

JPA With Hibernate

Learn how to use JPA with Hibernate for effective Java persistence management.

Category: Programming · Duration: 3 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

This 3-day training course provides a comprehensive introduction to JPA (Java Persistence API) and Hibernate. Participants will explore key concepts of object-relational mapping (ORM) and learn how to manage database persistence in Java applications efficiently. The course covers entity mapping, querying with JPQL, and advanced features like caching and performance optimization. By the end, you'll be equipped to implement robust persistence layers in your projects.

Prerequisites

Basic knowledge of Java programming and familiarity with databases.

Syllabus

- Introduction to JPA and Hibernate
- Setting up Hibernate in a Java project
- Understanding Entity and Table mapping
- Basic CRUD operations with JPA
- Advanced JPQL (Java Persistence Query Language)
- Working with relationships: One-to-One, One-to-Many, Many-to-Many
- Lazy vs. Eager Loading
- Using Annotations for Persistence
- Hibernate Session and Transactions
- Caching with Hibernate
- Performance tuning in Hibernate
- Inheritance mapping in JPA
- Managing database migrations
- Working with native SQL in JPA

- Spring Data JPA integration
- Optimistic and Pessimistic Locking
- Exception handling in JPA
- Criteria API usage
- Testing JPA applications
- Best practices for persistence layer design