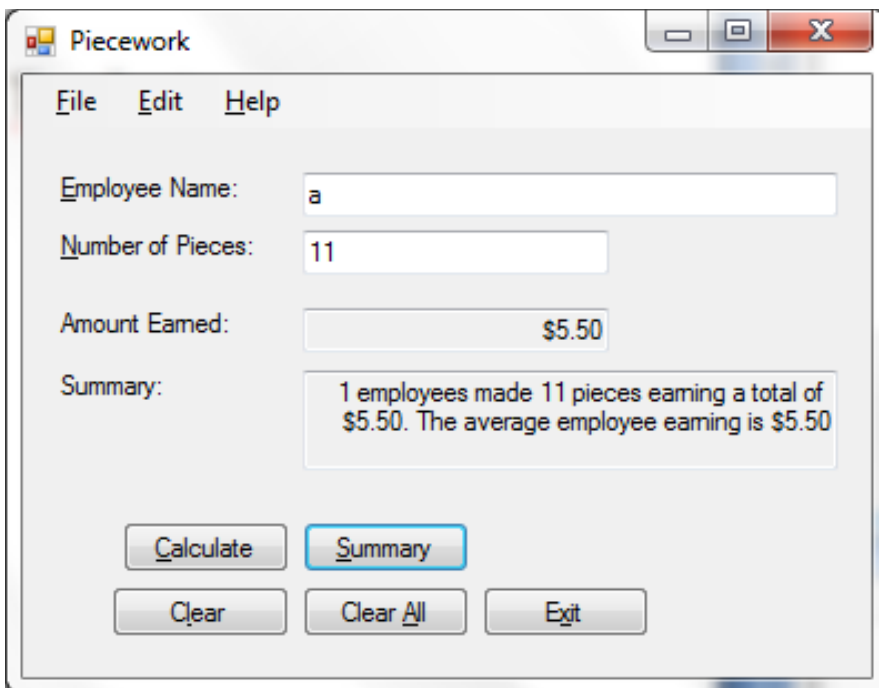
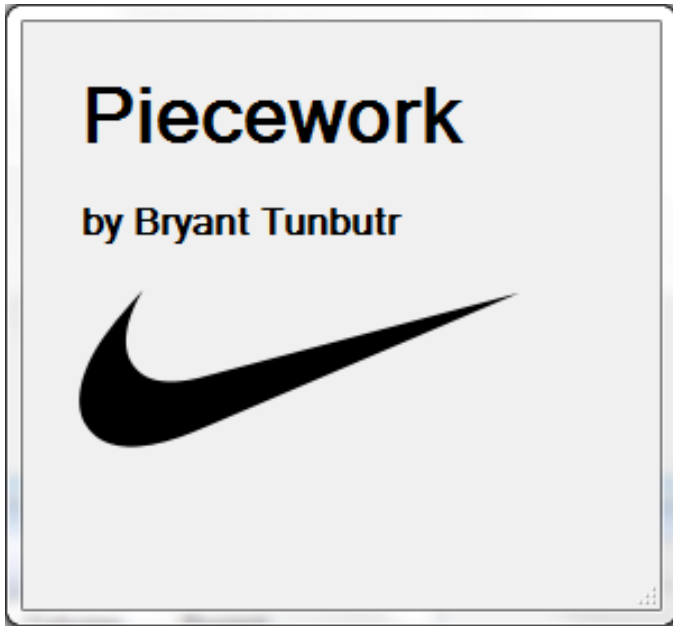


Lab 6 by Bryant Tunbutr



The image shows a screenshot of a Windows application window titled 'Piecework'. The window has a standard Windows XP-style title bar with minimize, maximize, and close buttons. Below the title bar is a menu bar with 'File', 'Edit', and 'Help'. The main area of the window contains several input fields and buttons. The 'Employee Name' field contains the letter 'a'. The 'Number of Pieces' field contains the number '11'. The 'Amount Earned' field contains '\$5.50'. Below these fields is a 'Summary' section with a text box containing the text: '1 employees made 11 pieces earning a total of \$5.50. The average employee earning is \$5.50'. At the bottom of the window are five buttons: 'Calculate', 'Summary', 'Clear', 'Clear All', and 'Exit'. The 'Summary' button is highlighted with a blue border.

