**Aim : Write a java program to demonstrate the concept of frame implementing ActionListener interface.**

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**Frame.php**

import javax.swing.\*;

import java.awt.\*;

import java.util.\*;

import java.sql.\*;

import java.awt.event.\*;

public class frame extends JFrame implements ActionListener

{

JTextField txt\_fld\_1,txt\_fld\_2,txt\_fld\_3;

JButton insert\_btn, delete\_btn, update\_btn, cancel\_btn;

JLabel lbl\_1,lbl\_2,lbl\_3;

GridBagConstraints gbc;

frame()

{

setSize(400,300);

setLayout(new FlowLayout());

JPanel panel1=new JPanel(new GridBagLayout());

GridBagConstraints gbc=new GridBagConstraints();

gbc.fill=GridBagConstraints.HORIZONTAL;

lbl\_1=new JLabel("Id:");

gbc.gridx=0;

gbc.gridy=0;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(lbl\_1,gbc);

txt\_fld\_1=new JTextField(10);

gbc.gridx=1;

gbc.gridy=0;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(txt\_fld\_1,gbc);

lbl\_2=new JLabel("Name:");

gbc.gridx=0;

gbc.gridy=1;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(lbl\_2,gbc);

txt\_fld\_2=new JTextField(10);

gbc.gridx=1;

gbc.gridy=1;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(txt\_fld\_2,gbc);

lbl\_3=new JLabel("City:");

gbc.gridx=0;

gbc.gridy=2;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(lbl\_3,gbc);

txt\_fld\_3=new JTextField(10);

gbc.gridx=1;

gbc.gridy=2;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

panel1.add(txt\_fld\_3,gbc);

JPanel panel2=new JPanel(new FlowLayout());

insert\_btn=new JButton("Insert");

gbc.gridx=0;

gbc.gridy=3;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

insert\_btn.addActionListener(this);

panel2.add(insert\_btn,gbc);

update\_btn=new JButton("Update");

gbc.gridx=1;

gbc.gridy=3;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

update\_btn.addActionListener(this);

panel2.add(update\_btn,gbc);

delete\_btn=new JButton("Delete");

gbc.gridx=2;

gbc.gridy=3;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

delete\_btn.addActionListener(this);

panel2.add(delete\_btn,gbc);

cancel\_btn=new JButton("Cancel");

gbc.gridx=3;

gbc.gridy=3;

//Insets(int top,int left,int bottom,int right)

gbc.insets=new Insets(10,10,10,10);

cancel\_btn.addActionListener(this);

panel2.add(cancel\_btn,gbc);

add(panel1);

add(panel2);

setDefaultCloseOperation(EXIT\_ON\_CLOSE);

setVisible(true);

}

@Override

public void actionPerformed(ActionEvent e)

{

//throw new UnsupportedOperationException("Not supported yet.");

try

{

String id=txt\_fld\_1.getText();

String Name=txt\_fld\_2.getText();

String City=txt\_fld\_3.getText();

if(e.getActionCommand()=="Insert")

{

if(!id.equals("")&& !Name.equals("")&& !City.equals(""))

{

Connection con = db\_Connect.connect();

PreparedStatement ps=con.prepareStatement("INSERT INTO employee(id,Name,City)Values(?,?,?)");

ps.setString(1,id);

ps.setString(2,Name);

ps.setString(3,City);

con.close();

txt\_fld\_1.setText("");

txt\_fld\_2.setText("");

txt\_fld\_3.setText("");

JOptionPane.showMessageDialog(this,"Row inserted successfully");

}

else

{

JOptionPane.showMessageDialog(this,"Please fill all the fileds");

}

}

if(e.getActionCommand()=="Update")

{

if(!id.equals("")&& !Name.equals("")&& !City.equals(""))

{

Connection con = db\_Connect.connect();

PreparedStatement ps=con.prepareStatement("UPDATE employee SET Name=?,City=? WHERE id='"+id+"' ");

ps.setString(1,Name);

ps.setString(2,City);

int row=ps.executeUpdate();

if(row>0)

{

JOptionPane.showMessageDialog(this,"Row updated successfully");

}

else

{

JOptionPane.showMessageDialog(this,"Id not match");

}

txt\_fld\_1.setText("");

txt\_fld\_2.setText("");

txt\_fld\_3.setText("");

}

else

{

JOptionPane.showMessageDialog(this,"Please fill all the fileds");

}

}

if(e.getActionCommand()=="Delete")

{

if(!id.equals(""))

{

Connection con = db\_Connect.connect();

PreparedStatement ps=con.prepareStatement("DELETE FROM employee WHERE id='"+id+"'");

int del\_row=ps.executeUpdate();

if(del\_row>0)

{

JOptionPane.showMessageDialog(this,"Row deleted successfully");

txt\_fld\_1.setText("");

con.close();

}

else

{

JOptionPane.showMessageDialog(this,"Id not match");

txt\_fld\_1.setText("");

}

}

else

{

JOptionPane.showMessageDialog(this," Required Id");

}

}

if(e.getActionCommand()=="Cancel"){

System.exit(0);

}

}

catch(Exception ex)

{

JOptionPane.showMessageDialog(this,"Connection Error");

}

}

public static void main(String []ar)

{

frame If=new frame();

}

}

**dbConnect.java**

import java.sql.\*;

public class db\_Connect {

//public static void main(String[] args)

public static Connection connect()

{

Connection con=null;

try

{

Class.forName("com.mysql.jdbc.Driver");

con=DriverManager.getConnection("jdbc:mysql://localhost:3306/user\_db","root","");

//System.out.println("connection Successfully");

}

catch(Exception e)

{

e.printStackTrace();

}

return con;

}

}

**Output :**

