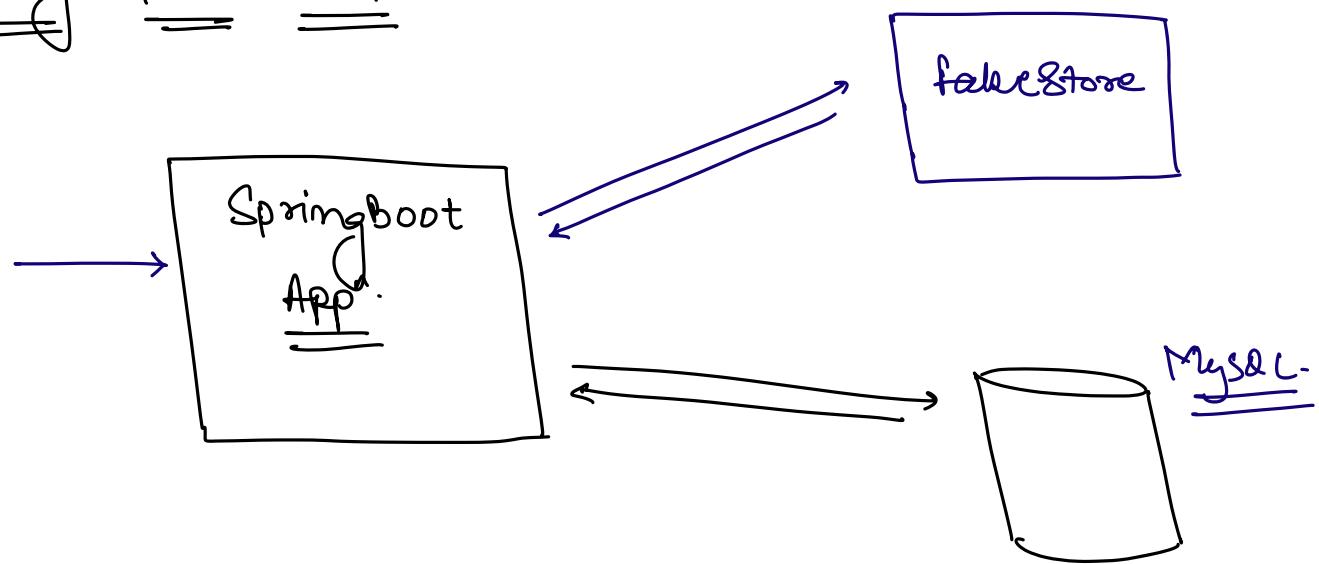


## Agenda.

- Implementing Controller Advises.
- Spring Data JPA
- Hibernate
- JDBC.
- Connect Springboot App<sup>n</sup> with MySQL DB.

## # Spring Data JPA



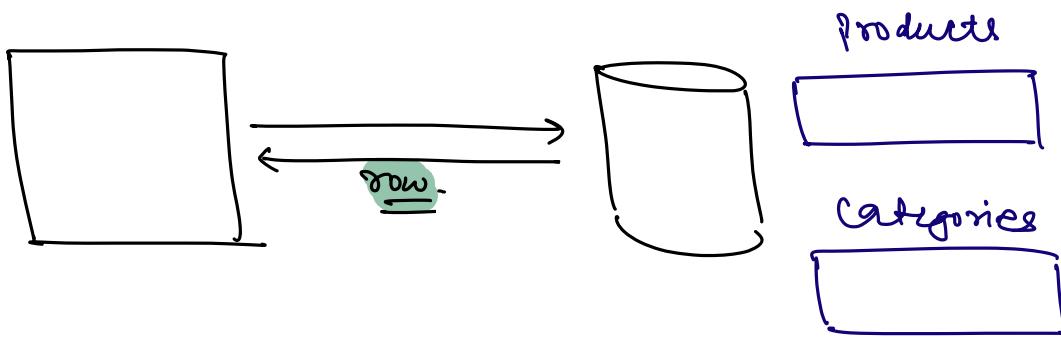
### Product Model.

↳ id  
title  
description  
price  
Category  
image

### Category Model

↳ id  
name.

⇒ CRUD operation on Model.