Field	Value
Employee Name	a
Number of Pieces	11
Amount Earned	\$5.50

Summary: 1 employees made 11 pieces earning a total of \$5.50. The average employee earning is \$5.50

Buttons: Calculate, Summary, Clear, Clear All, Exit

Piecework

File Edit Help

Employee Name: b

Number of Pieces: 222

Amount Earned: \$122.10

Summary: 2 employees made 233 pieces earning a total of \$127.60. The average employee earning is \$63.80

Calculate Summary

Clear Clear All Exit

Piecework

File Edit Help

Employee Name: c

Number of Pieces: 3333

Amount Earned: \$2,166.45

Summary: 3 employees made 3566 pieces earning a total of \$2,294.05. The average employee earning is \$764.68

Calculate Summary

Clear Clear All Exit

About Piecework Piecework



Piecework

Version 1.0.0.1 1.0.0.1

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Bryant Tunbutr LLC

Calculates and displays the amount an employee
earns for producing items.

OK

Source code for PieceworkForm.cs

Note

I made unsuccessful attempts to use a summary form using this type of coding

From the main form

```
private void summaryButton_Click(object sender, EventArgs e)
{
    if (piecesTextBox.Text == "")
    { MessageBox.Show("Missing data entry"); }
    if (nameTextBox.Text == "")
    { MessageBox.Show("Missing data entry"); }
    // Add to summary totals.

    totalPiecesInt += piecesInt;
    amountTotalEarnedDec += amountEarnedDec;
    averageAmountEarnedDec = amountTotalEarnedDec / employeesInt;

    // Display the summary information in a message box.
    SummaryForm sumForm = new SummaryForm();

    sumForm.Employees = employeesInt;
    // sumForm.Pieces = piecesInt;
    // sumForm.Total = amountEarnedDec;
    // sumForm.AverageEarned = averageAmountEarnedDec;

    sumForm.ShowDialog();
}
```

From the summary form

```
namespace Piecework
{
    public partial class SummaryForm : Form
    {
        int employeesInt, piecesInt;
        decimal amountEarnedDec, averageAmountEarnedDec;

        public int Employees
        {
            set
            {
                employeesInt = value;
            }
        }

        public SummaryForm()
        {
            InitializeComponent();
        }
    }
}
```

```
private void SummaryForm_Activated(object sender, EventArgs e)
{
    //summaryLabel.Text = summaryLabel.ToString();

    // Get and display the summary data.

    employeesTextBox.Text = employeesInt.ToString() + " employees made ";
}
```

However my attempts were unsuccessful so I stuck with the summary textbox.

I understand the concept of storing it as a variable and then making it public, then calling it in a text box, however I was unable to execute this.

I was also unable to convert my program actions into a method ☹

I will try harder to learn methods and use them in future lessons.

Otherwise my code and program work well ☺

```

/*
* Project: EX0406 - Exercise 5.1
* Programmer: Bryant Tunbutr
* Date: October 11 2012
* Description: Calculates and displays the amount an employee earns for producing
items.
* Upgraded with menu options.
* Upgraded again with splash screen, about box.
* I certify that the code below is my own work.
*/

```

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;

```

```

namespace Piecework

```

```

{
    public partial class pieceWorkForm : Form
    {
        // Declare the variables.
        int piecesInt, totalPiecesInt, employeesInt;
        decimal amountEarnedDec, amountTotalEarnedDec, averageAmountEarnedDec;
        public pieceWorkForm()
        {
            InitializeComponent();
        }

        private decimal findPayRate(int qtyInt)
        {
            decimal payRateDec;

            if (qtyInt < 200)
                payRateDec = 0.5M;
            else if (qtyInt < 400)
                payRateDec = 0.55M;
            else if (qtyInt < 600)
                payRateDec = 0.6M;
            else
                payRateDec = 0.65M;

            return payRateDec;
        }

        private void calculateButton_Click(object sender, EventArgs e)
        {
            try
            {
                if (piecesTextBox.Text != "")
                {
                    // Convert input values to numeric and assign to variables.
                    piecesInt = int.Parse(piecesTextBox.Text);

```

