

Spring Data JPA and Hibernate

Understand Spring Data JPA and Hibernate, from basic concepts to advanced techniques, to access and manipulate data efficiently in your applications.

Category: Programming · Duration: 4 days

WHO IT IS FOR

- Java developers
- Developers and DBAs who work with data every day
- Teams that want hands-on practice on real scenarios

In this comprehensive training program, you will gain a deep understanding of Spring Data JPA and Hibernate. Covering everything from basic concepts to advanced techniques, you will learn how to effectively use these frameworks to interact with databases and improve the performance and reliability of your applications. By the end of the course, you will be equipped with the essential skills and knowledge to implement robust data access layers using Spring Data JPA and Hibernate.

Prerequisites

Prior experience with Java programming and basic understanding of databases is recommended.

Syllabus

- Introduction to Spring Data JPA
- Understanding Object Relational Mapping (ORM)
- Configuring Hibernate with Spring Boot
- Mapping Entities and Relationships
- Performing Basic CRUD Operations
- Querying with JPQL and Criteria Queries
- Using Spring Data Repositories
- Sorting and Pagination in Spring Data
- Implementing Complex Queries
- Working with Transactions
- Caching with Hibernate
- Auditing and Soft Deletes

- Optimistic and Pessimistic Locking
- Testing and Debugging
- Best Practices and Performance Optimization
- Managing Database Migrations
- Error Handling and Exception Mapping
- Building RESTful APIs with Spring Data JPA
- Real-world Project Implementation