

*Programming Assignment Sheet*

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| To: | Troy Tuckett |
| From: | Elbio Iseas |
| Class: | POS/409 |
| Date: | 9/23/14 |
| Re: | Individual Assignment for Week 2 |

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| Design: |
| This design uses two forms: the main form and the results form to achieve the requirements of the requestor. The main form has three buttons: a write button, a read button, and an exit button. The first button to write the sum of the dice rolls to a text file; the second button to read the data from the text file saved with the previous button; the last button is to exit the application. The data from the text file is loaded into an arraylist data structure. From this arraylist the program will treat the elements to place them in a textbox for the user to see. In case the file has less data than the data required to run the application a error message will be displayed stating the lack of compliance with the requirements. |
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| Source Program(s) : |
| using System;  using System.Collections.Generic;  using System.ComponentModel;  using System.Data;  using System.Drawing;  using System.Linq;  using System.Text;  using System.Windows.Forms;  using System.IO;  //  namespace POS409DiceSimulation  {  public partial class frmMain : Form  {  public frmMain()  {  InitializeComponent();  }  private void frmMain\_Load(object sender, EventArgs e)  {  }  private void button3\_Click(object sender, EventArgs e)  {  Close();  }  private void btnWrite\_Click(object sender, EventArgs e)  {  // idea from MSDN example    string file = "rolledDice.txt";  string currentPath = Directory.GetCurrentDirectory();  string strSumOfDice = "";  StreamWriter fileWriter = new StreamWriter(file);  Random r = new Random();  int numberOne = 0;  int numberTwo = 0;  int numberSum = 0;    for (int i = 0; i < 100; i++)  {  numberOne = r.Next(1, 6);  numberTwo = r.Next(1, 6);  numberSum = numberOne + numberTwo;  strSumOfDice = numberSum.ToString();  fileWriter.WriteLine(strSumOfDice);  }  fileWriter.Close();  }  private void btnRead\_Click(object sender, EventArgs e)  {  frmResults results = new frmResults();  results.Show();  }  }  }  using System.Collections;  using System.Collections.Generic;  using System.ComponentModel;  using System.Data;  using System.Drawing;  using System.Linq;  using System.Text;  using System.Windows.Forms;  using System.IO;  using System;  namespace POS409DiceSimulation  {  public partial class frmResults : Form  {  public frmResults()  {  InitializeComponent();  ArrayList diceResults = new ArrayList();  string file = "rolledDice.txt";  try  {  StreamReader fileReader = new StreamReader(file);  string recordLine;  while ((recordLine = fileReader.ReadLine()) != null)  {  diceResults.Add(recordLine);    }  fileReader.Close();  if (diceResults.Count > 99)  {    int k = 0;  for (int i = 1; i <= 10; i++)    {  string txtBoxLine = " ";  for (int j = 1; j <= 10; j++)  {  // Two digit result  if (diceResults[k].ToString().Length > 1)  txtBoxLine = txtBoxLine + diceResults[k].ToString() + " ";  else // One digit result  txtBoxLine = txtBoxLine + " " + diceResults[k].ToString() + " ";  k++;  }  k = k-1;    if (i == 1)  textBox1.Text = txtBoxLine;  else if (i == 2)  textBox2.Text = txtBoxLine;  else if (i == 3)  textBox3.Text = txtBoxLine;  else if (i == 4)  textBox4.Text = txtBoxLine;  else if (i == 5)  textBox5.Text = txtBoxLine;  else if (i == 6)  textBox6.Text = txtBoxLine;  else if (i == 7)  textBox7.Text = txtBoxLine;  else if (i == 8)  textBox8.Text = txtBoxLine;  else if (i == 9)  textBox9.Text = txtBoxLine;  else if (i == 10)  textBox10.Text = txtBoxLine;    }  }  else  {  MessageBox.Show("File does not meet Application's Requirements!");  }    }  catch (Exception e)  {  MessageBox.Show("Unable to read file!");  MessageBox.Show(e.Message);  }  }  private void button1\_Click(object sender, EventArgs e)  {  Close();  }  }  } |
| Output Results: |
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| Testing: |
| Description of testing   1. The program will get randomly two values from 1 to 6 per dice and then get the sum of the two for future saving on disk with a text file.   Test result : PASS   1. The application will write the data to a text file of the sum of the result of two dice rolled. This sum of the two rolled dice will be saved a hundred times. The values of the sum of the two rolled dice will be in the range from 2 to 12.   Test result : PASS   1. The application will use a button to read the values from the text file to a string variable which will be arranged in a way to fit one of the ten textboxes.   Test result : PASS |
| Tested By  Elbio Iseas |