```

        // Calculate values.
        if (piecesInt < 200)
        {
            amountEarnedDec = piecesInt * 0.5m;
            amountEarnedTextBox.Text = amountEarnedDec.ToString("C");
        }
        else
        {
            if (piecesInt < 400 && piecesInt > 199)
            {
                amountEarnedDec = piecesInt * 0.55m;
                amountEarnedTextBox.Text = amountEarnedDec.ToString("C");
            }
            if (piecesInt < 600 && piecesInt > 399)
            {
                amountEarnedDec = piecesInt * 0.60m;
                amountEarnedTextBox.Text = amountEarnedDec.ToString("C");
            }
            if (piecesInt > 599)
            {
                amountEarnedDec = piecesInt * 0.65m;
                amountEarnedTextBox.Text = amountEarnedDec.ToString("C");
            }
            // Add to summary totals.
            employeesInt++;
        }
        else MessageBox.Show("Missing data entry"); ;
    }

    catch
    {
        MessageBox.Show("Bad input");
    }
    if (nameTextBox.Text == "")
    {
        MessageBox.Show("Missing data entry");
    }
}

private void summaryButton_Click(object sender, EventArgs e)
{
    if (piecesTextBox.Text == "")
    {
        MessageBox.Show("Missing data entry");
    }
    if (nameTextBox.Text == "")
    {
        MessageBox.Show("Missing data entry");
    }
    // Add to summary totals.

    totalPiecesInt += piecesInt;
    amountTotalEarnedDec += amountEarnedDec;
    averageAmountEarnedDec = amountTotalEarnedDec / employeesInt;

    // Display the summary information in a message box.
    summaryTextBox.Text = employeesInt.ToString() + " employees made " +
totalPiecesInt.ToString() +
    " pieces earning a total of " +
amountTotalEarnedDec.ToString("C") +

```

```

        ". The average employee earning is " +
averageAmountEarnedDec.ToString("C");
    }

    private void clearButton_Click(object sender, EventArgs e)
    {
        piecesTextBox.Text = "";
        amountEarnedTextBox.Text = "";
        nameTextBox.Text = "";
    }

    private void clearAllButton_Click(object sender, EventArgs e)
    {
        piecesTextBox.Text = "";
        amountEarnedTextBox.Text = "";
        nameTextBox.Text = "";
        summaryTextBox.Text = "";
    }

    private void exitButton_Click(object sender, EventArgs e)
    {
        this.Close();
    }

    private void pieceWorkForm_Load(object sender, EventArgs e)
    {
    }

    private void cOlorToolStripMenuItem_Click(object sender, EventArgs e)
    {
        // Change the form's ForeColor.
        // Applies to all controls on the form that haven't had their
        // ForeColor explicitly modified.
        // Initialize the dialog box.
        colorDialog1.Color = this.ForeColor;
        // Display the dialog box.
        colorDialog1.ShowDialog();
        // Assign the new color.
        this.ForeColor = colorDialog1.Color;
    }

    private void fOntToolStripMenuItem_Click(object sender, EventArgs e)
    {
        // Change the font of the total label.
        fontDialog1.Font = amountEarnedTextBox.Font;
        fontDialog1.ShowDialog();
        amountEarnedTextBox.Font = fontDialog1.Font;

        // fontDialog1.ShowDialog();
        // this.Font = fontDialog1.Font;
    }

    private void aBoutToolStripMenuItem_Click(object sender, EventArgs e)
    {
        //MessageBox.Show("Written by B Tunbutr");
    }

```



```
        AboutBox1 aboutForm = new AboutBox1();  
        aboutForm.ShowDialog();  
    }  
}
```

Why is it not a good idea to make class-level variables public?

You may not want to share information with users or with other sections of the program, i.e. prices, account balances, information such as social security numbers.

Also with class-level variables as public it is hard to read & modify code, you must synchronize, you might get confused when doing calculations and work, plus the code is harder to test and fix.