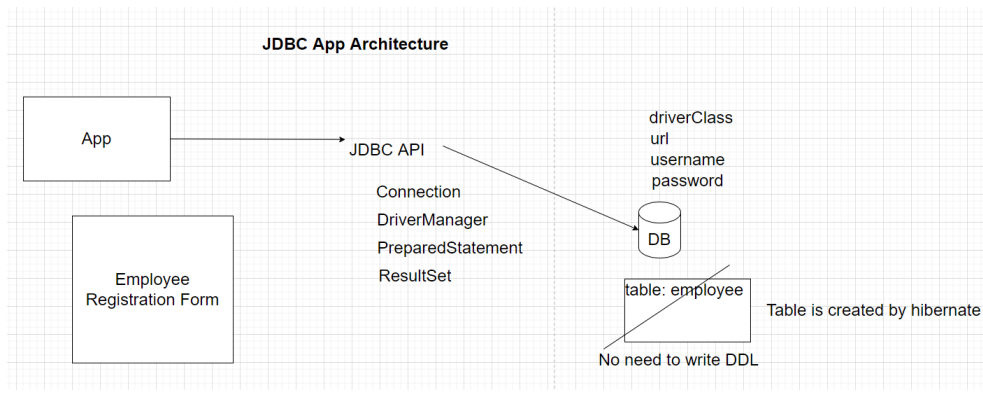
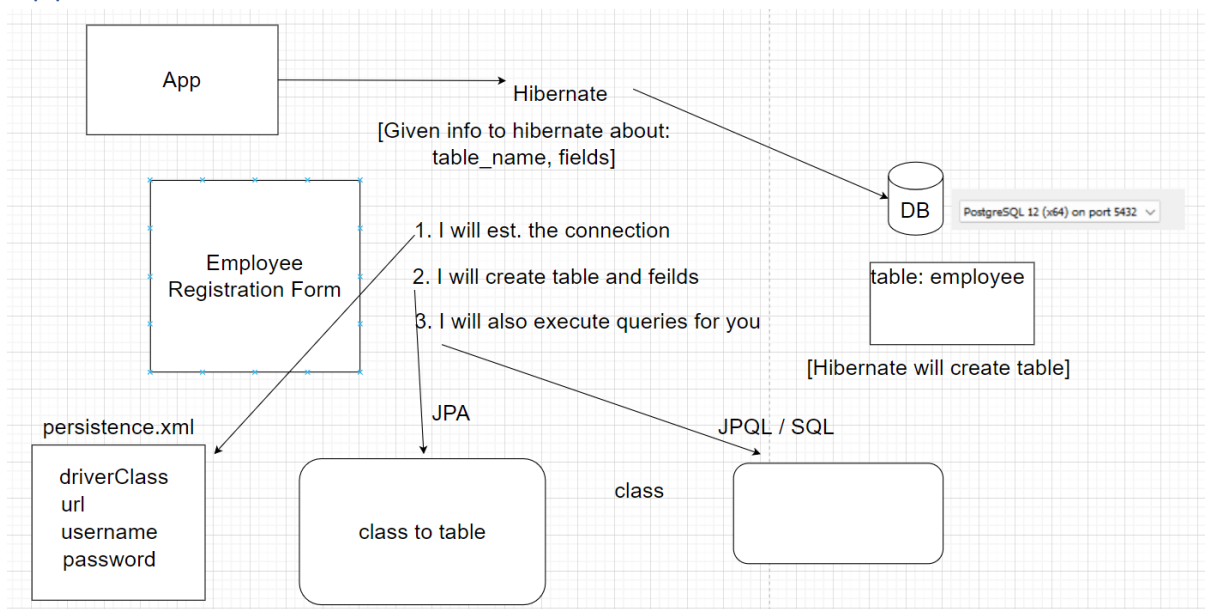


Day 1:

## Java App using Hibernate/JPA with Postgres DB



### Application Architecture with Hibernate/JPA



### Steps:

1. Create Dynamic Web Project and Convert it into Maven Project or alternatively, Create a Maven Project.

Maven: Maven is a Project Management Tool(PMT) with downloads dependencies(jar files) in our application from Maven Central Repository.

In POM.xml file, we add dependency details as shown below.

```
<dependency>
  <groupId>org.hibernate</groupId>
  <artifactId>hibernate-core</artifactId>
```

```
<version>5.6.5.Final</version>
</dependency>
```

Since we are using PostGre SQL DB we also add the dependency for that.

```
<dependency>
<groupId>org.postgresql</groupId>
<artifactId>postgresql</artifactId>
<version>42.5.1</version>
</dependency>
```

Code Link: <https://github.com/imtiyaz-hirani/cg-jan-23/blob/main/MyHibernateApp/pom.xml>

## 2. Configure persistence.xml file

This file will contain DB connection settings which is wrapped around persistence unit.

- Driver
- Url
- Username of DB
- Password of DB

Code Link:

<https://github.com/imtiyaz-hirani/cg-jan-23/blob/main/MyHibernateApp/src/META-INF/persistence.xml>

## 3. Create App class and Using Persistence class, create EntityManager, EntityManager, EntityTransaction.

```
/*
 * Step 1: Reach out to persistence.xml [mydb]
 * Step 2: Create EntityManager: this helps me create tables using classes
 * Step 3: Initiate transaction for queries
 */
```

Code Link:

<https://github.com/imtiyaz-hirani/cg-jan-23/blob/main/MyHibernateApp/src/com/hibernate/app/main/App.java>

## 4. Create an Entity class using JPA Annotations and run App.java

```
@Entity /* This annotation will tell hibernate to create a table "employee" */
public class Employee {

    @Id /* This annotation will make this ID a Primary key */
    private int id;

    private String name;

    private String email;

    private String contact;
```

Application URL: <https://github.com/imtiyaz-hirani/cg-jan-23/tree/main/MyHibernateApp>

O/P: After running App.java, Hibernate should create an employee table in postgresql DB.