Hibernate_Hql_Program

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```
package com.app.bean;
import javax.persistence.Entity;
import javax.persistence.Id;
import javax.persistence.Table;
@Entity
@Table(name = "employee_hql")
public class Employee {
@Id
private int empId;
private String empName;
private String empAddress;
private double empSal;
public int getEmpId() {
return empId;
}
public void setEmpId(int empId) {
this.empId = empId;
}
public String getEmpName() {
return empName;
}
public void setEmpName(String empName) {
this.empName = empName;
}
public String getEmpAddress() {
return empAddress;
}
public void setEmpAddress(String empAddress) {
this.empAddress = empAddress;
}
public double getEmpSal() {
return empSal;
}
public void setEmpSal(double empSal) {
this.empSal = empSal;
}
public Employee(int empId, String empName, String empAddress, double
empSal) { super();
this.empId = empId;
this.empName = empName;
this.empAddress = empAddress;
this.empSal = empSal;
}
public Employee() {
super();
// TODO Auto-generated constructor stub
}
}
```

2)EmployeeFactory.class

```
package com.app.factory;
import com.app.dao.EmployeeDao;
import
com.app.dao.impl.EmployeeDaoImpl;
public class EmployeeFactory {
public static EmployeeDao
getEmployeeDao() { return new
EmployeeDaoImpl();
}
}
```

```
Packagecom.app.da
o; import
java.util.List;
```

```
import com.app.bean.Employee;
public interface EmployeeDao {
int updateData(Employee emp);
int insertData(Employee emp);
int deleteData(int id);
List<Employee> listEmployee();
List<Employee> getEmployee(int id);
}
package com.app.dao.impl;
import java.util.List;
import org.hibernate.Session;
import org.hibernate.Transaction;
import org.hibernate.query.Query;
import com.app.bean.Employee;
import com.app.dao.EmployeeDao;
import com.app.utility.EmployeeUtil;
public class EmployeeDaoImpl implements
EmployeeDao{ public int updateData(Employee
emp) {
// TODO Auto-generated method stub
Session
session=EmployeeUtil.getSession();
Transaction tx=null;
try {
tx=session.beginTransactio
n();
Query<Employee>query=session.createQuery("update Employee set
empAddress='"+emp.getEmpAddress()+"' where empId="+emp.getEmpId());
session.update(emp);
tx.commit();
EmployeeUtil.closeSession();
return 1;
} catch (Exception e) {
// TODO: handle
exception
e.printStackTrace();
tx.rollback();
return 0;
}
}
public int insertData(Employee emp) {
// TODO Auto-generated method stub
Session
session=EmployeeUtil.getSession();
Transaction tx=null;
try {
tx=session.beginTransactio
n(); session.persist(emp);
tx.commit();
EmployeeUtil.closeSession(
); return 1;
} catch (Exception e) {
// TODO: handle
exception
e.printStackTrace();
tx.rollback();
return 0;
}
}
public int deleteData(int id) {
```

```
// TODO Auto-generated method stub
Session
session=EmployeeUtil.getSession();
Transaction tx=null;
try {
tx=session.beginTransactio
n();
String hql="delete from Employee where empId
="+id;
Query<Employee>query=session.createQuery(hq
l); int row=query.executeUpdate();
tx.commit();
EmployeeUtil.closeSessio
n(); return row;
} catch (Exception e) {
// TODO: handle exception
e.printStackTrace();
tx.rollback();
return 0;
}
}
public List<Employee> listEmployee() {
// TODO Auto-generated method stub
Session
session=EmployeeUtil.getSession();
Transaction tx=null;
String hql="From Employee";
Query<Employee>query=session.createQuery(
hql); List<Employee> list=query.list();
EmployeeUtil.closeSession();
return list;
}
public List<Employee> getEmployee(int id) {
// TODO Auto-generated method stub
// TODO Auto-generated method stub
Session
session=EmployeeUtil.getSession();
Transaction tx=null;
String hql="From Employee Where empId
="+id;
Query<Employee>query=session.createQuery(
hql); //query.setParameter(1, id);
List<Employee>
list=query.list();
EmployeeUtil.closeSession();
return list;
}
}
package com.app.utility; import
org.hibernate.Session; import
org.hibernate.SessionFactory;
import
org.hibernate.cfg.Configuration;
public class EmployeeUtil {
private static SessionFactory
factory; static {
try {
factory = new
Configuration().configure("com/app/config/employee.cfg.xml").buildSessionFactory(); }
catch (Exception e) {
e.printStackTrace();
}
}
static ThreadLocal<Session> local=new
ThreadLocal(); static Session session=null;
public static Session
getSession() { try {
```

