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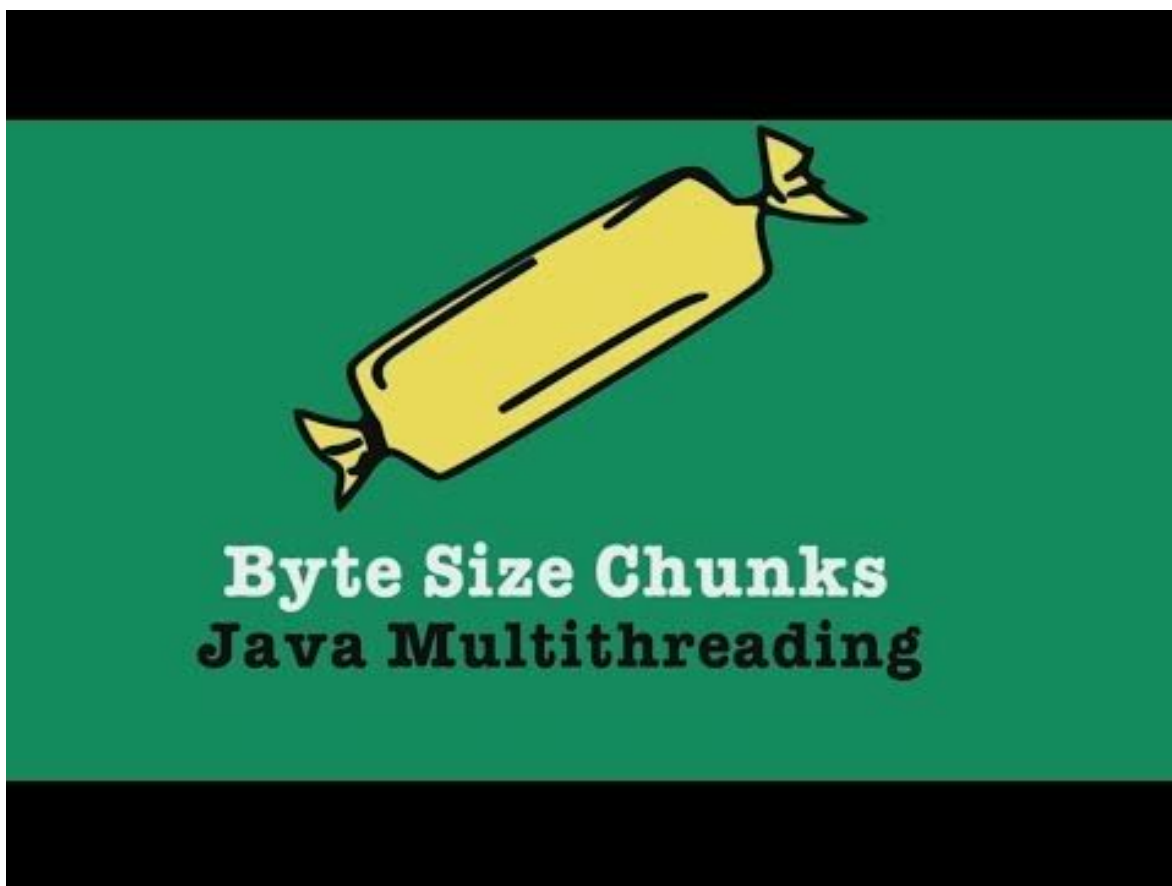
Learning Style: On Demand

Technology: Java

Difficulty: Beginner

Course Duration: 2 Hours

Byte Size Chunks: Java Multithreading

About this Course:

This Beginner-Level 2 Hours Training Program presents a great learning opportunity for IT Enthusiasts and App Developers who want to learn the art of Java concurrency and multithreading. This course is specifically designed for developers and IT professionals interested in expanding their array of expertise and learning

the fundamentals of Java Multithreading. On average, a Professional Java Developer with strong command in concurrency coding and multithreading earns $69.722 annually.

This is a unique training program with quirky practical examples to help learners grasp the key programming concepts with more ease and simplicity. Encompassing multiple quizzes, this online training strives to capitalize on cognition and recalling capabilities with the integration of a hint of art and music to develop an innovative learning experience. This course covers the key concepts of Inter-Thread Communication, Shared Memory, Old & New Age Java Threading, and Semantics.

Course Objectives:

The core objective of this course is to help professionals develop a better understanding and sound knowledge of the following key concepts:

- Overview of Threading Fundamentals & its Importance
- Understanding Threads, Shared Memory, Inter-Thread Communication, & Processes
- Threads, Multi-Threads, & Runnable Creation in Java
- Understanding Callable, Future, & Executor Services in Java
- Volatile & Synchronized Keywords in Java
- The Singleton Pattern & Double-Checked Locking Pattern (DCLP) in Java

Audience:

This course is specifically tailored for the following group of professionals and interested candidates:

- App Developers
- Programmers & Java Developers
- Professionals striving to Learn about Concurrent Coding & Multi-Threading

Prerequisites:

Professionals planning to enroll in the Byte Size Chunks: Java Multithreading course must comply with the following prerequisites:

- Fundamental Knowledge and Understanding of Java Programming
- Certification in Python Programming for Beginners is Highly Recommended
- Certification in C++ for Beginners is Highly Recommended

Course Outline:

Introduction

- You, This course and Us

Threading and Concurrency: A Lot Going On All At Once

- Threading, and Why It Matters
- Resource Material
- Threading: Old school vs New school
- Resource Material
- Traditional Threading Support
- Resource Material
- Threading and Concurrency: A lot going on at once
- Resource Material
- Synchronized Methods, Livelock, Deadlock and Starvation
- Resource Material
- Working with threads - and our first synchronization bug!
- Resource Material
- Threads: Object locking and static variables in action

New School Threading with Callables and Futures

- Digging Deeper into Callables and Futures
- Resource Material
- Threading: New school fun in action
- Resource Material
- Threading: Executors are pretty cool

The Singleton Design Pattern

- The Singleton Design Pattern Introduction

https://www.quickstart.com/catalog/product/view/id/2268/s/byte-size-chunks-java-multithreading/