

Activity 3

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CST-150: C# Programming I

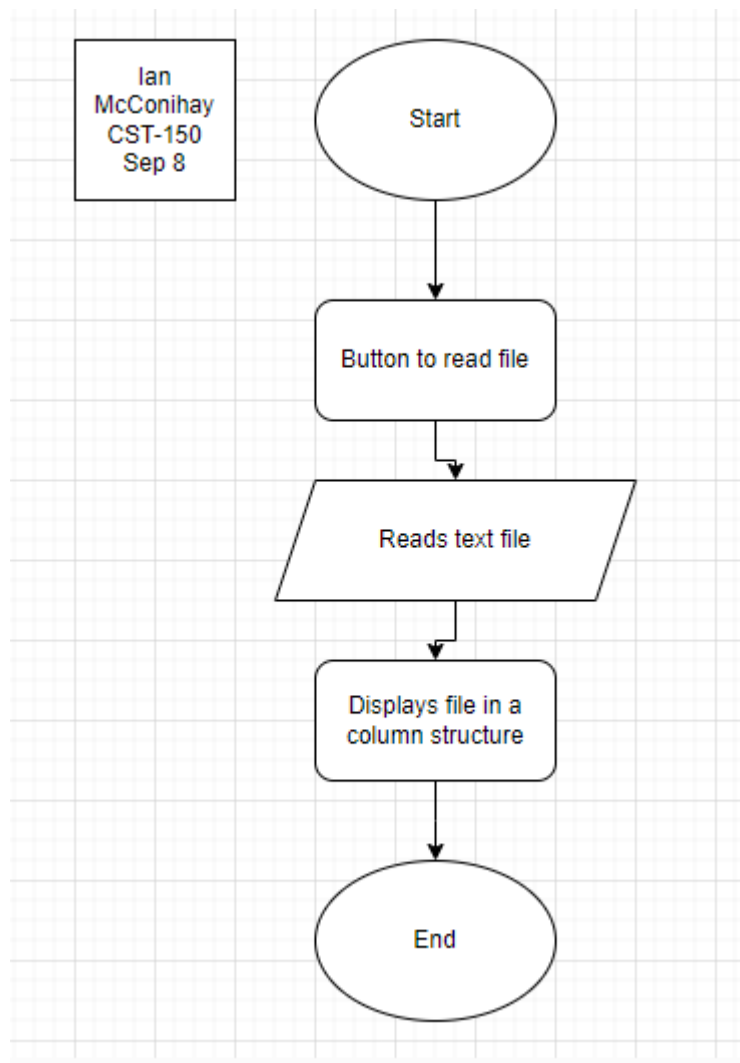
Mark Smithers

September 8, 2024

Video Link:

<https://www.loom.com/share/135752970cc7447fac67bfae86c30135?sid=110e1ebd-4073-46bd-b52f-59040ce9b5b1>

Github: <https://github.com/Ian-McConihay/CST-150>

Flowchart

The flow chart for the Activity 2 Part 1 application. This application allows the user to click a button to read a txt file. Once the button is clicked the user is able to select a file and an event fires off to display the text information. The display will be in column formation.