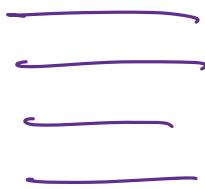


getProductById(id) {

```
    Database db = new Database(url, name,  
                                password);
```

```
    Row row = db.executeQuery("Select * from  
                             product where id = 10");
```

// Convert Row into Product



3

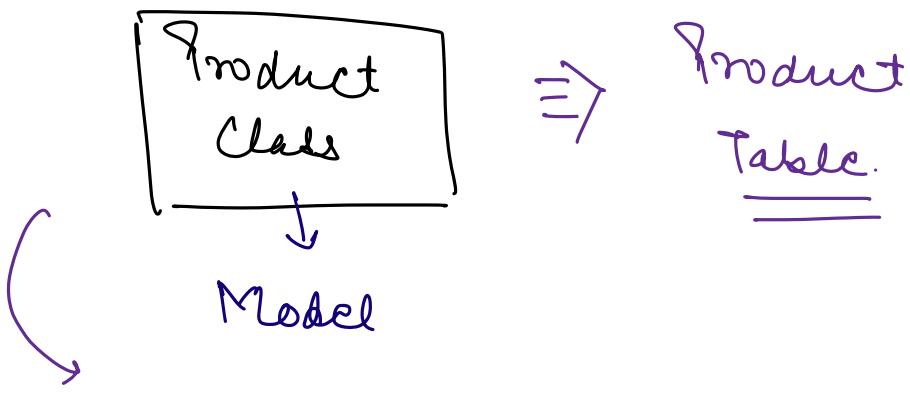
# ORM.



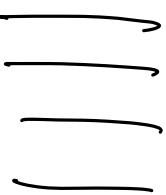
Object  $\equiv$  Model

Relation  $\equiv$  Table.

Mapping  
====

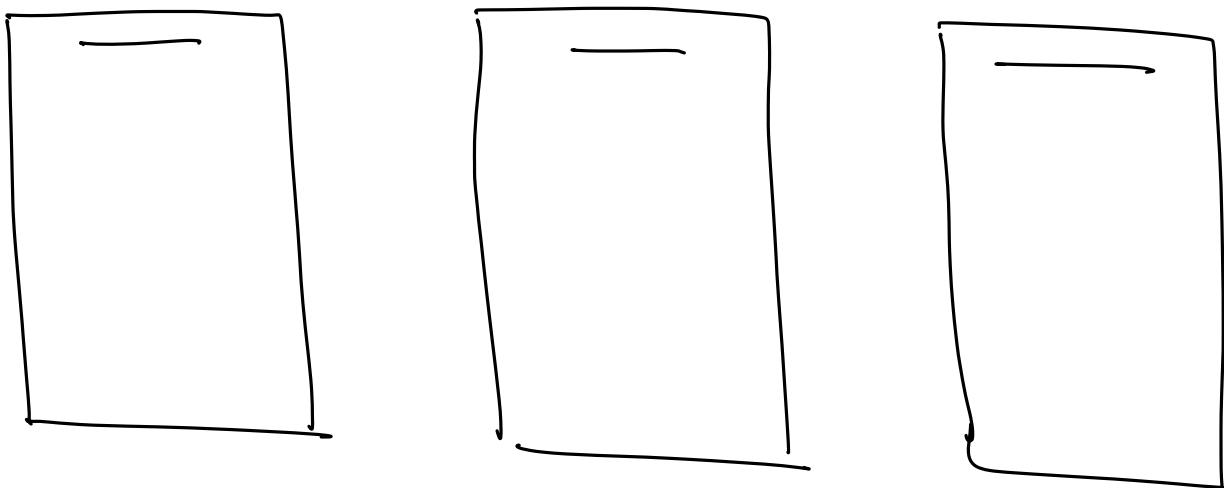


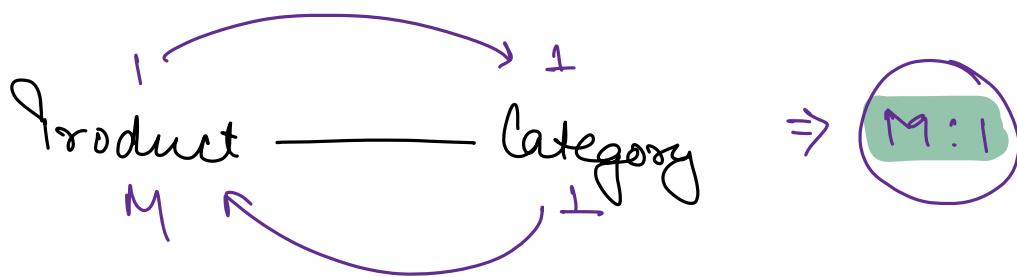
Create table products .



