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// Box Demonstration
// Illustrates a GUI and an Application Object
// CS 1400
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// Date last modified: October 15, 2013
// This file contains the Form class
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Boxes
{
    // The Form constructor
    public partial class Form1 : Form
    {
        // Create a Box reference
        // It will hold the address of the box object that will be created
        Box aBoxObjectRef;

        public Form1()
        {
            InitializeComponent();

            // The Exit Menu Item event handler
            // Purpose: To close the window and terminate the application
            // Parameters: The sending object and event arguments
            // Returns: none
            private void exitToolStripMenuItem1_Click(object sender, EventArgs e)
            {
                this.Close();
            }

            // The About Menu Item event handler
            // Purpose: To tell about this application
            // Parameters: The sending object and event arguments
            // Returns: none
            private void aboutToolStripMenuItem_Click(object sender, EventArgs e)
            {
                MessageBox.Show("Example of GUI and Application Objects\nRoger deBry");
            }

            // The Create a Box Menu Item event handler
            // Purpose: To read the data from the textboxes and create a Box object
            // Parameters: The sending object and event arguments
            // Returns: none
            private void createABoxToolStripMenuItem_Click(object sender, EventArgs e)
            {
                // Get the data from the textboxes - the data is in the Text property of
                each textbox
            }
        }
    }
}

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        int aHeight = int.Parse(heightTextBox.Text);
        int aWidth = int.Parse(widthTextBox.Text);
        int aDepth = int.Parse(depthTextBox.Text);

        // Create a box object using the parameterized constructor
        // save its address in the reference aBoxObjectRef
        aBoxObjectRef = new Box(aHeight, aWidth, aDepth);

        // Show a message box telling the user that the box has been created
        MessageBox.Show("The Box object has been created and initialized.");
    }

    // The Display Box Menu Item event handler
    // Purpose: To show all of the data in the box object
    // Parameters: The sending object and event arguments
    // Returns: none
    private void displayTheBoxToolStripMenuItem_Click(object sender, EventArgs
e)
    {
        // Get the data from the box
        int boxH = aBoxObjectRef.GetHeight();
        int boxW = aBoxObjectRef.GetWidth();
        int boxD = aBoxObjectRef.GetDepth();
        int boxV = aBoxObjectRef.CalcVolume();

        // Create strings to display in a message box
        string line1 = string.Format("You created the following Box object:\n");
        string line2 = string.Format("Its height is {0:d} units\n", boxH);
        string line3 = string.Format("Its width is {0:d} units\n", boxW);
        string line4 = string.Format("Its depth is {0:d} units\n", boxD);
        string line5 = string.Format("Its volume is {0:d} units\n", boxV);

        // show the message box
        // by concatenating the strings created above
        MessageBox.Show(line1 + line2 + line3 + line4 + line5);
    }
}

```