

#### Java SE 8 Fundamentals Ed 1

**Duration: 5 Days** Course Code: D83527

#### Overview:

This Java SE 8 Fundamentals training introduces you to object-oriented programming using the Java language. Through hands-on exercises,

you'll begin to build a baseline of knowledge to propel your career in development.

By enrolling in this course, you'll expand your knowledge of Java SE 8, while building your Java skill set. You'll build a solid basis in the Java programming language upon which to base continued work and training.

## **Target Audience:**

Application DevelopersDeveloperProject ManagerSystem AdministratorTeam LeaderTechnical AdministratorTechnical ConsultantWeb

### Objectives:

- Write Java code that uses variables, arrays, conditional and loop constructs
- Manipulate primitive numeric data and string data using Java operators
- Create Java classes and use object references
- Access the fields and methods of an object
- Manipulate text data using the methods of the String and StringBuilder classes
- Use casting without losing precision or causing errors
- Declare, override, and invoke methods

- Access and create static fields and methods
- Use classes from the java.time and java.time.format packages to format and print the local date and time
- Encapsulate a class using access modifiers and overloaded constructors
- Define and implement a simple class hierarchy
- Demonstrate polymorphism by implementing a Java Interface
- Use a Predicate Lambda expression as the argument to a method
- Handle a checked exception in a Java application

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# Content:

What Is a Java Program?	Introducing the NetBeans IDE	Using the NetBeans Debugger
Introduction to Computer Programs	Introducing the Soccer League Use Case	More on Arrays and Loops Working with Dates
Key Features of the Java Language	Manipulating and Formatting the Data in Your Program	Parsing the args Array
The Java Technology and Development Environment	Using the String Class	Two-dimensional Arrays
Running/testing a Java program	Using the Java API Docs	Alternate Looping Constructs
Creating a Java Main Class	Using the StringBuilder Class	Nesting Loops
Java Classes	More about primitive data types	The ArrayList class
The main Method	The remaining numeric operators	Using Inheritance
Data In the Cart	Promoting and casting variables	Overview of inheritance
Introducing variables	Creating and Using Methods	Working with subclasses and superclasses
Working with Strings	Using methods	Overriding methods in the superclass
Working with numbers	Method arguments and return values	Introducing polymorphism
Manipulating numeric data	Static methods and variables	Creating and extending abstract classes
Managing Multiple Items	How Arguments are Passed to a Method	Using Interfaces
Working with Conditions	Overloading a method	Polymorphism in the JDK foundation classes
Working with a List of Items	Using Encapsulation	Using Interfaces
Processing a list of items	Access Control	Using the List Interface
Describing Objects and Classes	Encapsulation	Introducing Lambda expressions
Working with objects and classes	Overloading constructors	Handling Exceptions
Defining fields and methods	More on Conditionals	Handling Exceptions: An overview
Declaring, Instantiating, and Initializing Objects	Relational and conditional operators	Propagation of exceptions

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Working with Object References

More ways to use if/else constructs

Catching and throwing exceptions

Handling multiple exceptions and errors

Doing more with Arrays

Using Switch Statements

### Further Information:

For More information, or to book your course, please call us on 0800/84.009 <a href="mailto:info@globalknowledge.be">info@globalknowledge.be</a>
<a href="https://www.globalknowledge.be">www.globalknowledge.be</a>

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