java 8 programs for practice

Java 8 Programs for Practice: A Gateway to Mastering Modern Java

java 8 programs for practice are an excellent way to deepen your understanding of one of the most transformative releases in the Java programming language's history. Java 8 introduced a variety of features that revolutionized how developers write Java code, making it more concise, readable, and efficient. If you're looking to sharpen your skills or prepare for interviews, working through practical Java 8 programs is the best approach. This article will guide you through essential Java 8 concepts, practical examples, and tips to get the most out of your learning journey.

Why Focus on Java 8 Programs for Practice?

Before diving into specific programs, it's important to understand why Java 8 remains relevant and worth mastering. Java 8 introduced features such as lambda expressions, the Stream API, default methods in interfaces, and the new Date and Time API. These enhancements have become fundamental in modern Java development.

Practicing Java 8 programs not only helps you familiarize yourself with these features but also improves your problem-solving skills by applying them in real scenarios. Whether you're preparing for technical interviews, working on projects, or simply upgrading your skill set, mastering Java 8 is a valuable asset.

Core Java 8 Features to Practice

Lambda Expressions

One of the most talked-about features in Java 8 is lambda expressions. They enable you to write anonymous functions, making your code more functional and concise. Instead of writing bulky anonymous inner classes, you can use lambdas to pass behavior as a method argument.

Here's a simple Java 8 program for practice involving lambda expressions:

```java
import java.util.Arrays;
import java.util.List;

public class LambdaExample {
public static void main(String[] args) {
List names = Arrays.asList("John", "Jane", "Jack", "Doe");

// Using lambda to print all names
names.forEach(name -> System.out.println(name));
}
}
```

This small program demonstrates how lambda expressions can simplify iteration over collections. Practicing similar programs will help you gain fluency with functional interfaces and method references.

The Stream API

The Stream API is a powerful addition that allows you to process collections of objects in a declarative way. It supports operations like filter, map, reduce, and collect, which are staples in functional programming.

Try this example to practice filtering and mapping with streams:

```java
import java.util.Arrays;
import java.util.List;
import java.util.stream.Collectors;

public class StreamExample {
public static void main(String[] args) {
List numbers = Arrays.asList(2, 3, 4, 5, 6);

// Filter even numbers and square them
List evenSquares = numbers.stream()
.filter(n -> n % 2 == 0)
.map(n -> n * n)
.collect(Collectors.toList());

System.out.println(evenSquares); // Output: [4, 16, 36]
}
}
```

Working with streams improves your ability to write clean and efficient code, especially when dealing with large data sets.

Default and Static Methods in Interfaces

Prior to Java 8, interfaces could only declare abstract methods. Java 8 allowed interfaces to have default and static methods, which adds flexibility in evolving APIs without breaking existing implementations.

Here’s a practice snippet demonstrating default methods:

```java
interface Vehicle {
void move();

default void start() {
System.out.println("Vehicle is starting");
}
}

public class Car implements Vehicle {
public void move() {
System.out.println("Car is moving");
```

```
}

public static void main(String[] args) {
Car car = new Car();
car.start(); // Calls default method
car.move();
}
}
```

Understanding this feature is crucial for designing robust and backward-compatible interfaces.

Practical Java 8 Programs for Practice

1. Sorting a List Using Lambda Expressions

Sorting collections is a common task. Java 8 makes it easier by allowing you to pass a comparator using lambdas:

```java
import java.util.Arrays;
import java.util.List;

public class SortList {
public static void main(String[] args) {
List fruits = Arrays.asList("Banana", "Apple", "Orange", "Mango");

// Sort in alphabetical order
fruits.sort((f1, f2) -> f1.compareTo(f2));
System.out.println(fruits);
}
}
```

This practice enhances your understanding of lambdas and the Collections framework.

2. Finding the Maximum and Minimum Element Using Stream API

Leveraging streams, you can easily find max and min values in a collection:

```java
import java.util.Arrays;
import java.util.Comparator;
import java.util.List;

public class MaxMinExample {
public static void main(String[] args) {
List numbers = Arrays.asList(5, 3, 8, 1, 9);
```

```
int max = numbers.stream()
.max(Comparator.naturalOrder())
.orElseThrow(() -> new RuntimeException("List is empty"));

int min = numbers.stream()
.min(Comparator.naturalOrder())
.orElseThrow(() -> new RuntimeException("List is empty"));

System.out.println("Max: " + max);
System.out.println("Min: " + min);
}
}
```

Practicing such tasks will help you get comfortable with Optional and functional programming idioms.

