

Microservices training for NEC Corporation

Course Name	Day	Topics Covered
Service Layer using Spring	Day 1	Introduction to Service Layer, Need of Spring Framework, Introduction to Spring Framework, Introduction to Spring IoC Container, Configuring and using Spring IoC Container Java-Annotation based Configuration, Introduction to Auto wiring, Using @Autowired annotation.
	Day 2	Need for Spring Data, Introduction to Spring Data, Spring Data Repositories, CRUD operations using Spring Data. Spring Data JPA, Introduction to JPQL, Selection – The SELECT clause, Restriction - The WHERE clause, JPQL Aggregate Functions, JPQL String Functions, Grouping and Ordering – The GROUP BY, HAVING and ORDER BY clause, Update and Delete Queries, MYSQL DB
Persistence Layer using Spring Data		
REST API using Spring	Day 3	Introduction to Spring Boot, Understanding the structure of a Spring Boot project, Spring Boot Application annotation, Configuring Spring Boot application Consuming REST API with Rest Template, CORS - Cross-Origin Resource Sharing, why to do exception handling? Exception Handling using @RestControllerAdvice, Exception handling using Response Status Exception
	Day 4	Need for validation, Data Validation using Bean Validation API, Path Variable Validation, Securing REST APIs Need for Microservices, Introduction to Microservices, Developing Microservices using Spring
Spring Microservices	Day-5	Centralized Configuration, Service Discovery, Load Balancing
		Need for Microservices, Introduction to Microservices, Developing Microservices using Spring, Docker Introduction, Docker commands, running docker image using spring boot