

OJAV-15 - JAVA SE 11: PROGRAMMING COMPLETE

Categoria: Java

INFORMAZIONI SUL CORSO









Durata: 5 Giorni

Categoria: Java Qualifica Istruttore: Oracle Certified Professional

Dedicato a: Sviluppatore Produttore:

OBIETTIVI

- -Manipulate numeric, text, date and time values using appropriate Java primitives and classes
- -Organise Java code using classes, interfaces and enumerations
- -Implement program logic using variables, arrays, conditional and loop constructs
- -Create Java applications that leverage the object-oriented features of the Java language, such as encapsulation, inheritance, and polymorphism
- -Use Lambda Expressions
- -Use Java Collections API
- -Process information using Streams API
- -Use Java Concurrency API
- -Implement error propagation and handling
- -Implement input/output (I/O) functionality to read and write binary and text data
- -Manipulate files, directories and file systems
- -Deploy and execute Java applications using a modularized approach

PREREQUISITI

Some experience with a programming language

CONTENUTI

1: Introduction to Java

- -Introduction to Java, Part 1
- -Introduction to Java, Part 2
- -Introduction to Java, Part 3
- -Practice 1-1: Verify the JDK Installation
- -Practice 1-2: Create, Compile, and Execute a Java Application

2: Primitive Types, Operators, and Flow Control Statements

- -Primitive Types, Operators, and Flow Control Statements, Part 1
- -Primitive Types, Operators, and Flow Control Statements, Part 2
- -Primitive Types, Operators, and Flow Control Statements, Part 3



- -Practice 2-1: Manipulate with Primitive Types
- -Practice 2-2: Use the if/else and switch Constructs and a Ternary Operator

3: Text, Date, Time, and Numeric Objects

- -Text, Date, Time, and Numeric Objects, Part 1
- -Text, Date, Time, and Numeric Objects, Part 2
- -Text, Date, Time, and Numeric Objects, Part 3
- -Practice 3-1: Explore String and StringBuilder Objects
- -Practice 3-2: Use BigDecimal Class and Format Numeric Values
- -Practice 3-3: Use and Format Date and Time Value
- -Practice 3-4: Apply Localization and Format Messages

4: Classes and Objects

- -Classes and Objects, Part 1
- -Classes and Objects, Part 2
- -Classes and Objects, Part 3
- -Practice 4-1: Create the Product Management Application
- -Practice 4-2: Enhance the Product Class
- -Practice 4-3: Document Classes

5: Improved Class Design

- -Improved Class Design, Part 1
- -Improved Class Design, Part 2
- -Improved Class Design, Part 3
- -Practice 5-1: Create Enumeration to Represent Product Rating
- -Practice 5-2: Add Custom Constructors to the Product Class
- -Practice 5-3: Make Product Objects Immutable

6: Inheritance

- -Inheritance, Part 1
- -Inheritance, Part 2
- -Inheritance, Part 3
- -Inheritance, Part 4
- -Practice 6-1: Create Food and Drink Classes That Extend Product
- -Practice 6-2: Override Methods and Use Polymorphism...Part 1
- -Practice 6-2: Override Methods and Use Polymorphism...Part 2
- -Practice 6-2: Override Methods and Use Polymorphism...Part 3
- -Practice 6-3: Create Factory Methods

7: Interfaces

- -Interfaces, Part 1
- -Interfaces, Part 2
- -Interfaces, Part 3
- -Practice 7-1: Design the Rateable Interface
- -Practice 7-2: Enable Products Review and Rating
- -Practice 7-3: Test the Product Review Functionality

8: Arrays and Loops

-Arrays and Loops, Part 1



- -Arrays and Loops, Part 2
- -Practice 8-1: Allow Multiple Reviews for a Product

9: Collections

- -Collections, Part 1
- -Collections, Part 2
- -Collections, Part 3
- -Practice 9-1: Organize Products and Reviews into a HashMap
- -Practice 9-2: Implement Review Sort and Product Search Features

10: Nested Classes and Lambda Expressions

- -Nested Classes and Lambda Expressions, Part 1
- -Nested Classes and Lambda Expressions, Part 2
- -Practice 10-1: Refactor ProductManger to use a Nested Class
- -Practice 10-2: Produce Customized Product Reports

11: Java Streams API

- -Java Streams API, Part 1
- -Java Streams API, Part 2
- -Java Streams API, Part 3
- -Practice 11-1: Modify ProductManager to Use Streams
- -Practice 11-2: Add Discount Per Rating Calculation

12: Handle Exceptions and Fix Bugs

- -Handle Exceptions and Fix Bugs, Part 1
- -Handle Exceptions and Fix Bugs, Part 2
- -Handle Exceptions and Fix Bugs, Part 3
- -Practice 12-1: Use Exception Handling to Fix Logical Errors...Part1
- -Practice 12-1: Use Exception Handling to Fix Logical Errors...Part2
- -Practice 12-2: Add Text Parsing Operations...Part 1
- -Practice 12-2: Add Text Parsing Operations...Part 2

13: Java IO API

- -Java IO API, Part 1
- -Java IO API, Part 2
- -Java IO API, Part 3
- -Java IO API, Part 4
- -Practice 13-1: Print Product Report to a File
- -Practice 13-2: Bulk-Load Data from Files...Part 1
- -Practice 13-2: Bulk-Load Data from Files...Part 2
- -Practice 13-3: Implement Memory Swap Mechanism

14: Java Concurrency and Multithreading

- -Java Concurrency and Multithreading, Part 1
- -Java Concurrency and Multithreading, Part 2
- -Java Concurrency and Multithreading, Part 3
- -Java Concurrency and Multithreading, Part 4
- -Practice 14-1: Redesign ProductManager as a Singleton
- -Practice 14-2: Ensure ProductManager Memory Safety



- -Practice 14-3: Simulate Concurrent Callers...Part 1
- -Practice 14-3: Simulate Concurrent Callers...Part 2

15: Open Module Content

- -Open Module Content, Part 1
- -Open Module Content, Part 2
- -Open Module Content, Part 3
- -Practice 15-1: Convert ProductManagement Application into a Module
- -Practice 15-2: Separate Application into Several Modules

16: Annotations

- -Annotations, Part 1
- -Annotations, Part 2

17: Java Database Connectivity

- -Java Database Connectivity, Part 1
- -Java Database Connectivity, Part 2

18: Java Security

- -Java Security, Part 1
- -Java Security, Part 2

19: Advanced Generics

- -Advanced Generics, Part 1
- -Advanced Generics, Part 2

20: Oracle Cloud Deployment

- -Oracle Cloud Deployment, Part 1
- -Oracle Cloud Deployment, Part 2
- -Oracle Cloud Deployment, Part 3
- -Oracle Cloud Deployment, Part 4

INFO

Materiale didattico: Materiale didattico ufficiale Oracle in formato digitale Costo materiale didattico: incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)