Szkolenie: Oracle
Java SE 8 New Features

<table>
<thead>
<tr>
<th>FORMA SZKOLENIA</th>
<th>MATERIAŁY SZKOLENIOWE</th>
<th>CENA</th>
<th>CZAS TRWANIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stacjonarne</td>
<td>Cyfrowe</td>
<td>2950 PLN NETTO*</td>
<td>2 dni</td>
</tr>
<tr>
<td>Stacjonarne</td>
<td>Tablet CTAB</td>
<td>3550 PLN NETTO*</td>
<td>2 dni</td>
</tr>
<tr>
<td>Metoda dlearning</td>
<td>Cyfrowe</td>
<td>2950 PLN NETTO*</td>
<td>2 dni</td>
</tr>
<tr>
<td>Metoda dlearning</td>
<td>Tablet CTAB</td>
<td>2950 PLN NETTO*</td>
<td>2 dni</td>
</tr>
</tbody>
</table>

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00
Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

Cel szkolenia:

This **Java SE 8 New Features** training delves into the major changes and enhancements in Oracle Java SE 8. You'll focus on developing an understanding of the basics, then looking at using streams and lambda expressions with collections.

**Learn To:**

- Work with the new Java Date and Time API.
- Use the Nashorn JavaScript engine.
- Create lambda expressions using the default library interfaces.
- Use new concurrent lambda features.

Plan szkolenia:

- Course Introduction
  - Reviewing course objectives
  - Discussing course format and LVC
  - Getting acquainted with instructor and student
  - Discussing course topics planned for coverage
  - Overview of changes in 8
- Introducing Lambda Expressions
  - Describing the purpose of an anonymous inner class
- Describing drawbacks to anonymous inner classes
- Describing the components of a lambda expression
- Defining a functional interface
- Creating programs that use lambda expressions

A Case for Lambda Expressions
- Discussing the reasons for adding lambda expressions to the Java language
- Reviewing the standard way of extracting data in Java
- Refactoring code to reduce redundancy
- Refactoring code to use inner classes
- Refactoring code to use lambda expressions
- Listing the benefits of lambda expressions

Filtering Collections with Lambdas
- Iterating through a collection with forEach
- Iterating through a collection using lambda syntax
- Describing the Stream interface
- Filtering a collection using lambda expressions
- Calling an existing method using a method reference
- Chaining multiple methods together
- Comparing function and imperative programming
- Defining pipelines in terms of lambdas and collections

Using Built in Lambda Types
- Listing the built in interfaces included in java.util.function
- Determining true or false with a Predicate
- Processing an object and return nothing with Consumer
- Processing one object and return another with Function
- Generating a new object with Supplier
- Using primitive versions of the base interfaces
- Using binary versions of the base interfaces

Collection Operations with Lambda
- Extracting data from an object using map
- Searching for data using search methods
- Describing the types of stream operations
- Describing the Optional class
- Performing calculations using methods
- Describing lazy processing
- Sorting a stream
Saving results to a collection using the collect method

Parallel Streams
- Reviewing the key characteristics of streams
- Contrasting old style loop operations with streams
- Describing how to make a stream pipeline execute in parallel
- Listing the key assumptions needed to use a parallel pipeline
- Defining reduction
- Describing why reduction requires an associative function
- Calculating a value using reduce
- Describing the process for decomposing and then merging work

Lambda Cookbook
- Modifying a list using removeIf
- Updating a list using replaceAll
- Updating a map using computeIfAbsent, computerIfPresent, and merge
- Sending the keys and values from a map to a stream
- Reading a file to a stream
- Reading a text file into an ArrayList
- List, walk, and search a directory structure using a stream
- Flattening a stream using flatMap

Method Enhancements
- Considering the importance of building good libraries
- Using static methods in Interfaces
- Using default methods
- Understanding default method inheritance rules

Using the Date/Time API: Working with Local Dates and Times
- Listing the goals of the Date/Time API (JSR-310)
- Creating and manage date-based events
- Creating and manage time-based events
- Combining date and time into a single object

Using the Date/Time API: Working with Time Zones
- Working with dates and times across time-zones and manage changes resulting from daylight savings

Using the Date/Time API: Working with Date and Time Amounts
- Defining and create timestamps, periods and durations
- Applying formatting to local and zoned dates and times

JavaScript on Java with Nashorn: Creating and executing shell scripts
Creating and execute shell scripts using JavaScript and Nashorn

JavaScript on Java with Nashorn: Writing JavaScript Applications
  Developing JavaScript applications that leverage Java code using Nashorn

JavaScript on Java with Nashorn: Writing JavaFX Applications Using JavaScript
  Running JavaScript script from Java applications using JSR-223
  Prototype JavaFX applications using Nashorn and JavaScript

Intro to Mission Control
  Describing JMX and Managed Beans with Mission Control
  Monitoring CPU utilization with Mission Control
  Analyzing JVM characteristics with Mission Control
  Analyzing heap memory with Mission Control

Intro to Flight Recorder
  Describing the Java Flight Recorder
  Describing the Java Flight Recorder Architecture
  Starting a Java Flight Recording
  Managing a Java Flight Recording
  Analyzing a Java Flight Recording

Wymagania:

Recommended Related Training Courses:
  - Java SE 7 Programming
  - Java SE 7 Fundamentals

Poziom trudności

Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.