**What is Hibernate?**

* Hibernate is a high level framework for persisting and saving java objects in a database
* It is a **ORM (Object-relational mapping)** framework to communicate and interaction with database from Java application
* Hibernate is a Java framework that provides an Object-Relational Mapping (ORM) solution, allowing developers to map Java objects to database tables and perform database operations using high-level Java APIs instead of writing raw SQL queries.

**Benefits of Hibernate**

* Hibernate handles all of the low-level SQL
* Minimizes the amount of JDBC code you have to develop
* Hibernate provides the Object-to-Relational Mapping (ORM)
* Lets us create CRUD Apps

**Object-to-Relational mapping(ORM)**

* The developer defines mapping between Java class and database table

**Whats is JPA?**

* JPA(Jakarta Persistence API) is a specification, not implementation, that defines a standard way to manage relational data in Java application. (Standard API for ORM)
* It provides guidelines for Orm but does not provide an actual implementation
* Hibernate is one of the most popular implementations of JPA
* JPA provides annotations(@Entity, @Table, @Column, etc)
* It doesn’t contain any code to perform database operation-it just provides the guidelines
* Jpa is like blueprint
* And hibernate as a concrete class
* So JPA requires implementation to be usable

**What are benefits of JPA**

* Because JPA is stadrad API, you are not locked to vendor’s implementation
* More flexible code, because you can any time switch vendor to another vendor(for example: from Hibernate to EclipseLink)

**What is JDBC**

* Hibernate/JPA uses JDBC for all database communications