**DAO Pattern with JDBC step by step**

1. Setting up MySQL

Create database DAO;

Use DAO;

Create table customer(cid int,cname varchar(20));

1. Eclipse – Java perspective –New – Java project – DAOSample
2. Add mysql-connector.jar to build path – add external jars
3. Model

**package** com.cts.model;

**public** **class** Customer {

**private** **int** cid;

**private** String cname;

**public** **int** getCid() {

**return** cid;

}

**public** **void** setCid(**int** cid) {

**this**.cid = cid;

}

**public** String getCname() {

**return** cname;

}

**public** **void** setCname(String cname) {

**this**.cname = cname;

}

}

1. DAO set up

package com.cts.dao;

import java.util.List;

import com.cts.model.Customer;

public interface CustomerDAO {

public int insertCustomer(Customer c);

public int deleteCustomer(int id);

public List<Customer> getAllCustomers();

public int updateCustomer(int id);

//public Customer getCustomer(int id);

}

1. Implementation class for DAO

**package** com.cts.dao;

**import** java.sql.Connection;

**import** java.sql.PreparedStatement;

**import** java.util.List;

**import** com.cts.model.Customer;

**import** com.cts.util.ConnectionHandler;

**public** **class** CustomerDAOImpl **implements** CustomerDAO {

**static** **final** String ***insertQuery***="insert into customer values(?,?)";

**static** **final** String ***deleteQuery***="delete from customer where cid=?";

**static** **final** String ***updateQuery***="update customer set cname=? where cid=?";

**final** Connection con=ConnectionHandler.*getConnection*();

@Override

**public** **int** insertCustomer(Customer c) {

**try**{

PreparedStatement pst=con.prepareStatement(***insertQuery***);

pst.setInt(1, c.getCid());

pst.setString(2,c.getCname());

pst.executeUpdate();

}**catch**(Exception e){}

**return** 1;

}

@Override

**public** **int** deleteCustomer(**int** id) {

**try**{

PreparedStatement pst=con.prepareStatement(***deleteQuery***);

pst.setInt(1, id);

pst.executeUpdate();

}**catch**(Exception e){}

**return** 1;

}

@Override

**public** List<Customer> getAllCustomers() {

// **TODO** Auto-generated method stub

**return** **null**;

}

@Override

**public** **int** updateCustomer(**int** id) {

**try**{

PreparedStatement pst=con.prepareStatement(***updateQuery***);

pst.setInt(2, id);

pst.setString(1,"ravi");

pst.executeUpdate();

}**catch**(Exception e){}

**return** 1;

}

}

1. connection.properties

driver=com.mysql.jdbc.Driver

username=root

password=password-1

url= jdbc:mysql://localhost:3306/DAO

1. Connection Handler

package com.cts.util;

import java.io.FileReader;

import java.sql.Connection;

import java.sql.DriverManager;

import java.util.Properties;

public class ConnectionHandler {

public static Connection getConnection()

{

String driver=null;

String url=null;

String pwd=null;

String user=null;

Connection con=null;

try{

FileReader fr=new FileReader("src/connection.properties");

Properties pro=new Properties();

pro.load(fr);

driver=pro.getProperty("driver");

//System.out.println(driver);

url=pro.getProperty("url");

pwd=pro.getProperty("password");

user=pro.getProperty("username");

Class.forName(driver);

con=DriverManager.getConnection(url,user,pwd);

}catch(Exception e){}

return con;

}

/\* public static void main(String a[])

{

System.out.println();

} \*/

}

1. Main/Client class for implementing DAO

package com.cts.client;

import java.util.Scanner;

import com.cts.dao.CustomerDAO;

import com.cts.dao.CustomerDAOMySQLImpl;

import com.cts.model.Customer;

public class CustomerClient {

public static void testInsertCustomer(Customer customer) {

CustomerDAO customerDAO=new CustomerDAOImpl();

int k=customerDAO.insertCustomer(customer);

if(k==1)

{

System.out.println("success");

}

else

System.out.println("not successful");

}

public static void testUpdateCustomer(int id) {

CustomerDAO customerDAO=new CustomerDAOImpl();

int k=customerDAO.updateCustomer(id);

if(k==1)

{

System.out.println("update success");

}

else

System.out.println("update not successful");

}

public static void testDeleteCustomer(int id) {

CustomerDAO customerDAO=new CustomerDAOImpl();

int k=customerDAO.deleteCustomer(id);

if(k==1)

{

System.out.println("delete success");

}

else

System.out.println("delete not successful");

}

public static void main(String[] args) {

{

Customer customer=new Customer();

customer.setCid(890145);

customer.setCname("venki");

testInsertCustomer(customer);

Scanner sc=new Scanner(System.in);

// System.out.println("enter customer number");

// int id=sc.nextInt();

// testDeleteCustomer(id);

System.out.println("enter customer number to update");

int id1=sc.nextInt();

testUpdateCustomer(id1);

}

}

}