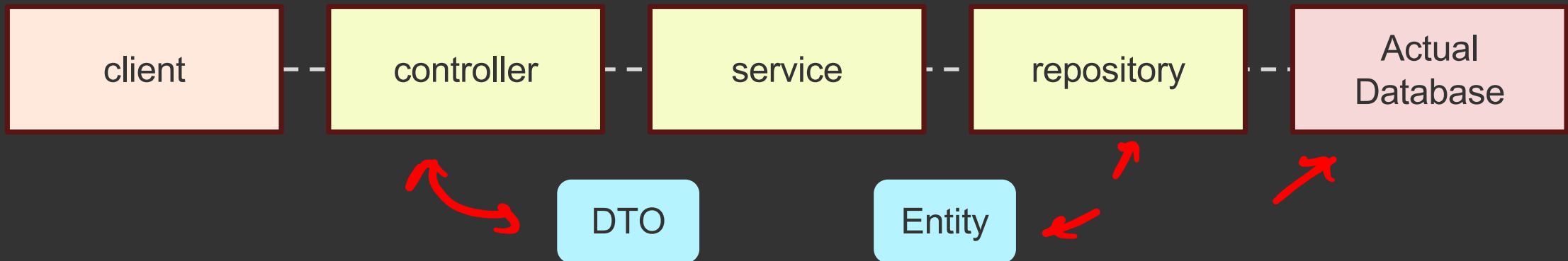




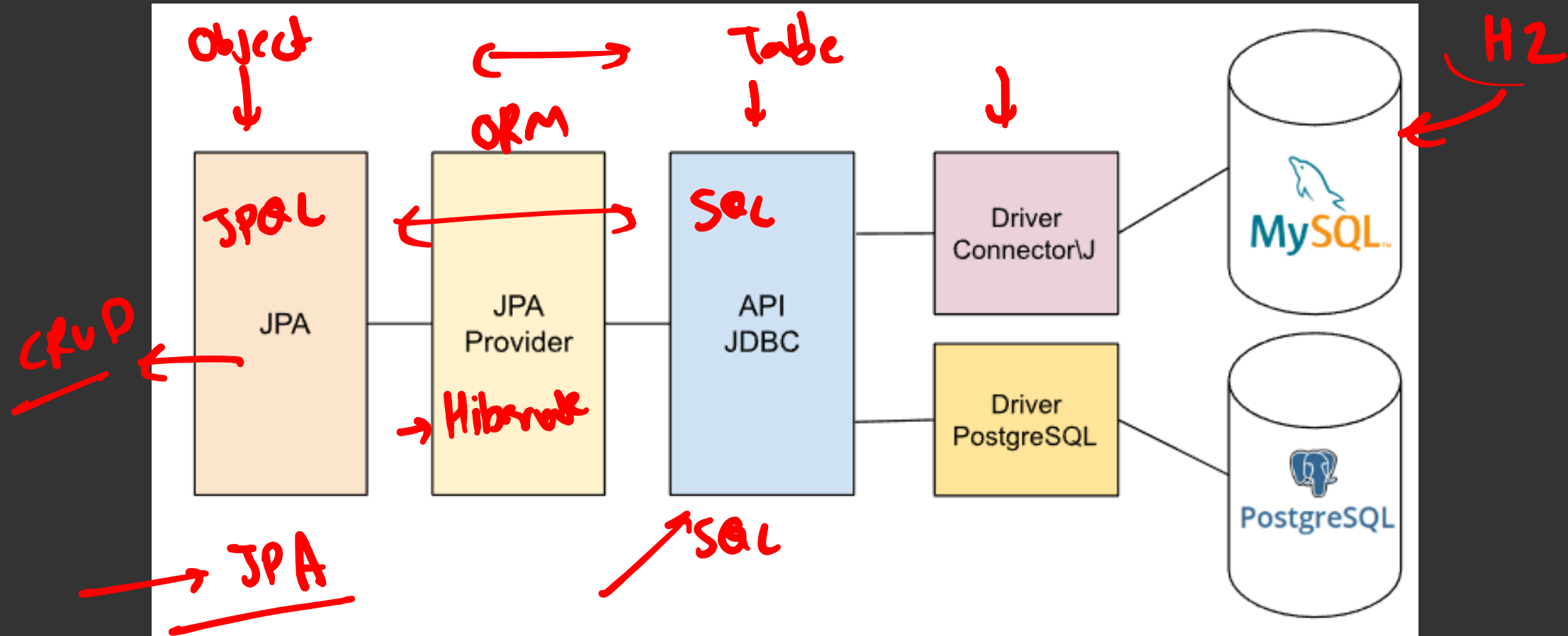
2.3

Persistence Layer & JPA

Spring Boot Web Project Structure



Java Persistence API - JPA



Spring H2 Database

Spring Boot makes it very easy to set up an in-memory H2 database for development and testing purposes. H2 is a lightweight, fast, and open-source relational database engine that can run in both in-memory and persistent modes.

Dependency:

```
<groupId>com.h2database</groupId>
```

@Entity Annotation

The `@Entity` annotation in Spring and Java Persistence API (JPA) is used to mark a class as a persistent entity, meaning it represents a table in a relational database. This is a fundamental part of the ORM (Object-Relational Mapping) paradigm, where Java objects are mapped to database tables.

Key Points of `@Entity`:

- Class-Level Annotation
- Primary Key
- Automatic Table Mapping

JpaRepository Interface

The JpaRepository interface in Spring Data JPA provides a set of CRUD (Create, Read, Update, Delete) operations and query methods for interacting with the database.

Key Points of CrudRepository :

- Generic Interface
- Predefined Methods
- Custom Queries