User Model = User Table

⇒ Class Diagram.  
= = =



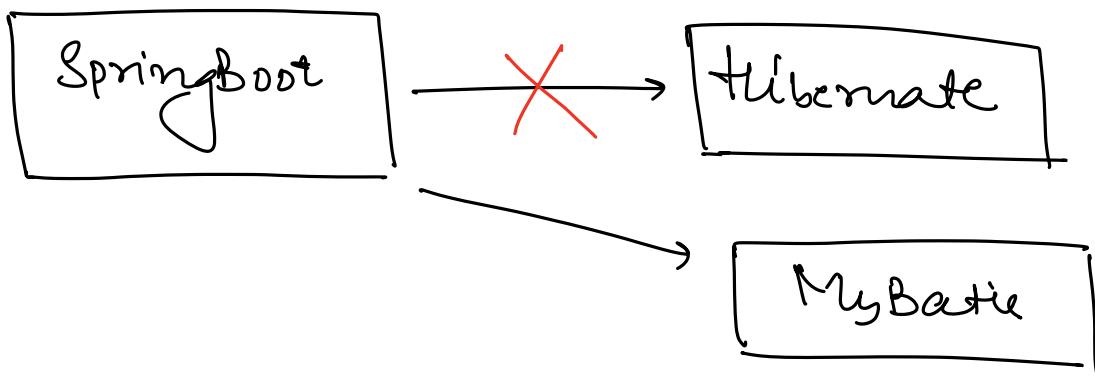


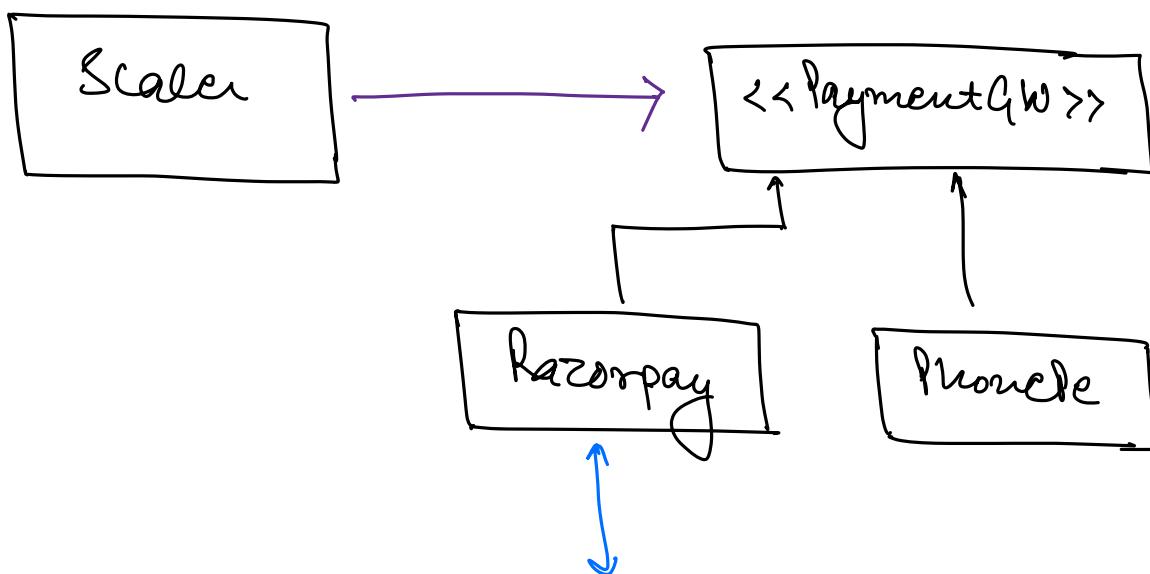
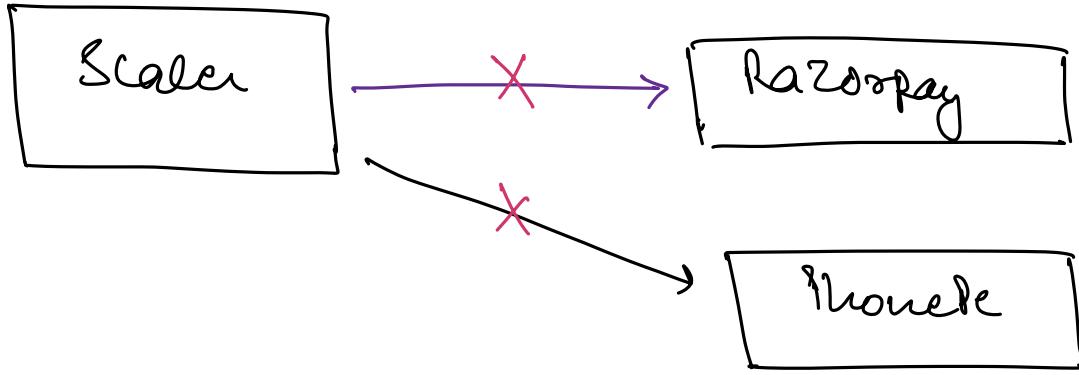
ORM libraries provides us an easy way to work with databases by creating a Mapping b/w Models & Entities.

