Spring-data-jpa-handson

Difference between JPA, Hibernate and Spring Data JPA

Solution:-

Feature	JPA	Hibernate	Spring Data JPA
Туре	Specification / Standard	Implementation of JPA	Abstraction layer over JPA/Hibernate
Who defines it?	Java EE / Jakarta EE (Oracle/Java Community)	Red Hat	Spring Framework (Pivotal/VMware)
Purpose	To define a standard way to persist Java objects	Provides actual implementation of JPA and additional features	Simplifies JPA by reducing boilerplate code
Key Usage	Annotations like @Entity, @Table, etc.	SessionFactory, Criteria API, Lazy Loading, Caching	Repositories (e.g., JpaRepository, CrudRepository)
Code Needed	Requires manual implementation	Still requires lots of boilerplate (Session handling etc.)	Minimizes code (CRUD without writing SQL or JPQL)
Standard or Tool?	Standard/Spec (no implementation)	Tool/Library	Framework Extension
Example Use	@Entity, EntityManager	Session, Configuration, Criteria API	<pre>findById(), save(), @Repository, @Service</pre>