3. Using Optional to Avoid NullPointerException

Java 8 introduced the Optional class to handle null values gracefully. Here's a sample program for practice:

```java
import java.util.Optional;

public class OptionalExample {
public static void main(String[] args) {
Optional optionalName = Optional.ofNullable(null);

// Provide a default value if empty
String name = optionalName.orElse("Unknown");
System.out.println(name);
}
}
```

This program emphasizes defensive programming techniques and helps reduce runtime exceptions.

4. Working with the New Date and Time API

Before Java 8, Java's date and time handling was cumbersome. The new Date and Time API (java.time package) is much more intuitive.

```java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class DateExample {
public static void main(String[] args) {
LocalDate today = LocalDate.now();
System.out.println("Today's date: " + today);

// Format date in custom pattern
DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd-MM-yyyy");
```

```
String formattedDate = today.format(formatter);
System.out.println("Formatted date: " + formattedDate);
}
}
```

Practicing with the new API can save you from the pitfalls of the old java.util.Date and Calendar classes.

Tips for Effective Practice with Java 8 Programs

- **Start Small, Then Scale Up:** Begin with simple programs like printing lists using lambdas, then move on to complex stream operations involving collectors and grouping.
- **Mix Theory and Practice:** Read about a feature, then immediately write a program to apply it. This reinforces learning.
- **Use Online Coding Platforms:** Websites like HackerRank and LeetCode offer Java 8 specific challenges that can help you practice under time constraints.
- **Experiment with Real-world Data:** Try processing CSV files or JSON objects using streams to simulate real-world scenarios.
- **Understand Functional Interfaces:** Many Java 8 methods accept functional interfaces like Predicate, Function, and Supplier. Practice creating and using these interfaces to unlock the full potential of lambdas.

Advanced Practice Ideas Using Java 8 Features

Once you are comfortable with basic programs, challenge yourself with these ideas:

- **Implement a custom Collector:** Create your own collector for streams to perform specialized data aggregation.
- **Parallel Streams:** Explore parallel stream processing to leverage multi-core processors for faster execution.
- **Predicate Chaining:** Practice combining multiple predicates using `and()`, `or()`, and `negate()` methods.
- **CompletableFuture for Asynchronous Programming:** Java 8 introduced CompletableFuture to handle asynchronous tasks. Writing programs with it will prepare you for modern reactive programming.

Here’s a quick example of chaining predicates:

```java
import java.util.function.Predicate;

public class PredicateChaining {
public static void main(String[] args) {
Predicate startsWithA = s -> s.startsWith("A");
Predicate lengthThree = s -> s.length() == 3;

Predicate combined = startsWithA.and(lengthThree);

System.out.println(combined.test("Ace")); // true
```

```
System.out.println(combined.test("Act")); // true
System.out.println(combined.test("Bat")); // false
}
}
```

This kind of practice improves your ability to write complex conditional logic elegantly.

Exploring CompletableFuture can be a game-changer for writing non-blocking and efficient applications.

Java 8 Programs for Practice: Final Thoughts

Diving into Java 8 programs for practice is more than just ticking off coding exercises—it's about embracing a new paradigm of programming within Java. The blend of object-oriented and functional programming styles introduced in Java 8 offers a powerful toolkit to write cleaner, more maintainable, and performant code.

As you continue to explore Java 8 through practical programs, you'll notice how these features simplify many programming tasks that were once verbose or complicated. From lambda expressions to the Stream API and the revamped Date and Time classes, practicing these concepts prepares you not only for current projects but also for future Java evolutions.

Keep experimenting, building, and challenging yourself with diverse problems. Soon enough, Java 8 won't just be something you practice—it will become second nature in your coding journey.

Frequently Asked Questions

What are some common Java 8 features to practice in programming exercises?

Common Java 8 features to practice include lambda expressions, streams API, method references, default and static methods in interfaces, and the new Date and Time API (java.time). Practicing these helps in writing concise and efficient code.

Can you provide a simple Java 8 program using streams to filter and sort a list?

Yes. For example, to filter a list of integers to get even numbers and sort them: `List<Integer> numbers = Arrays.asList(5, 3, 8, 1, 2); List<Integer> evenSorted = numbers.stream().filter(n -> n % 2 == 0).sorted().collect(Collectors.toList()); System.out.println(evenSorted);` This will output `[2, 8]`.

