* [Java SE 7](javascript:showVersionContainer('709'))

**Java Basics**

* Define the scope of variables
* Define the structure of a Java class
* Create executable Java applications with a main method
* Import other Java packages to make them accessible in your code

**Working With Java Data Types**

* Declare and initialize variables
* Differentiate between object reference variables and primitive variables
* Read or write to object fields
* Explain an object's lifecycle
* Call methods on objects
* Manipulate data using the StringBuilder class and its methods
* Create and manipulate strings

**Using Operators and Decision Constructs**

* Use Java operators
* Use parentheses to override operator precedence
* Test equality between strings and other objects using == and equals ()
* Create if and if/else constructs
* Use a switch statement

**Creating and Using Arrays**

* Declare, instantiate, initialize and use a one-dimensional array
* Declare, instantiate, initialize and use multi-dimensional array
* Declare and use an ArrayList

**Using Loop Constructs**

* Create and use while loops
* Create and use for loops including the enhanced for loop
* Create and use do/while loops
* Compare loop constructs
* Use break and continue

**Working with Methods and Encapsulation**

* Create methods with arguments and return values
* Apply the static keyword to methods and fields
* Create an overloaded method
* Differentiate between default and user-defined constructors
* Create and overload constructors
* Apply access modifiers
* Apply encapsulation principles to a class

**Working with Inheritance**

* Implement inheritance
* Develop code that demonstrates the use of polymorphism
* Differentiate between the type of a reference and the type of an object
* Determine when casting is necessary
* Use super and this to access objects and constructors
* Use abstract classes and interfaces

**Handling Exceptions**

* Differentiate among checked exceptions, RuntimeExceptions and Errors
* Create a try-catch block and determine how exceptions alter normal program flow
* Describe what exceptions are used for in Java
* Invoke a method that throws an exception
* Recognize common exception classes and categories