05-03-2022

**JDBC and Hibernate**

JDBC Overview

JDBC

What is jar file to use?

What is hibernate

What is annotation

Servlet and JSP

Filter

Lister

Brief about JSP

JDBC : Java Database Connectivity : JDBC is a API which provide set of classes and interfaces which help to do operation on any database through Java technologies.

Driver : load the driver.

Driver is a pre-defined class provided by vendor (database vendor) which help to connect the database.

ORM :

Limitation of JDBC

Using jdbc we can’t store and retrieve the object. We have to convert object to sql and sql object.

Jdbc throw checked exception we have to handle it.

All checked exception are database dependent.

Jdbc use SQL query language and SQL is database dependent.

Programming database side

Object relation

@Entity

class Employee { Employee

@Id

id,name,salary ID,NAME,SALARY

}

Mapping

Employee -🡪EMPLOYEE

Id -🡪id PK

Name -🡪NAME

Salary 🡪 SALARY

Using XML old version

Using Annotation new version

In ORM we can provide database details

In xml file

Using Properties

Using Java class.

Implementation of ORM is

Hibernate

JPA (Java Persistence API)

Hibernate provide HQL (Hibernate Query Language)

SQL

Select \* from employee;

HQL

Select emp from Employee emp (Emplyee is a classname)

**Servlet and JSP**

Jar file : files

Hibernate jar file to download

Session handling