**Introduction**

What is NetBeans?

NetBeans is an open-source integrated development environment (IDE) for developing with Java, PHP, C++, and other programming languages. NetBeans is also referred to as a platform of modular components used for developing Java desktop applications.

NetBeans is coded in Java and runs on most operating systems with a Java Virtual Machine (JVM), including Solaris, Mac OS, and Linux.

NetBeans manages the following platform features and components:

* User settings
* Windows (placement, appearance, etc.)
* NetBeans Visual Library
* Storage
* Integrated development tools
* Framework wizard

NetBeans uses components, also known as modules, to enable software development. NetBeans dynamically installs modules and allows users to download updated features and digitally authenticated upgrades.

NetBeans IDE modules include NetBeans Profiler, a Graphical User Interface (GUI) design tool, and NetBeans JavaScript Editor.

NetBeans framework reusability simplifies Java Swing desktop application development, which provides platform extension capabilities to third-party developers.

PROJECT GITHUB LINK :-

https://github.com/ItsMadtoEvil/Java-Project

## ABOUT Temperature-Converter

A temperature scale converter on Java Swing is a graphical user interface (GUI) application that allows users to convert temperatures between different temperature scales. The application is built using the Java Swing framework, which provides a set of tools and components for creating user interfaces.

The temperature scale converter typically includes a graphical interface with two input fields, where users can enter the temperature value to be converted, and a set of radio buttons or a drop-down menu to select the input and output temperature scales. The most commonly used temperature scales are Celsius, Fahrenheit, and Kelvin.

When the user enters a temperature value and selects the input and output temperature scales, the application calculates the equivalent temperature value in the selected output scale and displays it in a separate output field. The conversion formulas for the different temperature scales are programmed into the application using Java code.

The Java Swing framework provides a range of GUI components such as buttons, labels, text fields, and radio buttons that can be used to build the temperature scale converter. These components can be customized with different colors, fonts, and styles to create an appealing and user-friendly interface.

Overall, a temperature scale converter on Java Swing is a useful tool for anyone who needs to convert temperatures between different scales quickly and easily. The application is simple to use and can be easily customized to meet the specific needs of different users.

## Code

import javax.swing.\*; import java.awt.event.\*;

public class main extends JFrame { JLabel l1, l2, l3, l4;

JComboBox tc1, tc2; JTextField t1, t2;

JButton b, dot, ac, bs, pm;

JButton n0, n1, n2, n3, n4, n5, n6, n7, n8, n9;

public main(String s) { super(s);

}

public void setComp() {

String arr1[] = { "Celsius", "Fahrenheit", "Kelvin", "Rankine", "Reaumur" }; String arr2[] = { "Celsius", "Fahrenheit", "Kelvin", "Rankine", "Reaumur" }; l1 = new JLabel("To");

l2 = new JLabel("Enter the Value:"); l3 = new JLabel("Converted Value:"); l4 = new JLabel("From");

tc1 = new JComboBox(arr1); tc2 = new JComboBox(arr2); t1 = new JTextField();

t2 = new JTextField();

b = new JButton("Convert"); dot = new JButton(".");

pm = new JButton("±"); bs = new JButton("<--"); ac = new JButton("AC"); n0 = new JButton("0"); n1 = new JButton("1"); n2 = new JButton("2"); n3 = new JButton("3"); n4 = new JButton("4");

n5 = new JButton("5"); n6 = new JButton("6"); n7 = new JButton("7"); n8 = new JButton("8"); n9 = new JButton("9"); setLayout(null);

tc1.setBounds(75, 50, 100, 20);

t1.setBounds(200, 50, 100, 20);

l1.setBounds(100, 75, 50, 20);

l4.setBounds(90, 25, 50, 20);

l2.setBounds(200, 35, 100, 20);

l3.setBounds(200, 85, 100, 20);

tc2.setBounds(75, 100, 100, 20);

t2.setBounds(200, 100, 100, 20);

b.setBounds(138, 150, 100, 20);

ac.setBounds(238, 200, 50, 100);

pm.setBounds(238, 350, 50, 50);

bs.setBounds(238, 300, 50, 50);

dot.setBounds(188, 350, 50, 50);

n0.setBounds(88, 350, 100, 50);

n1.setBounds(88, 200, 50, 50);

n2.setBounds(138, 200, 50, 50);

n3.setBounds(188, 200, 50, 50);

n4.setBounds(88, 250, 50, 50);

n5.setBounds(138, 250, 50, 50);

n6.setBounds(188, 250, 50, 50);

n7.setBounds(88, 300, 50, 50);

n8.setBounds(138, 300, 50, 50);

n9.setBounds(188, 300, 50, 50); b.addActionListener(new Handler()); ac.addActionListener(new Handler()); pm.addActionListener(new Handler()); bs.addActionListener(new Handler()); dot.addActionListener(new Handler()); n0.addActionListener(new Handler()); n1.addActionListener(new Handler()); n2.addActionListener(new Handler());

n3.addActionListener(new Handler()); n4.addActionListener(new Handler()); n5.addActionListener(new Handler()); n6.addActionListener(new Handler()); n7.addActionListener(new Handler()); n8.addActionListener(new Handler()); n9.addActionListener(new Handler()); add(tc1);

add(tc2);

add(l1);

add(l2);

add(l3);

add(l4);

add(t1);

add(t2);

add(b);

add(ac);

add(dot);

add(pm);

add(bs);

add(n0);

add(n1);

add(n2);

add(n3);

add(n4);

add(n5);

add(n6);

add(n7);

add(n8);

add(n9); t2.setEditable(false);