How do lambda expressions improve Java 8 programming

practice?

Lambda expressions enable writing anonymous functions in a clear and concise way, reducing boilerplate code especially when implementing functional interfaces. They make code more readable and enable functional programming styles using Java 8 features like streams and collections.

What is a good Java 8 practice program to understand Optional class usage?

A good practice program is to demonstrate how to avoid NullPointerException by using Optional. For example: `Optional<String> name = Optional.ofNullable(getName()); name.ifPresent(n -> System.out.println("Name is " + n));` This shows how to handle potentially null values safely.

How can I practice Java 8 Date and Time API programming?

You can practice by writing programs that manipulate dates and times using classes like LocalDate, LocalTime, and LocalDateTime. For example, calculate the number of days between two dates, format dates in different patterns, or add/subtract time units using methods like `plusDays()` or `minusHours()`.

Additional Resources

Java 8 Programs for Practice: A Comprehensive Exploration for Developers

java 8 programs for practice offer an essential gateway for both novice and experienced developers aiming to master the features introduced in one of the most significant updates to the Java programming language. Since its release, Java 8 has transformed how developers write code, introducing functional programming concepts, stream APIs, and enhancements to concurrency handling. For programmers eager to deepen their understanding and apply these concepts effectively, engaging with a variety of practical Java 8 programs is indispensable.

The landscape of Java 8 programming is rich and diverse. The shift towards lambda expressions, default and static methods in interfaces, and the robust Stream API encourages a more declarative style of coding, improving readability and efficiency. However, to harness these improvements, developers must engage with well-structured practice programs that not only highlight new features but also demonstrate real-world applications.

Understanding the Importance of Java 8 Practice Programs

Java 8 programs for practice serve multiple educational purposes. They enable coders to internalize new syntax, grasp the utility of functional interfaces, and appreciate the power and flexibility of streams for data processing. Unlike earlier versions, Java 8 emphasizes immutability and side-effect-free programming, which requires a paradigm shift that can only be achieved through consistent practice.

Moreover, the ability to write Java 8 programs proficiently is a valuable skill in the current job market. Many enterprises have adopted Java 8 for backend development due to its improved performance and enhanced APIs. Practicing Java 8 concepts also prepares developers for subsequent versions, as many foundational features introduced here persist and evolve.

Core Features to Focus on in Java 8 Practice Programs

When selecting or designing Java 8 programs for practice, it is critical to target the language's hallmark features:

- **Lambda Expressions:** These enable anonymous functions, simplifying the implementation of functional interfaces.
- **Stream API:** Facilitates functional-style operations on collections, enabling filtering, mapping, and reduction.
- **Optional Class:** Helps avoid null pointer exceptions by providing a container that may or may not contain a value.
- **Default and Static Methods in Interfaces:** Allow interfaces to have method implementations, enhancing backward compatibility.
- **Date and Time API:** A modern and immutable API replacing the older, less reliable java.util.Date and Calendar.

Programs that incorporate these elements provide practical insights into their real-world applicability, helping learners move beyond theoretical knowledge.

Examples of Effective Java 8 Programs for Practice

Engaging with a curated set of Java 8 programs can significantly enhance a developer's skill set. Below are some illustrative examples that help solidify understanding:

1. Using Lambda Expressions for Comparator Implementation

Traditional anonymous inner classes can be replaced with concise lambda expressions to sort collections. A program that sorts a list of custom objects by multiple fields using lambdas demonstrates the elegance and brevity introduced by Java 8.

2. Stream API for Data Processing

Streams allow developers to write pipeline operations on collections. A practical program might involve filtering a list of employees based on salary, mapping to extract names, and collecting results into a new list. This exercise highlights intermediate and terminal stream operations.

3. Optional to Handle Null Values Gracefully

A program that retrieves user information from a database and uses Optional to handle null cases effectively prevents NullPointerExceptions. This practice instills defensive programming habits crucial for robust applications.

4. Implementing Default Methods in Interfaces

Creating an interface with default methods and then overriding them in implementing classes can help programmers understand backward compatibility and interface evolution in Java 8.

5. Working with the New Date and Time API

A program that calculates the duration between two dates, converts time zones, or formats dates using java.time package classes like LocalDate, LocalTime, and ZonedDateTime can provide practical exposure to this improved API.

