

Migrating to Java 17 | Java 17 New Features & Skills (TT2135)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Migrating to Java 17 / Java 17 New Features and Skills® is a one day course that focuses on the changes that will be most noticable for Java developers who will make the transition from Java 11 to Java 17.®

About This Course

There have been a lot of changes in the Java programming language since the release of Java 11 in September of 2018.

Migrating to Java 17 / Java 17 New Features and Skills is a one day course that focuses on the changes that will be most noticeable for Java developers who will make the transition from Java 11 to Java 17.

This course blends expert instruction and practical, hands-on experience, focusing on bridging the gap between your current Java knowledge and the latest version. Understanding that many developers are now transitioning projects from older versions of Java, this course is your key to making that shift both quickly and effectively. Throughout the course, you'll delve into Java 17's new features, such as the innovative use of Records for data management and the enhanced String and Text Blocks for improved text handling. These topics, along with the introduction of Sealed Classes and the refined approach to Switch Expressions and Pattern Matching, are more than just updates; they are pivotal enhancements that will streamline your coding practice. The real-world labs enable you to quickly pick up useful practical skills you'll be able to apply seamlessly into your work.

Whether you're upgrading existing projects or embarking on new ones, the skills and insights gained here will empower you to use Java 17 efficiently and innovatively. This course is more than just an upgrade in your Java knowledge; it's a comprehensive enhancement of your development skills, preparing you to tackle modern challenges with renewed expertise and confidence.

Who Should Attend

This is an intermediate- level Java programming course, designed for experienced Java 11 developers who wish to get up and running with Java 17 immediately. Attendees should have a working knowledge of developing Java 11 applications. This course is not for non-developers, or developers new to Java.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Working in an interactive learning environment, led by our expert facilitator, you'll explore:

- Mastering Records in Java 17: Gain a thorough understanding of how to utilize Records in Java 17 for efficient data handling, enabling you to simplify data modeling and ensure more concise and readable code.
- Advanced String and Text Block Management: Develop the ability to effectively use the new String and Text Block features in Java 17. This includes mastering methods like `strip()`, `isBlank()`, and `repeat()`, as well as understanding the nuances of indentation in text blocks for improved text manipulation.
- Implementing Sealed Classes and Interfaces: Acquire the skills to implement sealed classes and interfaces in Java 17, enhancing your ability to create more secure, type-safe, and maintainable code.
- Utilizing Enhanced Switch Expressions and Pattern Matching: Learn to effectively use enhanced switch expressions and pattern matching for `instanceof` in Java 17. This skill is crucial for writing more concise and error-resistant code.
- Efficient Exception Handling Techniques: Master the enhanced exception handling features in Java 17, such as the improved `try-with-resources` statement and more informative `NullPointerExceptions`, to write more robust and reliable Java applications.
- Applying Modern Java Development Techniques: Develop the ability to apply these new Java 17 features in real-world scenarios. This includes integrating these skills into existing projects, enhancing your capacity to upgrade and modernize Java applications efficiently.
- Specific Java 17 features that are covered in the course including: Switch Expressions; Text blocks; Pattern matching for `instance of`; Introducing records as carrier of immutable data
- Specific Java 21 features that are covered in the course including: Sequenced Collections; Pattern matching in Switch statements; Record Patterns

Detailed Course Outline

1. Versions and Features

¢ Quick refresh of Java versions since Java 8

¢ (Non) LTS releases

- ‡ Preview features
- ‡ Java Language Specifications
- ‡ Java Specification Requests
- ‡ Java Enhancement Proposals
- ‡ Tutorial: IntelliJ Community Edition 2023 QuickStart (Using Maven) (Eclipse also available ‡ please inquire)

2. Records

- ‡ Data objects in Java
- ‡ Introduce records as carrier of immutable data
- ‡ Defining records
- ‡ The Canonical constructor
- ‡ Compact constructors
- ‡ Lab: Records

3. String and Text Blocks

- ‡ Discuss the definition of whitespace in Java
- ‡ Introduce the strip() methods of the String class
- ‡ The isBlank() and repeat() methods introduced in Java 11
- ‡ Using the lines() method to construct a Stream instance using a String
- ‡ Compact strings
- ‡ Introducing Text Blocks
- ‡ Indentation in text blocks
- ‡ Lab: Text Blocks

4. Sealed Classes

- ‡ Introduce sealed classes
- ‡ The sealed and permits modifier
- ‡ Sealed interfaces
- ‡ Sealed classes and pattern matching
- ‡ Lab: Sealed Classes

5. Switch Expressions

- ‡ Switch Expressions

- ‡ Using yield

- ‡ Discuss switch fall through

- ‡ Lab: Switch Expressions

6. Pattern Matching for instanceof

- ‡ Pattern Matching for instanceof

- ‡ Scope of variable when using pattern matching

- ‡ Refining Patterns in switch

- ‡ Dominance of pattern labels

- ‡ Lab: Pattern Matching

7. Exception Handling

- ‡ Enhanced try-with-resources

- ‡ Helpful NullPointerExceptions

- ‡ Excluding parameter names in error messages

- ‡ Lab: Helpful Nullpointers

8. More Updates

- ‡ Private methods in interfaces

- ‡ The forRemoval and since attributes of the Deprecated annotation

- ‡ Multi-release JAR files

- ‡ Javadoc updates

- ‡ Class-Data Sharing

- ‡ Application Class-Data

- ‡ CompactNumberFormat

- ‡ Lab: Creating a Multi-Release Jar file

Additional Course Details

Nexus Humans Migrating to Java 17 | Java 17 New Features & Skills (TT2135) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Migrating to Java 17 | Java 17 New Features & Skills (TT2135) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Migrating to Java 17 | Java 17 New Features & Skills (TT2135)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Migrating to Java 17 | Java 17 New Features & Skills (TT2135) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Migrating to Java 17 | Java 17 New Features & Skills (TT2135) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Migrating to Java 17 | Java 17 New Features & Skills (TT2135)?

Yes, we provide corporate training, dedicated training, and closed classes for Migrating to Java 17 | Java 17 New Features & Skills (TT2135). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Java

Q: Why choose Nexus Human for Migrating to Java 17 | Java 17 New Features & Skills (TT2135)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Migrating to Java 17 | Java 17 New Features & Skills (TT2135) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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