Difference between JPA, Hibernate and Spring Data JPA.

JPA (Java Persistence API) is a specification provided by Java for object-relational mapping (ORM), defining a standard way to map Java objects to relational databases. It provides a set of annotations and interfaces but does not include any implementation. Hibernate is one of the most popular implementations of the JPA specification, offering additional features such as caching, lazy loading, and batch processing. It can be used with or without JPA and provides more control over ORM behavior. Spring Data JPA is a part of the Spring ecosystem that builds on top of JPA and Hibernate to simplify data access. It provides a higher-level abstraction for creating repositories, reducing boilerplate code by allowing developers to define query methods by simply declaring method signatures in interfaces. In essence, JPA defines the standard, Hibernate implements it, and Spring Data JPA makes it easier to use.