

Database Integration with JPA

Relational Database Concepts

- Tables, relationships, and normalization
- SQL fundamentals and advanced queries
- Transaction management
- Indexing and optimization

Java Persistence API (JPA)

- Entity mapping
- Relationships (One-to-One, One-to-Many, Many-to-Many)
- JPQL and native queries
- Cascade operations

Spring Data JPA

- Repository pattern
- Query methods
- Pagination and sorting
- Auditing and versioning