

## SPRING & SPRING BOOT – 30 DAY COMPLETE ROADMAP (INDUSTRY LEVEL)

### WEEK 1 – CORE SPRING (Day 1–7)

Day 1: Spring Overview, Setup, Hello App

Day 2: IOC, DI, @Component, @Service, @Repository

Day 3: Auto-Configuration & Profiles

Day 4: Spring MVC & Basic CRUD API

Day 5: Validation, @ControllerAdvice

Day 6: Lombok

Day 7: Mini Project #1 – Student CRUD (in-memory)

### WEEK 2 – JPA + DATABASE (Day 8–14)

Day 8: JPA, Hibernate, Entities

Day 9: CRUD with MySQL

Day 10: Relationships (1-1, 1-N, N-N)

Day 11: DTO, Mapping

Day 12: Pagination & Sorting

Day 13: Advanced JPA (JPQL, Criteria, Transactions)

Day 14: Mini Project #2 – Employee Management System

### WEEK 3 – SECURITY + JWT (Day 15–21)

Day 15: Spring Security Basics

Day 16: JWT Auth (Login, Register, Tokens)

Day 17: Role-Based Access

Day 18: Logging & Exception Handling

Day 19: File Upload/Download

Day 20: Caching & Redis

Day 21: Mini Project #3 – Task Manager with JWT

#### WEEK 4 – MICROSERVICES + TESTING + DEPLOYMENT (Day 22–30)

Day 22: Microservices Concepts

Day 23: Create Product and Order Service

Day 24: Eureka Server & Service Discovery

Day 25: Config Server

Day 26: API Gateway

Day 27: Resilience4J & Circuit Breaker

Day 28: Unit Testing (JUnit & Mockito)

Day 29: Dockerize Spring Boot

Day 30: Final Microservices Project

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