**Hands-on 4: JPA vs Hibernate vs Spring Data JPA**

**Overview :**

This exercise explains the differences between JPA, Hibernate, and Spring Data JPA with example code.

**Key Points**

**JPA:**

* A specification (JSR 338) for object-relational mapping in Java.
* Does not include any implementation.
* Hibernate is a common implementation.

**Hibernate:**

* ORM framework that implements JPA.
* Requires boilerplate code for session, transaction, etc.

**Spring Data JPA:**

* Abstraction over JPA/Hibernate.
* Reduces boilerplate code.
* Manages repository and transaction automatically.

**Example Comparison**

**Hibernate**:

Session session = factory.openSession();

Transaction tx = session.beginTransaction();

session.save(employee);

tx.commit();

session.close();

**Spring Data JPA**:

@Autowired

private EmployeeRepository employeeRepository;

employeeRepository.save(employee);

🔗 **Reference:**

<https://dzone.com/articles/what-is-the-difference-between-hibernate-and-sprin-1>

<https://www.javaworld.com/article/3379043/what-is-jpa-introduction-to-the-java-persistence-api.html>