Java Backend Learning Plan (Daily Series)

Phase 1: Core Java (7–10 days)
■ Goal: Build a solid foundation.

Day 1–2: Data types, variables, operators, loops, conditions
Day 3: Arrays & Strings (with real examples)
Day 4–5: OOP (class, object, constructor, this, super)
Day 6: Inheritance, Polymorphism, Interfaces, Abstract classes
Day 7: Collections (List, Map, Set), Generics
Day 8: Exception Handling & File I/O
Day 9: Multithreading & Concurrency basics
Day 10: Mini Project → Student Management System (CRUD in console)

Phase 2: Advanced Java (6–8 days)
■ Goal: Connect Java to databases & learn Java 8+ features.

Day 11–12: JDBC → Connect Java with MySQL/PostgreSQL
Day 13: Servlets & JSP basics (web foundation)
Day 14–15: Java 8 Features (Lambda, Streams, Functional interfaces)
Day 16: File Handling + Optional Class + Date/Time API
Day 17–18: Mini Project → Employee Management System (CRUD with database)

Phase 3: Spring Framework (15–20 days)
■ Goal: Build REST APIs & backend services.

Day 19–20: Spring Core (Beans, Dependency Injection)
Day 21–25: Spring Boot (Controllers, Services, REST APIs)
Day 26–28: Spring Data JPA + Hibernate (connect to DB)
Day 29–30: Spring Security (JWT, login system)
Day 31–33: Testing with JUnit + Mockito
Day 34–35: Mini Project → RESTful E-Commerce API

Phase 4: Tools & Deployment (10 days)
■ Goal: Become industry-ready.

Day 36: Git & GitHub (version control)
Day 37–38: Maven/Gradle (build tool)
Day 39–40: Postman + API testing
Day 41–42: Logging (SLF4J, Logback)
Day 43–44: Docker (containerize Spring Boot app)
Day 45: Deploy project to Heroku / AWS

■ Final Projects (Real-world)
- Banking System API (transactions, users, accounts)
- E-commerce Backend (cart, checkout, orders, payments)
- Blogging Platform (JWT auth, CRUD posts, comments)