

...Portfolio\Arrays-Plus-Strings\ArrayExample1\FrmDisplay.cs		1
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1  /
    *****
    *****/
2  /* Jacob Hobbie
    */
3  /* May 20th 2015
    */
4  /* ProgrammingOneSubmit, FrmDisplay.cs
    */
5  /* Programming I
    */
6  /*
    */
7  /* FrmDisplay takes a string generated from FrmMain and fills the screen with
    the */
8  /* data sent to display to the user.
    */
9  /
    *****
    *****/
10
11 using System;
12 using System.Windows.Forms;
13
14 namespace EmployeeDeviation
15 {
16     public partial class FrmDisplay : Form
17     {
18         // Takes string generated from FrmMain and displays it in FrmDisplay
19         public FrmDisplay(string display)
20         {
21             InitializeComponent();
22             rchTxtBxDisplay.Text = display;
23         }
24
25         // Closes FrmDisplay
26         private void btnClose_Click(object sender, EventArgs e)
27         {
28             Close();
29         }
30     }
31 }
32

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...nt\Portfolio\Arrays-Plus-Strings\ArrayExample1\FrmMain.cs 1
1 / 2
    ***** 2
    *****/ 2
2 /* Jacob Hobbie 2
    */ 2
3 /* May 20th 2015 2
    */ 2
4 /* ProgrammingOneSubmit, FrmMain.cs 2
    */ 2
5 /* Programming I 2
    */ 2
6 /* 2
    */ 2
7 /* Takes an employee's name and their salary as input. The program then finds 2
    the */ 2
8 /* employee's name from their full name, displays it in a professional format, 2
    and */ 2
9 /* also displays the employee's salary, and the salary's deviation from the 2
    average. */ 2
10 /* The program supports alt-keys and the Accept and Cancel button, with 2
    btnCalculate */ 2
11 /* and btnClear being the values of those two respectively. 2
    */ 2
12 / 2
    ***** 2
    *****/ 2
13
14 using System;
15 using System.Windows.Forms;
16
17 // ReSharper disable FieldCanBeMadeReadOnly.Local
18 // ReSharper disable StringIndexOfIsCultureSpecific.1
19 // ReSharper disable JoinDeclarationAndInitializer
20 // ReSharper disable StringLastIndexOfIsCultureSpecific.1
21
22 namespace EmployeeDeviation
23 {
24     public partial class FrmMain : Form
25     {
26         /// <globalVars>
27         /// MAXNUM - A constant variable that holds the number of entries this
28         /// program will accept.
29         /// dblSum - Sum of all values entered in order to find the average
30         /// of the scores provided.
31         /// intCount - How many numbers are entered into the array by the user.
32         /// strOutput - A string that is entered into rchTxtBxOutput
33         /// to show the results of btnCalculate.
34         /// dblScores[] - A double array that holds the total scores 2
            individually

