

Difference between JPA, Hibernate and Spring Data

JPA :

Feature	JPA	Hibernate	Spring Data JPA
Type	Specification (JSR 338)	ORM Framework (implements JPA)	Abstraction/Helper Framework on top of JPA/Hibernate
Implementation	No (it's just an API/specification)	Yes (full implementation of JPA spec and more)	No (relies on JPA provider like Hibernate)
Boilerplate Code	Requires manual handling of EntityManager etc.	Reduces some boilerplate via Session/Transaction	Removes most boilerplate with repository interfaces and annotations
Transactions	Manual	Manual	Automatically managed using <code>@Transactional</code>
Query Generation	Developer writes queries (JPQL/SQL)	Same as JPA + some native features	Auto-generates queries from method names or <code>@Query</code> annotations