

Student Name: _____ Bryant Tunbutr _____ Project Number: _____ 4 _____
Project Name: _____ BtunbutrProject4 _____ Visual Studio Version: _____ 2008 _____
Date Due: _____ 11/22/12 _____ Date Turned In: _____ 11/22/12 _____

Above to be completed by student

	Points (____ Possible)
Correctness/Efficiency:	
Output is accurate	_____
Meets all requirements	_____
Provide appropriate user interface	_____
Logic is efficient	_____
Documentation/Coding Style:	
Project can be open from the submitted zip file	_____
Folder is present and contains all necessary project files (no extra files)	_____
Use required coding template	_____
Use proper naming and spacing	_____
Submit all requested information	_____
Test Cases:	
List all required test cases	_____
Provide output forms for important test cases	_____
Other issues:	_____
Extra Credit:	_____
Timeliness:	_____
Project Score:	<div></div>

Project specification

This software is intended to give the spark plug number that is equivalent to other brands.

It is designed to be run in Visual Studio 2008 using the C# coding.

It uses user input including the selected brand and number of the part.

It displays CCC brand number.

Used in the project are arrays, 2-dimensional arrays, methods, list boxes.

Project status

The project is not complete.

I tried for many hours to get the text file into an array of structure.

I was successful in loading the file into string arrays using this code

```
//Load text file
TextReader tr = new StreamReader("C:\\Users\\bryantt\\Desktop\\project 4 3
test\\WindowsFormsApplication1\\bin\\Debug\\test.txt");

//lines loaded
int NumberOfLines = 5;

//array for each line
string[] ListLines = new string[NumberOfLines];

//Read the number of lines and put them in the array
for (int i = 1; i < NumberOfLines; i++)
{
    ListLines[i] = tr.ReadLine();
}

//Make array for each line
string[] ccc = ListLines[1].Split(new Char[] { ',' });
string[] brandsA = ListLines[2].Split(new Char[] { ',' });
string[] brandsB = ListLines[3].Split(new Char[] { ',' });
string[] brandsC = ListLines[4].Split(new Char[] { ',' });

// close the stream
tr.Close();
```

However I was never able to get these string arrays to convert into a 2-dimensional array structure.

I tried parsing methods, I tried integer and character and string conversion without success. I also tried making using loops to create 2-dimensional arrays without success.

I also tried just using these arrays but was unable to do so successfully

I do know that these arrays worked in exporting the data from the text file because when used code like the following, I got successful results

```
textBox1.Text = brandsB[3].ToString();
```



RN8

I feel that the project is 95% complete, I am just missing one step of converting these string arrays into the 2-dimensional arrays that I used in the finalized project

Sketch of user interface

The sketch shows a user interface for 'Chris Car Center'. It features a title bar at the top, followed by a section for 'Part Number' with an adjacent input box. Below this is a list of three radio buttons labeled 'BRAND A', 'BRAND C', and 'BRAND X'. A 'Look Up' button is positioned below the list. At the bottom, there is a section for 'CCC Part Number' with another input box.

Chris Car Center

Part Number

☐ BRAND A

☐ BRAND C

☐ BRAND X

CCC Part Number

[illegible]

CISP 41

Programming in C#

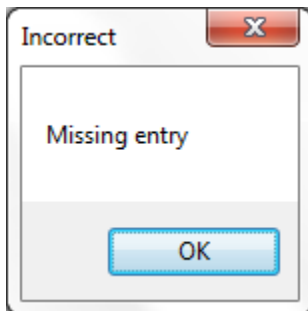
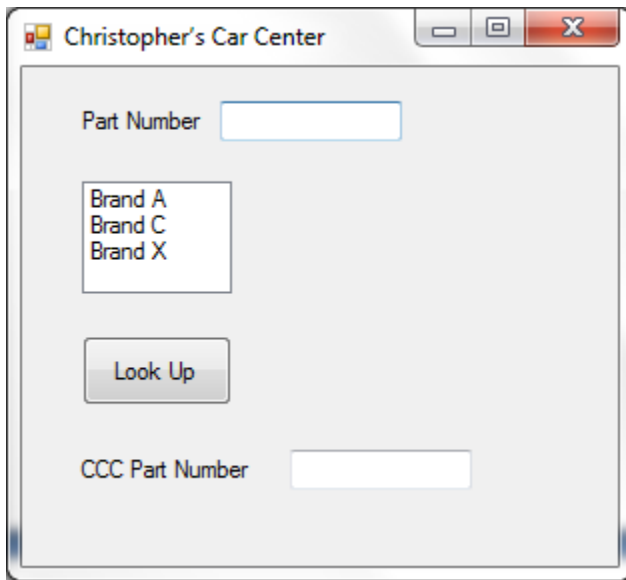
Event Plan for _____ BTunbutrProject 4_____Form

