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Titolo Pro Java 8 Programming / / by Terrill Brett Spell

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Edizione [1st ed. 2015.]

Descrizione fisica 1 online resource (695 p.)

Collana The expert's voice in Java

Disciplina 004

Soggetti Java (Computer program language)

Software engineering

Java

Software Engineering/Programming and Operating Systems

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di contenuto Contents at a Glance; Introduction; Chapter 1: Going Inside Java; Java's

Architecture; The Java Virtual Machine; Different JVM Implementations; The JVM As a Runtime Execution Environment; The Runtime Data Areas of the JVM; The Heap; The Stack; Method Area; Registers; Runtime Constant Pool; The Garbage Collector; The JVM: Loading, Linking, and Initializing; The First Step; Loading; Linking; Java Class File Verification; Preparation; Resolution; Initialization; Bytecode Execution; The Java Class File Format; The Java Programming Language and APIs; The Java

Programming Language: The Java APIs

Choosing a Superclass for a Custom Exception ClassUsing a Common Superclass for Different Exception Types; Adding Information to an Exception; When to Catch Exceptions; Using a finally Block; Nested Exceptions; Stack Traces and Message Text; Avoiding Exceptions; Assertions; Enumerations; Summary; Chapter 3: Lambdas and Other Java 8 Features; Lambda Expression Concepts; Analyzing the Example; Functional Interface Methods; Default Methods; Multiple Inheritance Ambiguity; Streams; Optional; Parallel Streams; Improved Date/Time

Handling In Java 8; Date/Time Support Before Java 8

Thread ManagementUnderstanding the Problem; Synchronizing the Use of Shared Resources; Nested Calls to Synchronized Methods and Code

Blocks; Synchronized Blocks vs. Methods; Deadlocks; High-Level Synchronization; Lock Ordering; Thread Priorities; Daemon Threads; Adding Threads to an Application; Controlling Threads; Starting a Thread; Making a Thread "Sleep"; Suspending a Thread; Resuming a Thread; Stopping a Thread; Interrupting a Thread; Completing DownloadManager; Deprecated Methods in Thread; DownloadFiles; ThreadGroup; Uncaught Exceptions; Voluntarily Relinquishing the Processor Concurrency Utilities

Sommario/riassunto

Pro Java 8 Programming covers the core Java development kit. It takes advantage of the finer points of the core standard edition (SE) and development kit version 8. You'll discover the particulars of working with the Java language and APIs to develop applications in many different contexts. You will also delve into more advanced topics like lambda expressions, closures, new i/o (NIO.2), enums, generics, XML, metadata and the Swing APIs for GUI design and development. By the end of the book, you'll be fully prepared to take advantage of Java's ease of development, and able to create powerful, sophisticated Java applications.