```
if(local.get()==null) {
session=factory.openSession();
local.set(session);
return session;
}else {
return local.get();
}
} catch (Exception e) {
// TODO: handle
exception return null;
}
}
public static void
closeSession() { try {
session.close();
} catch (Exception e) {
// TODO: handle
exception
e.printStackTrace();
}
}
}
package com.app.test; import
java.util.List; import java.util.Scanner;
import com.app.bean.Employee;
import com.app.dao.EmployeeDao;
import
com.app.factory.EmployeeFactory;
public class Client {

public static void main(String[] args) {
// TODO Auto-generated method stub
```

```
EmployeeDao
empDao=EmployeeFactory.getEmployeeDao(); Scanner
sn =new Scanner(System.in); int choice;
String conti;
do {
System.out.println("!----------------HQL Operation-------!");
System.out.println("1. insert data");
System.out.println("2. update data");
System.out.println("3. delete data");
System.out.println("4. Get All data");
System.out.println("5. get Single data");
System.out.println("!----------------End-------!");
System.out.println("Enter you choice:");
choice=sn.nextInt();
switch (choice) {
case 1:
System.out.println("Enter your id:");
int id=sn.nextInt();
System.out.println("Enter your name:");
String name=sn.next();
System.out.println("Enter your Address:");
String address=sn.next();
System.out.println("Enter your Salary:");
double sal=sn.nextDouble();
Employee emp=new Employee(id, name, address, sal);
int i=empDao.insertData(emp);
if(i==1)
{
System.out.println("Data inserted successfully.");
}else {
System.out.println("Data Not Inserted something went wrong..!");
}
break;
```

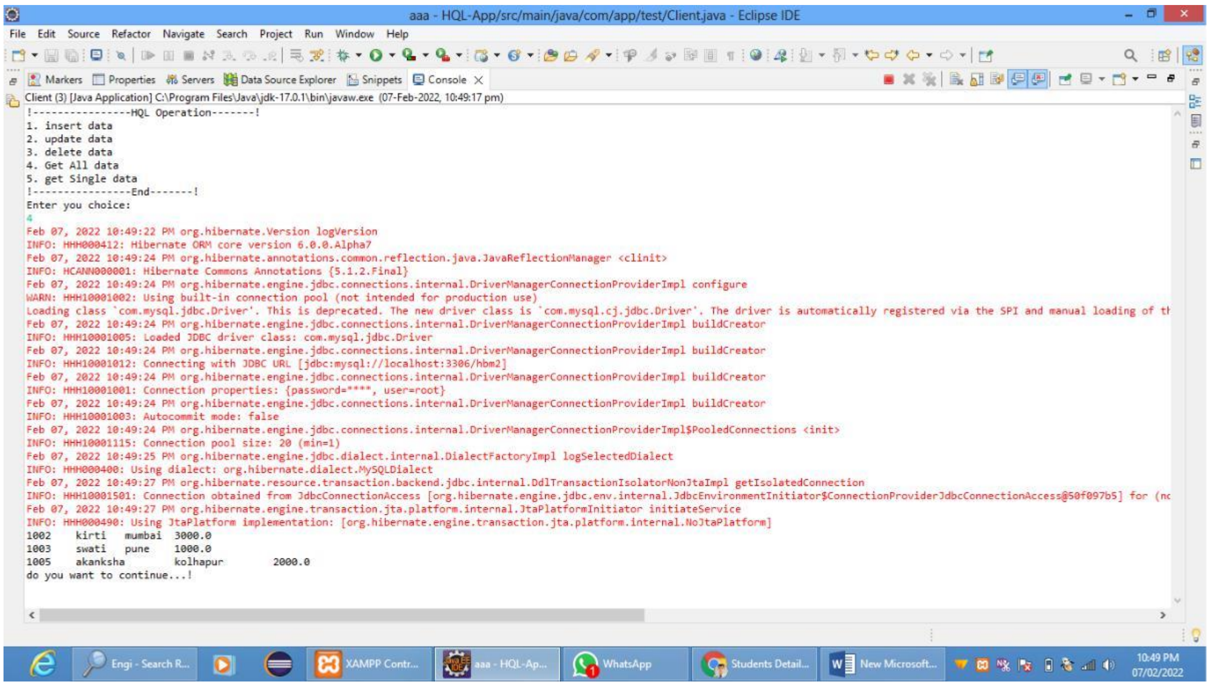
```
case 2:
System.out.println("Enter your id:");
int id2=sn.nextInt();
System.out.println("Enter your name:");
String name1=sn.next();
System.out.println("Enter your Address:");
String address1=sn.next();
System.out.println("Enter your Salary:");
double sal1=sn.nextDouble();
Employee emp5=new Employee(id2, name1, address1,
sal1); int i2=empDao.updateData(emp5); if(i2==1)

