Lab 6 Code a Windows Form

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GUI Design

adopted from Lab 5

by

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double userInput = 0.0;

double calculatedTemperatureCelsius = 0.0;

double calculatedTemperatureFahrenheit = 0.0;

**Input**

Prompt user to enter the temperature they want converted from either Celsius to Fahrenheit or vise-versa

Validate user input is a valid numeric entry

Store user input into userInput Variable

if (double.TryParse(txtTemperatureValue.Text, out userInput) == false)

{

MessageBox.Show("Please enter a valid numeric number");

txtTemperatureValue.Focus();

}

If user input is not numeric display error message:

“ERROR: Please enter a numeric temperature to convert”

**Process**

If user selects radio button “Celsius”

rbtCelsius.Checked--

Convert to Celsius

(°C \* .5556) +32

If user selects radio button “Fahrenheit”

Convert to Fahrenheit

(°F - 32) x .5556

else if (rbtCelsius.Checked)

{

calculatedTemperatureCelsius = Math.Round(((userInput - 32) \* 5) / 9, 2);

lblConvertedValue.Text = calculatedTemperatureCelsius.ToString();

}

else if (rbtFahrenheit.Checked)

{

calculatedTemperatureFahrenheit = ((userInput \* 9) / 5) + 32;

lblConvertedValue.Text = calculatedTemperatureFahrenheit.ToString();

}

**Output**

Display converted temperature value in lblConvertedValue

else if (rbtCelsius.Checked)

{

calculatedTemperatureCelsius = Math.Round(((userInput - 32) \* 5) / 9, 2);

lblConvertedValue.Text = userInput + " degrees Fahrenheit converts to " + calculatedTemperatureCelsius.ToString() + " degrees Celsius.";

}

else if (rbtFahrenheit.Checked)

{

calculatedTemperatureFahrenheit = ((userInput \* 9) / 5) + 32;

lblConvertedValue.Text = userInput + " degrees Celsius converts to " + calculatedTemperatureFahrenheit.ToString() + " degrees Fahrenheit."; }

}

private void btnReset\_Click(object sender, EventArgs e)

{

lblConvertedValue.Text = "";

txtTemperatureValue.Text = "";

txtTemperatureValue.Focus();

}

private void btnExit\_Click(object sender, EventArgs e)

{

this.Close();

}