[illegible]

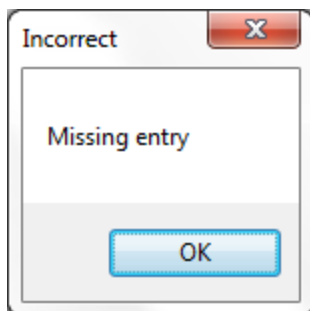
Test cases and captured screens

Test case #1

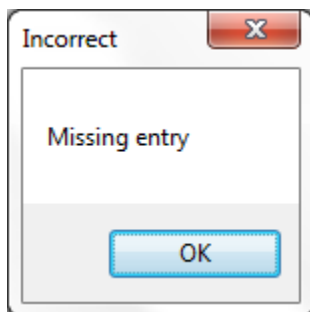
Nothing selected



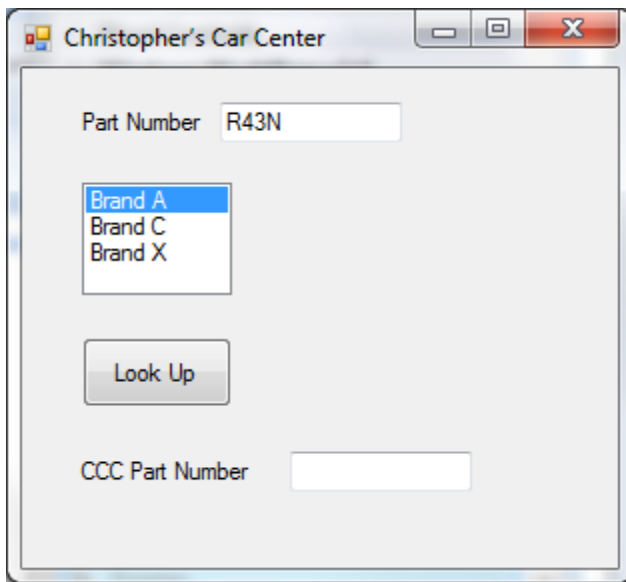
Test case #2a
Only a part number is entered



Test case #2b
Only a brand is selected



Test case #3



Christopher's Car Center

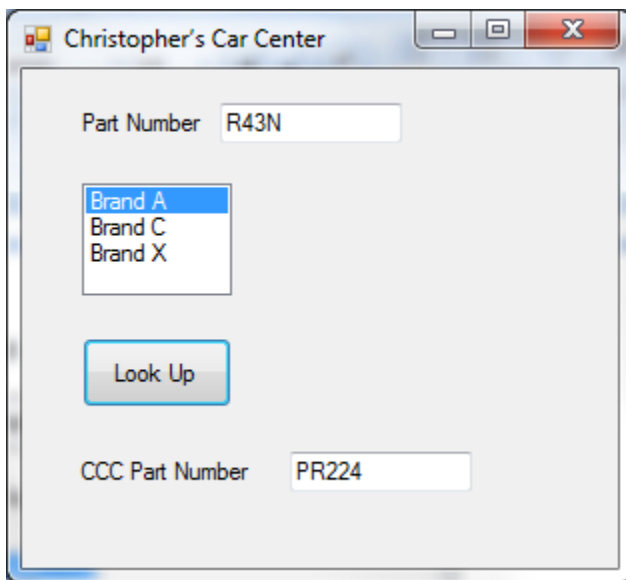
Part Number R43N

Brand A
Brand C
Brand X

Look Up

CCC Part Number

This screenshot shows the initial state of the application. The 'Part Number' field contains 'R43N'. The 'Brand' dropdown menu is open, showing 'Brand A' as the selected option. The 'Look Up' button is visible and not highlighted. The 'CCC Part Number' field is empty.



Christopher's Car Center

Part Number R43N

Brand A
Brand C
Brand X

Look Up

CCC Part Number PR224

This screenshot shows the state of the application after clicking the 'Look Up' button. The 'Look Up' button is now highlighted with a blue border. The 'CCC Part Number' field now contains the value 'PR224'.

