**Java Framework**

1. What is Spring framework ?
2. Spring Vs Java EE
3. Evolution of Spring and release timeline of Spring
4. Different projects inside Spring
5. Spring Core Concepts like **Inversion of Control (IoC)**, **Dependency Injection (DI)** & **Aspect-Oriented Programming (AOP)**

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1. Different approaches of **Beans creation** inside Spring framework
2. **Bean Scopes**inside Spring framework
3. **Autowiring**of the Spring Beans
4. **Lombok** library and Annotations
5. Introduction to **MVC pattern** & overview of web apps

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1. **Spring MVC** internal architecture & how to create web applications using **Spring MVC & Thymeleaf**
2. Spring MVC **Validations**
3. How to build dynamic web apps using Thymeleaf & Spring
4. Thymeleaf integration with Spring, Spring MVC, Spring Security
5. Deep dive on **Spring Boot, Auto-configuration**

**----------------------------8/6/24---------------------------------------------------------------**

1. **Spring Boot Dev Tools**
2. **Spring Boot H2 Database**
3. Securing web applications using **Spring Security**
4. **Authentication , Authorization, Role based access**
5. **Cross-Site Request Forgery (CSRF) & Cross-Origin Resource Sharing (CORS)**

**------------------------------9/6/24-------------------------------------------------------**

1. Database create, read, update, delete operations using **Spring JDBC**
2. Introduction to **ORM**frameworks & database create, read, update, delete operations using **Spring Data JPA/Hibernate**
3. **Derived Query methods in JPA**
4. **OneToOne, OneToMany, ManyToOne, ManyToMany mappings inside JPA/Hibernate**
5. **Sorting, Pagination, JPQL**inside Spring Data JPA

**--------------------------------10/6/24----------------------------------------**

1. Building Rest Services inside Spring
2. Consuming Rest Services using **OpenFeign, Web Client, RestTemplate**
3. **Spring Data Rest & HAL Explorer**
4. **Logging**inside Spring applications
5. **Properties Configuration**inside Spring applications

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1. **Profiles** inside Spring Boot applications
2. Conditional Bean creation using Profiles
3. Monitoring Spring Boot applications using **Spring Boot Actuator & Spring Boot Admin**
4. **Deploying** Spring Boot App into cloud using **AWS Elastic Beanstalk**

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