{
System.out.println("Data update successfully.");
}else {
System.out.println("Data Not Inserted something went wrong..!");
}
break;
case 3:
System.out.println("Enter your id:");
int id1=sn.nextInt();
int row=empDao.deleteData(id1);
if(row==1)
{
System.out.println("Data deleted successfully.");
}else {
System.out.println("Data Not Inserted something went wrong..!");
}
break;
case 4:
```

```
List<Employee> list=empDao.listEmployee();
if(list!=null)
{
for(Employee e:list) {
System.out.println(e.getEmpId()+"\t"+e.getEmpName()+"\t"
+e.getEmpAddress()+"\t"+e.getEmpSal());
}
}else {
System.out.println("something went wrong..!");
}
break;
case 5:
System.out.println("Enter your id:");
int empId=sn.nextInt();
List<Employee> emp1=empDao.getEmployee(empId);
if(emp1!=null)
{
for(Employee e:emp1) {
System.out.println(e.getEmpId()+"\t"+e.getEmpName()+"\t"
+e.getEmpAddress()+"\t"+e.getEmpSal());
}
}else {
System.out.println("Data Not Inserted something went wrong..!");
}
break;
default:
break;
}
System.out.println("do you want to continue...!");
conti=sn.next();
```

```
}while(conti.equalsIgnoreCase("y"));
}
}
```

Output



aaa - HQL-App/src/main/java/com/app/test/Client.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Markers Properties Servers Data Source Explorer Snippets Console

```
Client (3) [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (07-Feb-2022, 10:49:17 pm)
!----------------HQL Operation-------!
1. insert data
2. update data
3. delete data
4. Get All data
5. get Single data
!----------------End-------!
Enter you choice:
4
Feb 07, 2022 10:49:22 PM org.hibernate.Version logVersion
INFO: HHH000412: Hibernate ORM core version 6.0.0.Alpha7
Feb 07, 2022 10:49:24 PM org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>
INFO: HCANN000001: Hibernate Commons Annotations {5.1.2.Final}
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
WARN: HHH10001002: Using built-in connection pool (not intended for production use)
Loading class `com.mysql.jdbc.Driver'. This is deprecated. The new driver class is `com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of th
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH10001005: Loaded JDBC driver class: com.mysql.jdbc.Driver
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH10001012: Connecting with JDBC URL [jdbc:mysql://localhost:3306/hbm2]
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH10001001: Connection properties: {password="****", user=root}
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH10001003: Autocommit mode: false
Feb 07, 2022 10:49:24 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl$PooledConnections <init>
INFO: HHH10001115: Connection pool size: 20 (min=1)
Feb 07, 2022 10:49:25 PM org.hibernate.engine.jdbc.dialect.internal.DialectFactoryImpl logSelectedDialect
INFO: HHH000400: Using dialect: org.hibernate.dialect.MySQLDialect
Feb 07, 2022 10:49:27 PM org.hibernate.resource.transaction.backend.jdbc.internal.DdlTransactionIsolatorNonJtaImpl getIsolatedConnection
INFO: HHH10001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator$ConnectionProviderJdbcConnectionAccess@50f097b5] for (nc
Feb 07, 2022 10:49:27 PM org.hibernate.engine.transaction.jta.platform.internal.JtaPlatformInitiator initiateService
INFO: HHH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
1002    kirti   mumbai  3000.0
1003    swati   pune    1000.0
1005    akanksha        kolhapur        2000.0
do you want to continue...!
```