Benefits of Practicing Java 8 Programs in Real-World Contexts

Beyond syntax mastery, Java 8 programs for practice offer tangible benefits that reflect in professional development workflows:

- **Improved Code Readability:** Lambda expressions and streams encourage cleaner and more readable code structures.
- **Enhanced Performance:** Stream API’s lazy evaluation and parallel streams can optimize data processing tasks.
- **Reduced Boilerplate Code:** Functional interfaces and default methods reduce the need for verbose implementations.
- **Better Error Handling:** The Optional class enforces explicit handling of potentially absent values.

These benefits collectively contribute to writing maintainable, efficient,

and modern Java applications.

Challenges When Practicing Java 8 Programs

Despite its advantages, Java 8 introduces certain complexities. Understanding when and how to use streams effectively can be non-trivial, especially concerning debugging and performance implications. Lambda expressions, while concise, may obscure logic flow for beginners if not used judiciously. Additionally, the immutability principles embedded in the new Date and Time API require a shift in mindset from traditional mutable objects.

Therefore, practice programs should be designed to balance conceptual clarity with practical application, enabling developers to navigate these challenges.

Resources and Strategies for Practicing Java 8 Programs

To maximize learning outcomes, developers should consider the following approaches:

1. **Incremental Complexity:** Begin with simple lambda expressions and gradually introduce streams, optionals, and date/time operations.
2. **Project-Based Learning:** Implement small projects such as inventory management or employee record systems using Java 8 features to simulate real-world scenarios.
3. **Code Reviews and Pair Programming:** Collaborate with peers to critique and improve Java 8 code, ensuring best practices.
4. **Utilize Online Platforms:** Engage with coding challenge websites and repositories that focus on Java 8 exercises.

Consistent practice, coupled with reflective learning, solidifies the understanding of Java 8’s paradigm shifts.

Comparing Java 8 Practice to Other Java Versions

While Java 8 remains a cornerstone in modern Java development, it is instructive to contrast its features with earlier and later versions. Prior to Java 8, programming was predominantly imperative, with verbose anonymous classes. Post-Java 8 versions have built upon its functional programming foundation, enhancing type inference, pattern matching, and record types.

Practicing Java 8 programs lays the groundwork for these advancements, making it a strategic choice for developers aiming to future-proof their skills.

In the evolving ecosystem of Java programming, mastering Java 8 through targeted practice programs is not merely an academic exercise but a practical

necessity. It enables developers to write more expressive, efficient, and maintainable code, aligning with contemporary software development trends. As the technology landscape continues to advance, the foundational knowledge gained from Java 8 programming remains relevant, underscoring the enduring value of these practice exercises.

Java 8 Programs For Practice

java 8 programs for practice: Pro Java 8 Programming Terrill Brett Spell, 2015-05-29 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.

java 8 programs for practice: Modern Java in Action Raoul-Gabriel Urma, Alan Mycroft, Mario Fusco, 2018-09-26 Summary Manning's bestselling Java 8 book has been revised for Java 9! In Modern Java in Action, you'll build on your existing Java language skills with the newest features and techniques. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Modern applications take advantage of innovative designs, including microservices, reactive architectures, and streaming data. Modern Java features like lambdas, streams, and the long-awaited Java Module System make implementing these designs significantly easier. It's time to upgrade your skills and meet these challenges head on! About the Book Modern Java in Action connects new features of the Java language with their practical applications. Using crystal-clear examples and careful attention to detail, this book respects your time. It will help you expand your existing knowledge of core Java as you master modern additions like the Streams API and the Java Module System, explore new approaches to concurrency, and learn how functional concepts can help you write code that's easier to read and maintain. What's inside Thoroughly revised edition of Manning's bestselling Java 8 in Action New features in Java 8, Java 9, and beyond Streaming data and reactive programming The Java Module System About the Reader Written for developers familiar with core Java features. About the Author Raoul-Gabriel Urma is CEO of Cambridge Spark. Mario Fusco is a senior software engineer at Red Hat. Alan Mycroft is a University of Cambridge computer science professor; he cofounded the Raspberry Pi Foundation. Table of Contents PART 1 - FUNDAMENTALS Java 8, 9, 10, and 11: what's happening? Passing code with behavior parameterization Lambda expressions PART 2 - FUNCTIONAL-STYLE DATA PROCESSING WITH STREAMS Introducing streams Working with streams Collecting data with streams Parallel data processing and performance PART 3 - EFFECTIVE PROGRAMMING WITH STREAMS AND LAMBDAS Collection API enhancements Refactoring, testing, and debugging Domain-specific languages using lambdas PART 4 - EVERYDAY JAVA Using Optional as a better alternative to null New Date and Time API Default methods The Java Module System PART 5 - ENHANCED JAVA CONCURRENCY Concepts behind CompletableFuture and reactive programming CompletableFuture: composable asynchronous programming Reactive programming PART 6 - FUNCTIONAL PROGRAMMING AND FUTURE JAVA EVOLUTION Thinking functionally Functional

programming techniques Blending OOP and FP: Comparing Java and Scala Conclusions and where next for Java