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35     /// from the user.
36     /// strFirstNames[] - A string array that holds the first name of the individual's
37     /// score.
38     /// strLastName[] - A string array that holds the last name of the individual's
39     /// score.
40     /// strMiddleInit[] - A string array that holds the middle name of the individual's
41     /// score.
42     /// </globalVars>
43
44     #region GlobalVars
45     const int MAXNUM = 100;
46     double dblSum;
47     int intCount;
48     string strOutput;
49     double[] dblSalaries = new double[MAXNUM];
50     string[] strFirstNames = new string[MAXNUM];
51     string[] strLastNames = new string[MAXNUM];
52     string[] strMiddleInit = new string[MAXNUM];
53     #endregion
54
55     // Starts the Windows Form with InitializeComponent() and starts
56     // the application with txtBxScore focused for the user to enter
57     // data.
58     public FrmMain()
59     {
60         InitializeComponent();
61         ActiveControl = txtBxName;
62     }
63
64     #region Events
65     // Takes data from the user, and attempts to enter it into their respective
66     // arrays.
67     private void btnEnterData_Click(object sender, EventArgs e)
68     {
69         try
70         {
71             string strSalary = txtBxSalary.Text;
72             double dblSalary = Convert.ToDouble(strSalary);
73             try
74             {
75                 dblSalaries[intCount] = dblSalary;
76                 DivideNames();
77                 intCount++;
78                 dblSum += dblSalary;
79                 MessageBox.Show("The Employee has been entered",
```

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    "Successful Entry");
80     txtBxName.Text = "";
81     txtBxSalary.Text = "";
82     ActiveControl = txtBxName;
83 }
84 catch (IndexOutOfRangeException)
85 {
86     string strMessage = "You have entered " + MAXNUM + "
    values. The" +
87         " array is full.";
88     btnEnterData.Enabled = false;
89     MessageBox.Show(strMessage, "Error", MessageBoxButtons.OK,
90         MessageBoxIcon.Error);
91     txtBxName.Text = "";
92     txtBxSalary.Text = "";
93 }
94 }
95 catch (FormatException)
96 {
97     MessageBox.Show("You must enter a salary", "Error");
98     txtBxSalary.SelectAll();
99     ActiveControl = txtBxSalary;
100 }
101 }
102
103 // Takes scores and names from user-entered data and inputs them into
104 // a string that is sent to FrmDisplay.
105 private void btnCalculate_Click(object sender, EventArgs e)
106 {
107     double dblAverage = dblSum / intCount;
108     strOutput = "Name".PadRight(25) + "Salary".PadLeft(18) + "Dev. from
    Avg"
109         .PadLeft(23) + "\n\n";
110
111     for (int i = 0; i < intCount; i++)
112     {
113         double dblDeviation = dblSalaries[i] - dblAverage;
114         string strFullName = strLastNames[i] + ", " + strFirstNames[i]
    +
115             strMiddleInit[i];
116         strOutput += strFullName.PadRight(25) +
117             dblSalaries[i].ToString("C2").PadLeft(18) +
118             dblDeviation.ToString("C2").PadLeft(23) + "\n";
119     }
120     FrmDisplay aDisplayForm = new FrmDisplay(strOutput);
121     aDisplayForm.ShowDialog();
122 }
123
124 // Clears all Text Boxes, global variables, and user entered data in

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```
125     // arrays to completely reset program.
126     private void btnClear_Click(object sender, EventArgs e)
127     {
128         txtBxSalary.Text = "";
129         txtBxName.Text = "";
130         intCount = 0;
131         dblSum = 0;
132         strOutput = "";
133         ActiveControl = txtBxName;
134         // btnDataEnter made sure to be enabled when program reset.
135         btnEnterData.Enabled = true;
136     }
137
138     // Shows FrmAbout
139     private void aboutToolStripMenuItem_Click(object sender, EventArgs e)
140     {
141         FrmAbout anAboutForm = new FrmAbout();
142         anAboutForm.ShowDialog();
143     }
144     #endregion
145
146     // Finds all parts of employee's name from one main name
147     private void DivideNames()
148     {
149         int intIndexPeriod;
150         int intIndexFirstSpace;
151
152         string strName = txtBxName.Text;
153         // Finds First Name
154         intIndexFirstSpace = strName.IndexOf(" ");
155         strFirstNames[intCount] = strName.Substring(0, intIndexFirstSpace);
156         // Finds Middle Initials, (If there)
157         intIndexPeriod = strName.IndexOf(".");
158         if (intIndexPeriod != -1)
159         {
160             strMiddleInit[intCount] = " " + strName.Substring
161                 (intIndexPeriod - 1, 2);
162             // Finds Last Name
163             strLastNames[intCount] = strName.Substring(intIndexPeriod + 2);
164         }
165         else
166         {
167             // Happens if No Middle Initial
168             strLastNames[intCount] = strName.Substring(intIndexFirstSpace +
169                 1);
170         }
171     }
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...t\Portfolio\Arrays-Plus-Strings\ArrayExample1\FrmAbout.cs 1
1 / 2
    ***** 2
    *****/ 2
2 /* Jacob Hobbie 2
    */ 2
3 /* May 20th 2015 2
    */ 2
4 /* ProgrammingOneSubmit, FrmAbout.cs 2
    */ 2
5 /* Programming I 2
    */ 2
6 /* 2
    */ 2
7 /* Shows FrmAbout, which gives a brief description of the programmer, the 2
    purpose of */ 2
8 /* the program, and a link to the programmer's website. 2
    */ 2
9 / 2
    ***** 2
    *****/ 2
10
11 using System;
12 using System.Diagnostics;
13 using System.Windows.Forms;
14
15 // ReSharper disable AssignNullToNotNullAttribute
16
17 namespace EmployeeDeviation
18 {
19     public partial class FrmAbout : Form
20     {
21         public FrmAbout()
22         {
23             InitializeComponent();
24         }
25
26         #region Events
27         // Prepares form to accept lnkLblWebsite Click
28         private void FrmAbout_Load(object sender, EventArgs e)
29         {
30             LinkLabel.Link websiteLink = new LinkLabel.Link();
31             websiteLink.LinkData = "http://www.jacobhobbie.com/";
32             lnkLblWebsite.Links.Add(websiteLink);
33         }
34
35         // Starts new web process
36         private void lnkLblWebsite_LinkClicked(object sender, 2
            LinkLabelLinkClickedEventArgs e)
37         {

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```
38         if (e != null) Process.Start(e.Link.LinkData as string);
39     }
40     #endregion
41 }
42 }
43
```