🖥️ SLIDE 1 — Cover Page

Preparing for a Java Backend Interview?

A quick guide to must-know questions & topics
#Java #SpringBoot #InterviewPrep

🖥️ SLIDE 2 — Introduction

Over the last few weeks, I’ve attended multiple interviews for Java Backend roles — and noticed certain questions came up repeatedly.

Here’s a curated checklist to help you crack your next interview! 👇

🖥️ SLIDE 3 — ☕ Core Java (Part 1)

✅ Java 8 Features (Lambdas, Streams, Functional Interfaces)

✅ Streams API — map, filter, reduce, collect

(💡 Expect coding questions!)

✅ Immutable Class — how to create & its advantages

✅ Create a Singleton Class — steps & best practices

✅ Marker Interfaces — what and why?

🖥️ SLIDE 4 — ☕ Core Java (Part 2)

✅ HashSet Working — internal implementation

✅ Internal Working of HashMap

✅ HashMap vs TreeMap — when to use which?

✅ Fail-safe vs Fail-fast Iterators

✅ JVM Memory Areas — Heap, Stack, Method Area, etc.

✅ Reflection in Java — uses and best practices

🖥️ SLIDE 5 — ☕ Core Java (Part 3)

✅ volatile vs Atomic variables — Visibility guarantees & differences
✅ Thread Creation — methods & lifecycle
✅ Fixing ConcurrentModificationException
✅ Future vs CompletableFuture — async programming differences
✅ FlatMap vs Map — when to use which?
✅ String, StringBuilder & StringBuffer — performance and use cases

💻 SLIDE 6 — 🌱 Spring & Spring Boot

✅ Bean Scopes — singleton, prototype, request, session

✅ IOC Container & DI — constructor vs setter vs field injections

✅ Exception Handling — using @ExceptionHandler & @ControllerAdvice

✅ CRUD & JPA Repositories — best practices and differences

✅ JWT & Auth Token — implementation & flow

✅ Securing Endpoints — best practices

✅ Spring Security — common questions & use cases

✅ Redis Caching — why & how?

✅ @Transactional — when and why?

✅ Annotations in Spring — common and advanced usage

💻 SLIDE 7 — ⚙️ Microservices

✅ Saga Pattern — managing distributed transactions across services
✅ Circuit Breaker Pattern — resilience design (using Resilience4J)
✅ Deployment Models — Docker & Kubernetes best practices
✅ ELK Stack — how it works & benefits for logging and monitoring

🖥️ SLIDE 8 — 📖 Design Patterns & Best Practices

✅ SOLID Principles — especially Dependency Inversion & why it matters

✅ How to print "Hello World" WITHOUT using the main method? (One of the unique questions I came across!)

✅ Prepare questions on DSA (Medium & Easy Level) — Take reference from Striver’s Sheet for practice

🖥️ SLIDE 9 — 💡 Final Advice

If you’re actively preparing for interviews:
✅ Save this post for later!
✅ Share it with someone on the same path.
✅ Stay consistent, practice daily, and crack that next interview! 💪🔥