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java 8 programs for practice: Java 8 Recipes Carl Dea, Mark Beaty, Freddy Guime, John OConner, Josh Juneau, 2014-09-25 Java 8 Recipes offers solutions to common programming problems encountered while developing Java-based applications. Fully updated with the newest features and techniques available, Java 8 Recipes provides code examples involving Lambdas, embedded scripting with Nashorn, the new date-time API, stream support, functional interfaces, and much more. Especial emphasis is given to features such as lambdas that are newly introduced in Java 8. Content is presented in the popular problem-solution format: Look up the programming problem that you want to solve. Read the solution. Apply the solution directly in your own code. Problem solved! The problem-solution approach sets Java 8 Recipes apart. Java 8 Recipes is focused less on the language itself and more on what you can do with it that is useful. The book respects

your time by always focusing on a task that you might want to perform using the language. Solutions come first. Explanations come later. You are free to crib from the book and apply the code examples directly to your own projects. Covers the newly-released Java 8, including a brand new chapter on lambdas Focuses especially on up-and-coming technologies such as Project Nashorn and Java FX 2.0 Respects your time by focusing on practical solutions you can implement in your own code

java 8 programs for practice: *Java Cookbook* Ian F. Darwin, 2020-03-17 Java continues to grow and evolve, and this cookbook continues to evolve in tandem. With this guide, you'll get up to speed right away with hundreds of hands-on recipes across a broad range of Java topics. You'll learn useful techniques for everything from string handling and functional programming to network communication. Each recipe includes self-contained code solutions that you can freely use, along with a discussion of how and why they work. If you're familiar with Java basics, this cookbook will bolster your knowledge of the language and its many recent changes, including how to apply them in your day-to-day development. This updated edition covers changes through Java 12 and parts of 13 and 14. Recipes include: Methods for compiling, running, and debugging Packaging Java classes and building applications Manipulating, comparing, and rearranging text Regular expressions for string and pattern matching Handling numbers, dates, and times Structuring data with collections, arrays, and other types Object-oriented and functional programming techniques Input/output, directory, and filesystem operations Network programming on both client and server Processing JSON for data interchange Multithreading and concurrency Using Java in big data applications Interfacing Java with other languages

java 8 programs for practice: Principles and Practices of Building Parallel Software Rajkishore Barik, Rajiv Gupta, Jens Palsberg, 2025-06-27 This Festschrift celebrates the career of Vivek Sarkar, a pioneer who has influenced research into programming languages, compilers, runtime systems, and debugging and verification systems for high-performance computers. After foundational Ph.D. work at Stanford University under the mentorship of John L. Hennessy, Vivek joined IBM, where he contributed to the PTRAN Project, he led the design and implementation of the ASTI optimizer for the XL compiler, the design of the X10 programming language, and the development of the Jikes Research Virtual Machine, an open-source JVM that has enabled experimentation with advanced virtual machine technologies at hundreds of universities worldwide. He was appointed to a professorship at Rice University where he also served as Chair of the Dept. of Computer Science, and he is now the Chair of the School of Computer Science at Georgia Tech. Vivek is a member of the IBM Academy of Technology, he is an ACM Fellow and an IEEE Fellow, and he serves on the US Dept. of Energy Advanced Scientific Computing Advisory Committee and the CRA Board of Directors. In 2020 he received the ACM-IEEE CS Ken Kennedy Award for foundational technical contributions to the area of programmability and productivity in parallel computing, and leadership contributions to professional service, mentoring, and teaching. This volume celebrates Vivek Sarkar's transformative work. Motivated by the challenges of high-performance and exascale computing, he has profoundly shaped both industry practices and academic research through pioneering innovations, technical expertise, and dedicated mentorship, and is a role model for generations of computer scientists.