Test case #4

Part #14K44 with each of the brands selected

Christopher's Car Center

Part Number 14K44

Brand A
Brand C
Brand X

Look Up

CCC Part Number

Christopher's Car Center

Part Number 14K44

Brand A
Brand C
Brand X

Look Up

CCC Part Number

Christopher's Car Center

Part Number 14K44

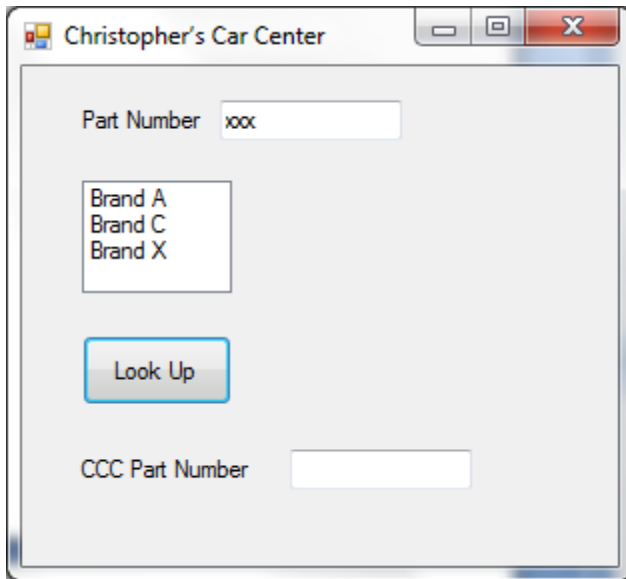
Brand A
Brand C
Brand X

Look Up

CCC Part Number PR444

Test case #5

A non existing part number is entered



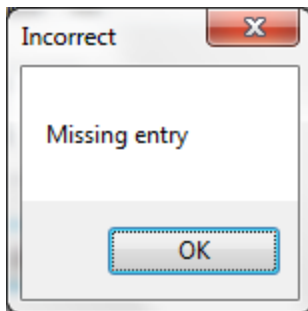
Christopher's Car Center

Part Number

Brand A
Brand C
Brand X

Look Up

CCC Part Number

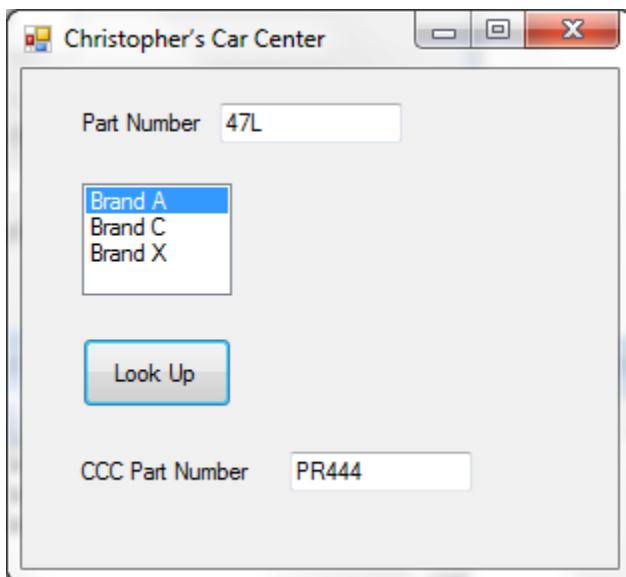


Incorrect

Missing entry

OK

Test case #6



Christopher's Car Center

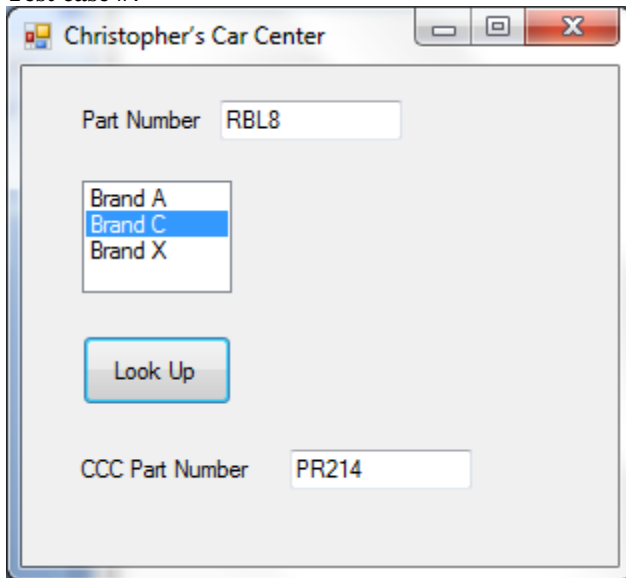
Part Number

Brand A
Brand C
Brand X

Look Up

CCC Part Number

Test case #7



A screenshot of a software application window titled "Christopher's Car Center". The window contains a form with the following elements: a "Part Number" text box with the value "RBL8"; a dropdown menu with three options: "Brand A", "Brand C" (which is highlighted in blue), and "Brand X"; a "Look Up" button; and a "CCC Part Number" text box with the value "PR214". The window has standard Windows-style title bar controls (minimize, maximize, close).

