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Project Name : HQL_App

```
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
	}

}
```

```
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();
	}

}
```

```
package com.app.dao;

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.beginTransaction();
			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.beginTransaction();
        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.beginTransaction();
String hql="delete from Employee where empId ="+id;
		Query<Employee>query=session.createQuery(hql);

		int row=query.executeUpdate();
		tx.commit();
		EmployeeUtil.closeSession();
		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