}

class Handler implements ActionListener { public void actionPerformed(ActionEvent e) {

String x, y;

x = (String) tc1.getSelectedItem();

y = (String) tc2.getSelectedItem();

if (e.getSource() == n0) t1.setText(t1.getText() + "0");

if (e.getSource() == n1) t1.setText(t1.getText() + "1");

if (e.getSource() == n2) t1.setText(t1.getText() + "2");

if (e.getSource() == n3) t1.setText(t1.getText() + "3");

if (e.getSource() == n4) t1.setText(t1.getText() + "4");

if (e.getSource() == n5) t1.setText(t1.getText() + "5");

if (e.getSource() == n6) t1.setText(t1.getText() + "6");

if (e.getSource() == n7) t1.setText(t1.getText() + "7");

if (e.getSource() == n8) t1.setText(t1.getText() + "8");

if (e.getSource() == n9) t1.setText(t1.getText() + "9");

if (e.getSource() == dot) t1.setText(t1.getText() + ".");

if (e.getSource() == ac) { t1.setText("");

t2.setText("");

}

if (e.getSource() == pm) { String spm = new String(); spm = t1.getText();

if (spm.length() == 0) t1.setText("-");

else if (spm.charAt(0) != '-')

t1.setText("-" + t1.getText()); else

t1.setText("" + spm.substring(1));

}

if (e.getSource() == bs) { int n;

String bsp = new String(); bsp = t1.getText();

n = bsp.length();

t1.setText("" + bsp.substring(0, n - 1));

}

if (e.getSource() == b) {

if (x == "Celsius" && y == "Celsius") { t2.setText("" + t1.getText());

} else if (x == "Fahrenheit" && y == "Fahrenheit") { t2.setText("" + t1.getText());

} else if (x == "Kelvin" && y == "Kelvin") { t2.setText("" + t1.getText());

} else if (x == "Rankine" && y == "Rankine") { t2.setText("" + t1.getText());

} else if (x == "Reaumur" && y == "Reaumur") { t2.setText("" + t1.getText());

}

else if (x == "Celsius" && y == "Fahrenheit") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) ((a \* 9 / 5) + 32); t2.setText("" + b);

} else if (x == "Celsius" && y == "Kelvin") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a + 273.15); t2.setText("" + b);

} else if (x == "Celsius" && y == "Rankine") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) (a \* 9 / 5 + 32 + 459.67); t2.setText("" + b);

} else if (x == "Celsius" && y == "Reaumur") {

String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a \* 0.8); t2.setText("" + b);

}

else if (x == "Fahrenheit" && y == "Celsius") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) ((a - 32) \* 5 / 9); t2.setText("" + b);

} else if (x == "Fahrenheit" && y == "Kelvin") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) ((a - 32) \* 5 / 9 + 273.15); t2.setText("" + b);

} else if (x == "Fahrenheit" && y == "Rankine") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a + 459.67); t2.setText("" + b);

} else if (x == "Fahrenheit" && y == "Reaumur") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) ((a - 32) / 2.25); t2.setText("" + b);

}

else if (x == "Kelvin" && y == "Celsius") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a - 273.15); t2.setText("" + b);

} else if (x == "Kelvin" && y == "Fahrenheit") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) ((a - 273.15) \* 9 / 5 + 32);

t2.setText("" + b);

} else if (x == "Kelvin" && y == "Rankine") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a \* 9 / 5); t2.setText("" + b);

} else if (x == "Kelvin" && y == "Reaumur") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) ((a - 273.15) \* 0.8); t2.setText("" + b);

} else if (x == "Rankine" && y == "Celsius") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) ((a - 32 - 459.67) / 1.8); t2.setText("" + b);

} else if (x == "Rankine" && y == "Fahrenheit") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a - 459.67); t2.setText("" + b);

} else if (x == "Rankine" && y == "Kelvin") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a / 1.8); t2.setText("" + b);

} else if (x == "Rankine" && y == "Reaumur") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) ((a - 32 - 459.67) / 2.25); t2.setText("" + b);

}

else if (x == "Reaumur" && y == "Celsius") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a \* 1.25);

t2.setText("" + b);

} else if (x == "Reaumur" && y == "Fahrenheit") { String s = t1.getText();

float a = Float.parseFloat(s); float b = (float) (a \* 2.25 + 32); t2.setText("" + b);

} else if (x == "Reaumur" && y == "Kelvin") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) (a \* 1.25 + 273.15); t2.setText("" + b);

} else if (x == "Reaumur" && y == "Rankine") { String s = t1.getText();

float a = Float.parseFloat(s);

float b = (float) (a \* 2.25 + 32 + 459.67); t2.setText("" + b);

}

}

}

}

public static void main(String[] args) {

main jf = new main("Temperature Converter"); jf.setComp();

jf.setSize(400, 500); jf.setVisible(true);

jf.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

}

}

**Screenshot**

