-TYPE WRAPPER CLASSES (02 Hrs)

CONTROL STATEMENTS (02 Hrs)

- Conditional (if) Statements
- Conditional (switch) Statements
- While and do while Loops
- For Loops
- The continue Statement
- The break Statement

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/// STRING, STRING BUFFER AND STRING TOKENIZER (1 days) ///

- Operations on Strings
- Mutable Strings

/// PACKAGES (1 days) ///

- Packages
- The import Statement
- CLASSPATH and Import
- Defining Packages
- Package Scope

/// EXCEPTION HANDLING (1 days) ///

- Java Exceptions Overview
- Making Custom (User Defined) Exceptions
- Throw and Throws Clause
- Exception Chaining
- Finally Clause

/// INPUT/OUTPUT STREAMS (3 days) ///

- Overview of IO Streams
- Files and Directories
- Writing Files and Reading Files
- Reading and Writing Objects
- Serialization
- Scanners

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REGULAR EXPRESSIONS (3 days)

- Defining Regular Expressions
- Creating Patterns
- Creating matcher
- Matching Boundaries
- Understanding Groups

INTRODUCTION TO THREADS (3 days)

- Overview of Thread
- Life Cycle of A Thread
- Managing Threads
- Thread Priorities
- Synchronization

CORE COLLECTION CLASSES (3 days)

- The Collections Framework
- List Interface
- ArrayList, LinkedList
- Set Interface
- HashSet, LinkedHashSet
- Vector
- Collections Class
- Iterator
- List Iterator
- Fail fast behavior
- Performance analysis
- Queue Interface
- Map Interface
- Hashmap, LinkedHashMap
- SortedList, SortedSet, SortedMap
- Generics
- Generic Types and Generic Interfaces