- ⇒ Automatically create table for every Model.
- ⇒ Automatically perform CRUD operations.

Examples of ORMs

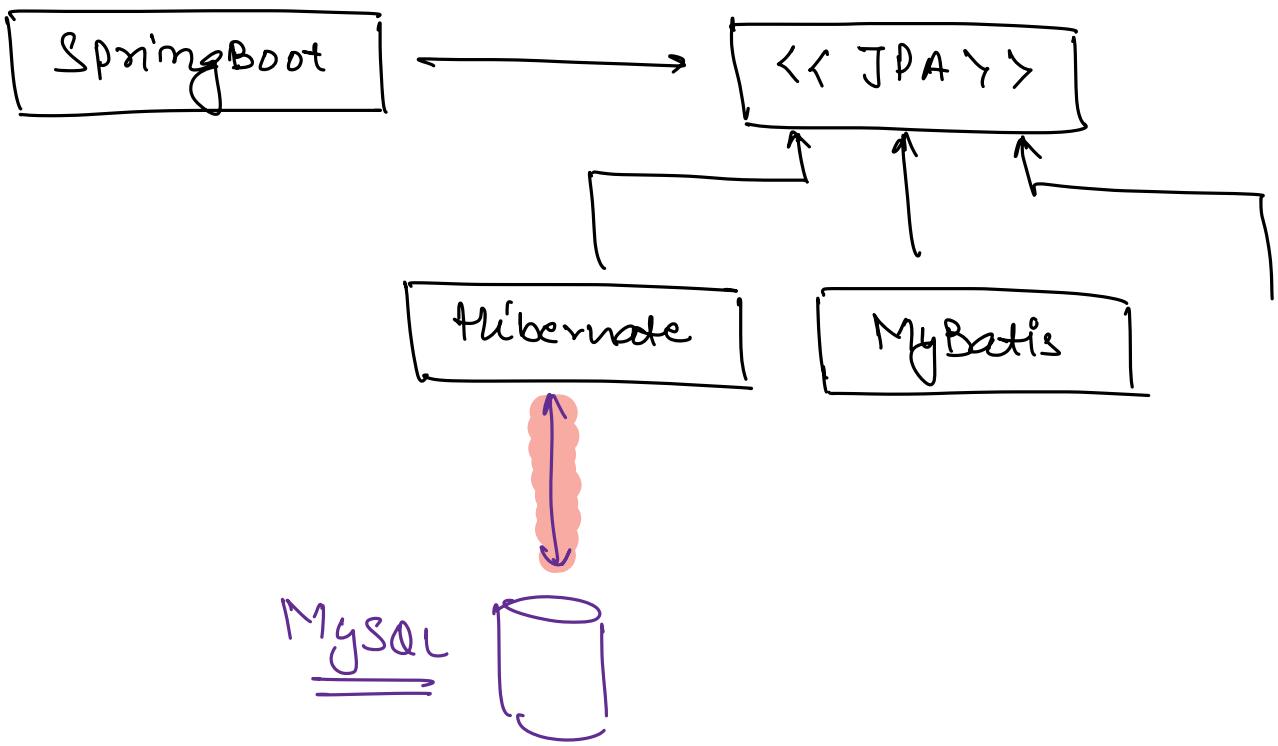
- Hibernate \*\*
- MyBatis
- Jooq



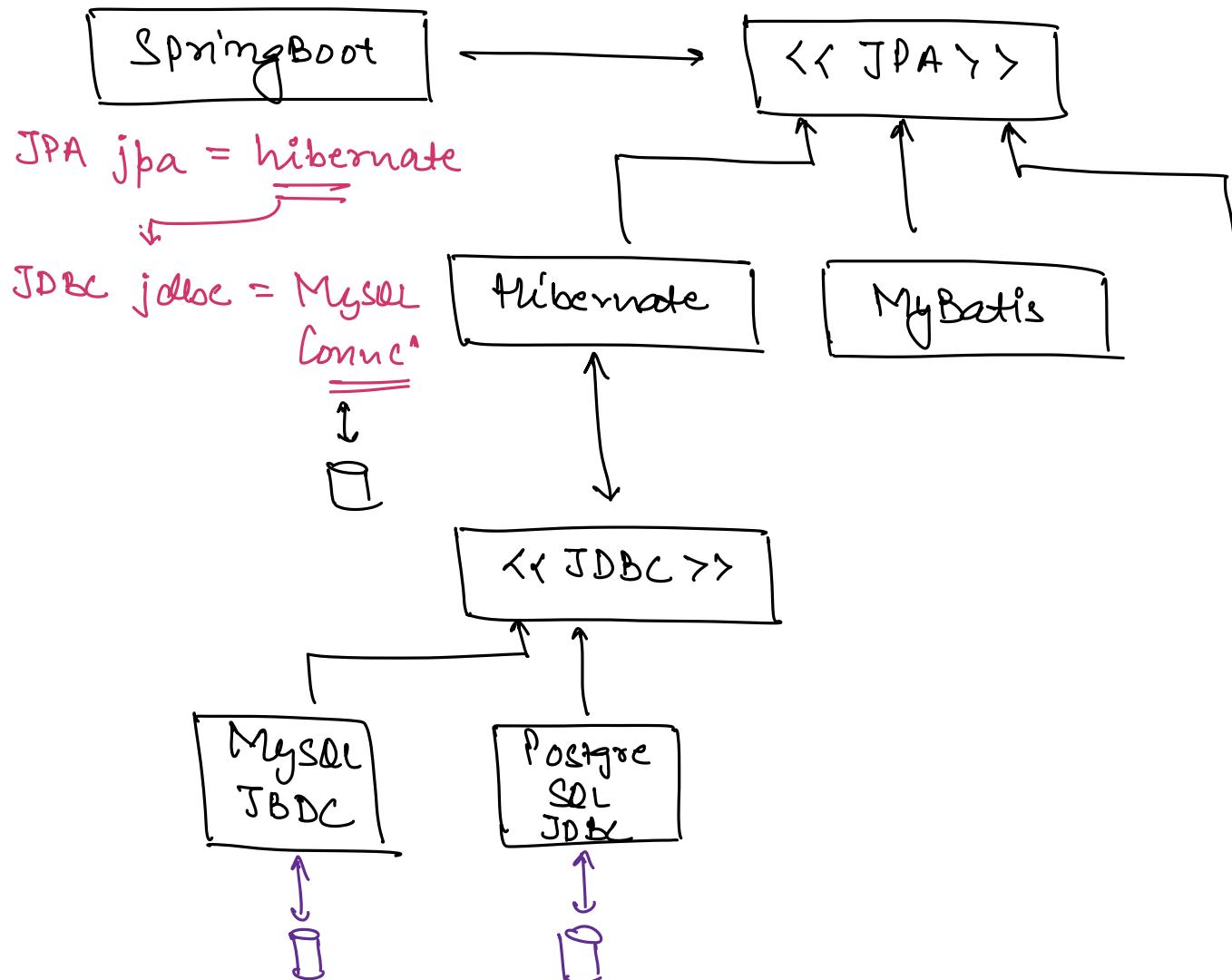


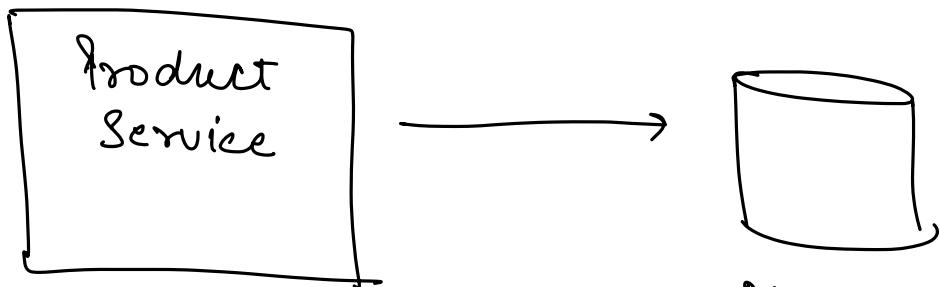
⇒ SpringBoot provides an interface to connect with ORM libraries.

⇒ JPA : Java Persistence API.



⇒ JDBC: Java DB Connector





Spring  
Data  
JPA

{ → JPA  
→ hibernate  
→ MySQL JDBC Driver.