

#	Category	Keywords	Topics	Books	Videos	Articles
1	Core Java	Java, OOP, Exception handling, Collections Framework, Generics, Java , Concurrency, Multithreading, Lambda Expressions, Functional Programming	Java Language Fundamentals	Complete Reference (Chapter 1 - 3), Head First	01 Welcome to the course Java Essentials Full Course, Java Full Course for Beginners - YouTube	
2			Object-Oriented Programming (OOP)	Complete Reference (Chapter 6 - 9), Head First (Chapter 7 - 9)	01 Welcome to the course Java Essentials Full Course	Object-Oriented-Programming Concepts in Java Baeldung
3			Exception Handling	Complete Reference (Chapter 10), Head First(Chapter 11)	01 Welcome to the course Java Essentials Full Course	Exception Handling in Java Baeldung
4			Collections Framework	Complete Reference (Chapter 19), Head First (Chapter 16), Java Generics and Collections	java-collections-vdo	Java Collections Series Baeldung
5			Generics	Complete Reference (Chapter 14), Java Generics and Collections	Course Intro - Generics In Depth [01] - Java Brains	Lesson: Generics (Updated) - Java™ Tutorials
6			Java 8+ Features (e.g., Optional, Date-Time API)	Complete Reference (Chapter 14)		
7			Concurrency & Multithreading	Complete Reference (Chapter 11 and 28)	Java Concurrency - Full Course by Java Brains	Java Concurrency Series Baeldung
8			Lambda Expressions & Functional Programming	Complete Reference (Chapter 15 and 20), Functional Programming in Java, Functional (Declarative Approach) Programming in Java	Java 8 Lambda Basics 1 - Introduction	Lambda Expressions and Functional Interfaces: Tips and Best Practices Baeldung
9			String and Utils	Complete Reference (Chapter 17, 18 and 20)		Strings - Learning the Java Language
10	Spring Boot & Framework	Spring, Spring Boot, Dependency Injection, Spring Boot starters, Spring Boot configuration, Spring Boot Actuator, Spring Profiles, Reactive Programming	Spring Boot Basics	Spring Boot in Action (Chapter 1)	Spring Boot Quick Start 1 - Introduction, Top 10 Spring Annotations to know in 2024 - YouTube	
11			Dependency Injection	Spring Boot in Action (Chapter 2)	#6 Dependency Injection using Spring Boot - YouTube, #4 IoC and DI in Spring - YouTube, #7 Autowire using Spring Boot - YouTube	
12			Spring Boot Starters	Spring Boot in Action (Chapter 2)	Top 7 Spring Boot Starters You Should Know in 2024 - Java Brains	
13			Spring Boot Application Configuration	Spring Boot in Action (Chapter 3)	ConfigurationProperties explained - Microservice configuration with Spring Boot [06] - YouTube, Using external property sources with Spring Boot - Microservice configuration with Spring Boot [04], Introducing Spring Cloud Config Server - Microservice configuration with Spring Boot [10]	
14			Spring Boot Actuator	Spring Boot in Action (Chapter 7)	Spring Boot Quick Start 33 - Spring Boot Actuator - YouTube	
15			Spring Boot Swagger			
16	Reactive Programming	Reactive Streams, Spring WebFlux, Backpressure, Flow Control, Error Handling, Reactive MongoDB, R2DBC	Reactive Spring	Reactive Spring by Josh Long	Reactive Spring, 3rd edition by Josh Long, 01 Course Introduction (Reactive programming with Java - full course), Project Reactor Essentials	
17	Microservices Patterns	API Gateway, Monitoring, Logging, Tracing, Microservices Security, Service Resilience and Fault Tolerance, Circuit Breaker, Retry Patterns, Rate Limiting	Spring Boot Microservices	Spring Microservice in Action (Chapter 2)	01 Agenda - Spring Boot Microservices Level 1	
18			Spring Cloud Configuration	Spring Microservice in Action (Chapter 3)	Microservice configuration with Spring Boot [01] - Java Brains	
19			Spring Cloud Resiliency	Spring Microservice in Action (Chapter 5)	1 Agenda and prerequisites - Spring Boot Microservices Level 2	
20			Spring Security	Spring Microservice in Action (Chapter 7), Spring Security in Action	What is Spring Security really all about? Java Brains Brain Bytes, OAuth 2.0 and OpenID Connect (in plain English) - YouTube	
21			Event Driven Architecture	Spring Microservice in Action (Chapter 8)		
22			Logging and Tracing	Spring Microservice in Action (Chapter 9)		
23	Testing	Integration Testing , Spring Boot Test, MockMvc, TestRestTemplate, BDD, TDD, Parameterized and Nested Tests , JUnit 5	Spring Boot Test	Spring Boot in Action (Chapter 6)	Spring Boot testing: Zero to Hero by Daniel Garnier-Moiron - YouTube, Introduction to Testcontainers	