Christopher's Car Center

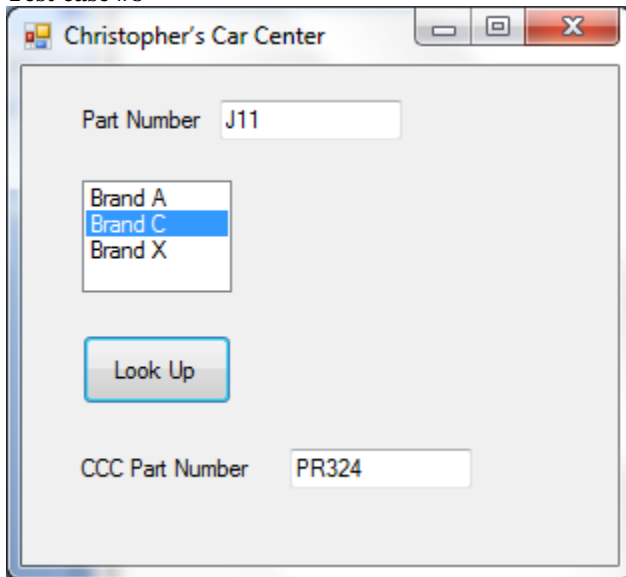
Part Number RBL8

Brand A
Brand C
Brand X

Look Up

CCC Part Number PR214

Test case #8



A screenshot of the same software application window titled "Christopher's Car Center". The form elements are identical to the previous screenshot, but with different values: the "Part Number" text box now contains "J11", and the "CCC Part Number" text box now contains "PR324". The dropdown menu still shows "Brand A", "Brand C" (highlighted), and "Brand X". The "Look Up" button remains the same. The window title bar and controls are also consistent with the previous screenshot.

Christopher's Car Center

Part Number J11

Brand A
Brand C
Brand X

Look Up

CCC Part Number PR324

```
/*
 * Project: BtunbutrProject4
 * Programmer: Bryant Tunbutr
 * Date: Nov 22 2012
 * Description: Uses array of structures to match part number with brand number
 * 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.Linq;
using System.Text;
using System.Windows.Forms;
using System.IO;

namespace WindowsFormsApplication1
{
    public partial class Form1 : Form
    {
        //Create arrays, 2 dimensional for brands
        string[,] brandsString = new string[9, 3];
        string[] cccString = new string[9];

        public Form1()
        {
            InitializeComponent();
        }

        private void lookUpButton_Click(object sender, EventArgs e)
        {
            //Organize by having each brand have same second integer,
            //i.e. Brand A has second integer of 0

            //Brand A
            brandsString[0, 0] = "MR43T";
            brandsString[1, 0] = "R43";
            brandsString[2, 0] = "R43N";
            brandsString[3, 0] = "R46N";
            brandsString[4, 0] = "R46TS";
            brandsString[5, 0] = "R46TX";
            brandsString[6, 0] = "S46";
            brandsString[7, 0] = "SR46E";
            brandsString[8, 0] = "47L";

            //Brand C
            brandsString[0, 1] = "RBL8";
            brandsString[1, 1] = "RJ6";
            brandsString[2, 1] = "RN4";
            brandsString[3, 1] = "RN8";
            brandsString[4, 1] = "RBL17Y";
            brandsString[5, 1] = "RBL12-6";
            brandsString[6, 1] = "J11";
            brandsString[7, 1] = "XEJ8";
            brandsString[8, 1] = "H12";

            //Brand X
            brandsString[0, 2] = "14K22";
        }
    }
}
```

```

brandsString[1, 2] = "14K24";
brandsString[2, 2] = "14K30";
brandsString[3, 2] = "14K32";
brandsString[4, 2] = "14K33";
brandsString[5, 2] = "14K35";
brandsString[6, 2] = "14K38";
brandsString[7, 2] = "14K40";
brandsString[8, 2] = "14K44";

//CCC NUMBER
cccString[0] = "PR214";
cccString[1] = "PR223";
cccString[2] = "PR224";
cccString[3] = "PR246";
cccString[4] = "PR247";
cccString[5] = "PR248";
cccString[6] = "PR324";
cccString[7] = "PR326";
cccString[8] = "PR444";

int brandInteger = brandListBox.SelectedIndex;
int lengthInteger = 9;

//make sure user has selected and entered data
if (partNumberTextBox.Text != "" && brandInteger != -1)

    for (int indexInteger = 0; indexInteger < lengthInteger; indexInteger++)
    {
        //match part number with brand number.
        if (partNumberTextBox.Text == brandsString[indexInteger,
brandInteger])
        {
            //display result.
            cccPartNumberTextBox.Text = cccString[indexInteger];
        }
    }

    //check for exeption.
else
{
    MessageBox.Show("Missing entry", "Incorrect");
}
}
}
}

```