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java 8 programs for practice: Guide To Clear Java Developer Interview , 2025-02-03 Welcome to the Ultimate Guide to Mastering Java Developer Interviews! Whether you're an aspiring Java Backend Developer with little to no experience or someone with up to 10 years of expertise, you've come to the right place! This book is tailor-made to be your ultimate companion in preparing for your dream role. Inside these pages, you'll find a curated collection of crucial interview questions, carefully compiled based on my own experiences and encounters. But it doesn't stop

there! Not only will you find the questions themselves, but I've also provided in-depth and relevant answers to each one. This comprehensive guide covers an extensive array of topics, leaving no stone unturned in your preparation journey. Comprehensive guide covering a wide range of topics for your preparation journey. Topics: Fundamentals of Object-Oriented Programming and Core Java Java-8 and its advanced features Spring Framework and Spring-Boot Microservice architecture Memory Management in Java REST principles Design Patterns System Design SQL and Hibernate-JPA Coding and Programming Questions covered Not to mention, I've included Scenario-Based Interview Questions, delving into practical situations that will test your problem-solving skills. Additionally, you'll find a section dedicated to Miscellaneous topics, ensuring you're well-versed in all the essential aspects. The book also dives into the intricate world of Multithreading, an area that many interviews focus on to assess your proficiency in concurrent programming. After you've explored the depths of this guide, I am confident that you'll walk into your interview room with newfound confidence and expertise. The knowledge you'll gain from these pages will undoubtedly set you apart from the competition. So, embrace this opportunity and embark on your journey toward interview success with enthusiasm. Best of luck! Best Regards, Ajay Rathod

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java 8 programs for practice: *Advanced Information Networking and Applications* Leonard Barolli, 2024-05-12 Networks of today are going through a rapid evolution and there are many emerging areas of information networking and their applications. Heterogeneous networking supported by recent technological advances in low power wireless communications along with silicon integration of various functionalities such as sensing, communications, intelligence, and actuations are emerging as a critically important disruptive computer class based on a new platform, networking structure and interface that enable novel, low-cost and high-volume applications. Several of such applications have been difficult to realize because of many interconnection problems. To fulfill their large range of applications different kinds of networks need to collaborate and wired and next generation wireless systems should be integrated in order to develop high performance computing solutions to problems arising from the complexities of these networks. This book covers the theory, design and applications of computer networks, distributed computing, and information systems. The aim of the book “Advanced Information Networking and Applications” is to provide latest research findings, innovative research results, methods and development techniques from both theoretical and practical perspectives related to the emerging areas of information networking and applications.

java 8 programs for practice: Java 9: Building Robust Modular Applications Dr. Edward Lavieri, Peter Verhas, Jason Lee, 2018-04-13 Mastering advanced features of Java and implement them to build amazing projects Key Features Take advantage of Java's new modularity features to write real-world applications that solve a variety of problems Explore the major concepts introduced with Java 9, including modular programming, HTTP 2.0, API changes, and more Get to grips with tools, techniques and best practices to enhance application development Book Description Java 9 and its new features add to the richness of the language; Java is one of the languages most used by developers to build robust software applications. Java 9 comes with a special emphasis on modularity with its integration with Jigsaw. This course is your one-stop guide to mastering the language. You'll be provided with an overview and explanation of the new features introduced in Java 9 and the importance of the new APIs and enhancements. Some new features of Java 9 are

ground-breaking; if you are an experienced programmer, you will be able to make your enterprise applications leaner by learning these new features. You'll be provided with practical guidance in applying your newly acquired knowledge of Java 9 and further information on future developments of the Java platform. This course will improve your productivity, making your applications faster. Next, you'll go on to implement everything you've learned by building 10 cool projects. You will learn to build an email filter that separates spam messages from all your inboxes, a social media aggregator app that will help you efficiently track various feeds, and a microservice for a client/server note application, to name just a few. By the end of this course, you will be well acquainted with Java 9 features and able to build your own applications and projects. This Learning Path contains the best content from the following two recently published Packt products: •Mastering Java 9 •Java 9 Programming Blueprints What you will learn Package Java applications as modules using the Java Platform Module System Implement process management in Java using the all-new process handling API Integrate your applications with third-party services in the cloud Interact with mail servers, using JavaMail to build an application that filters spam messages Use JavaFX to build rich GUI-based applications, which are an essential element of application development Leverage the possibilities provided by the newly introduced Java shell Test your application's effectiveness with the JVM harness See how Java 9 provides support for the HTTP 2.0 standard Who this book is for This learning path is for Java developers who are looking to move a level up and learn how to build robust applications in the latest version of Java.

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