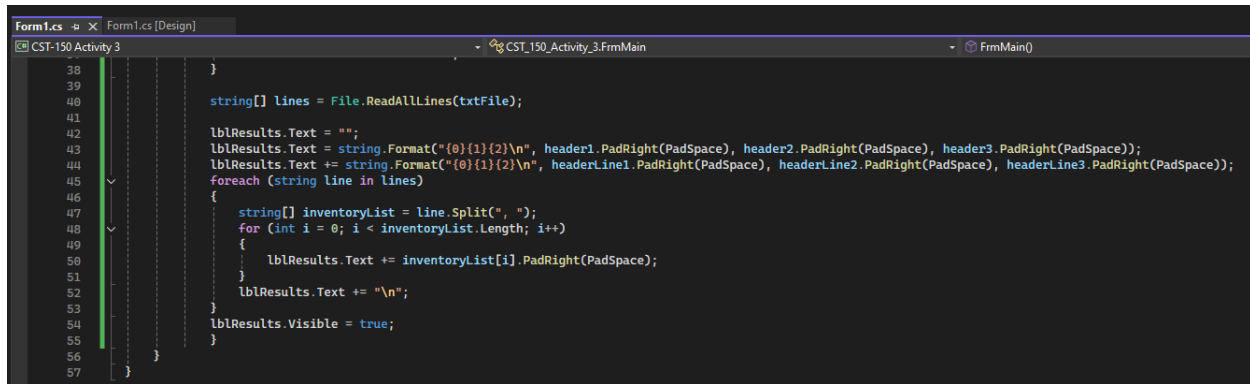
Application Screenshots

```

1  /*
2   * Ian McConihay
3   * CST-150
4   * HelloWorldFormsApp
5   * Sep 8 2024
6   */
7  namespace CST_150_Activity_3
8  {
9      3 references
10     public partial class FrmMain : Form
11     {
12         1 reference
13         public FrmMain()
14         {
15             InitializeComponent();
16             selectFileDialog.InitialDirectory = Application.StartupPath + @"Data";
17             selectFileDialog.Title = "Browse Txt Files";
18             selectFileDialog.DefaultExt = "txt";
19             selectFileDialog.Filter = "Text Files (*.txt)|*.txt|All Files (*.*)|*.*";
20
21             lblResults.Visible = false;
22             lblSelectedFile.Visible = false;
23         }
24
25         1 reference
26         private void BtnReadFileClickEvent(object sender, EventArgs e)
27         {
28             string txtFile = "";
29             string dirLocation = "";
30             const int PadSpace = 20;
31             string header1 = "Type", header2 = "Color", header3 = "Qty";
32             string headerLine1 = "-----", headerLine2 = "-----", headerLine3 = "-----";
33
34             if (this.selectFileDialog.ShowDialog() == DialogResult.OK)
35             {
36                 txtFile = this.selectFileDialog.FileName;
37                 dirLocation = Path.GetFullPath(selectFileDialog.FileName);
38                 lblSelectedFile.Text = txtFile;
39                 lblSelectedFile.Visible = true;
40             }
41         }
42     }
43 }

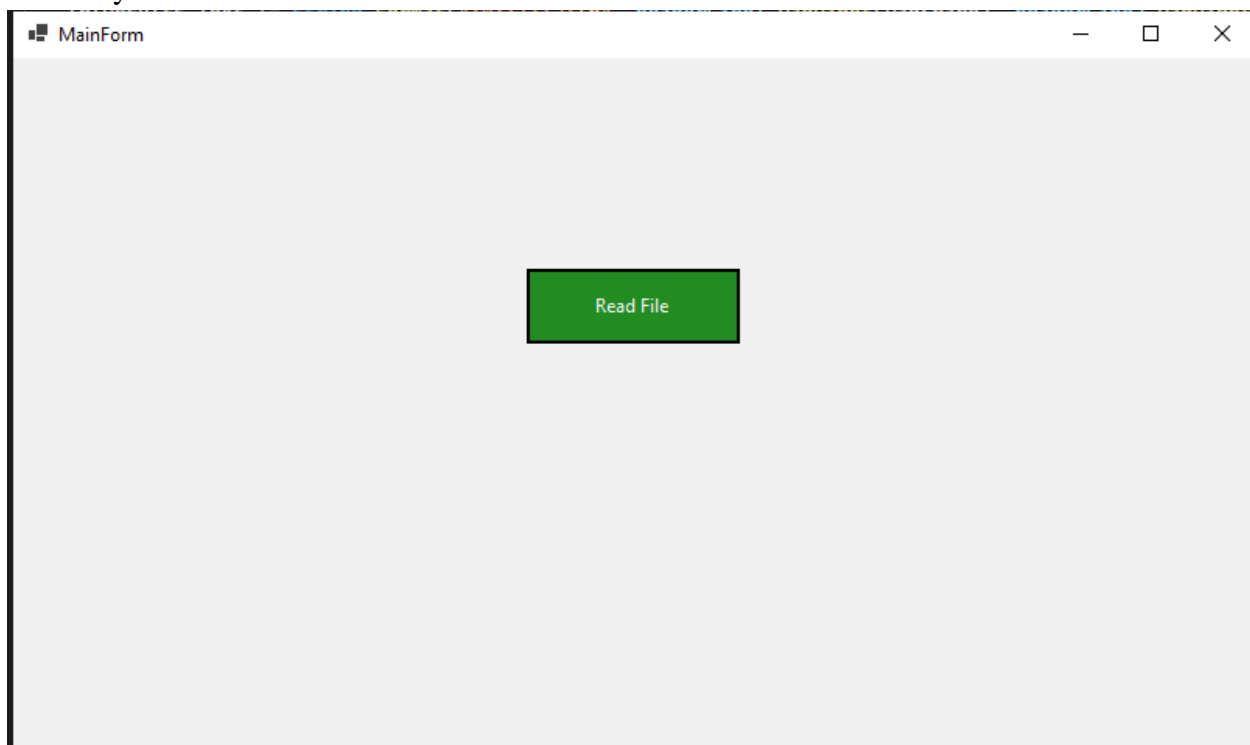
```

In this screenshot we can see the citation. After that we initialize the access to the directory and text files we are looking for when using the selectFileDialog. This then leads into the button click event. The beginning of the method is just setting the variables used.

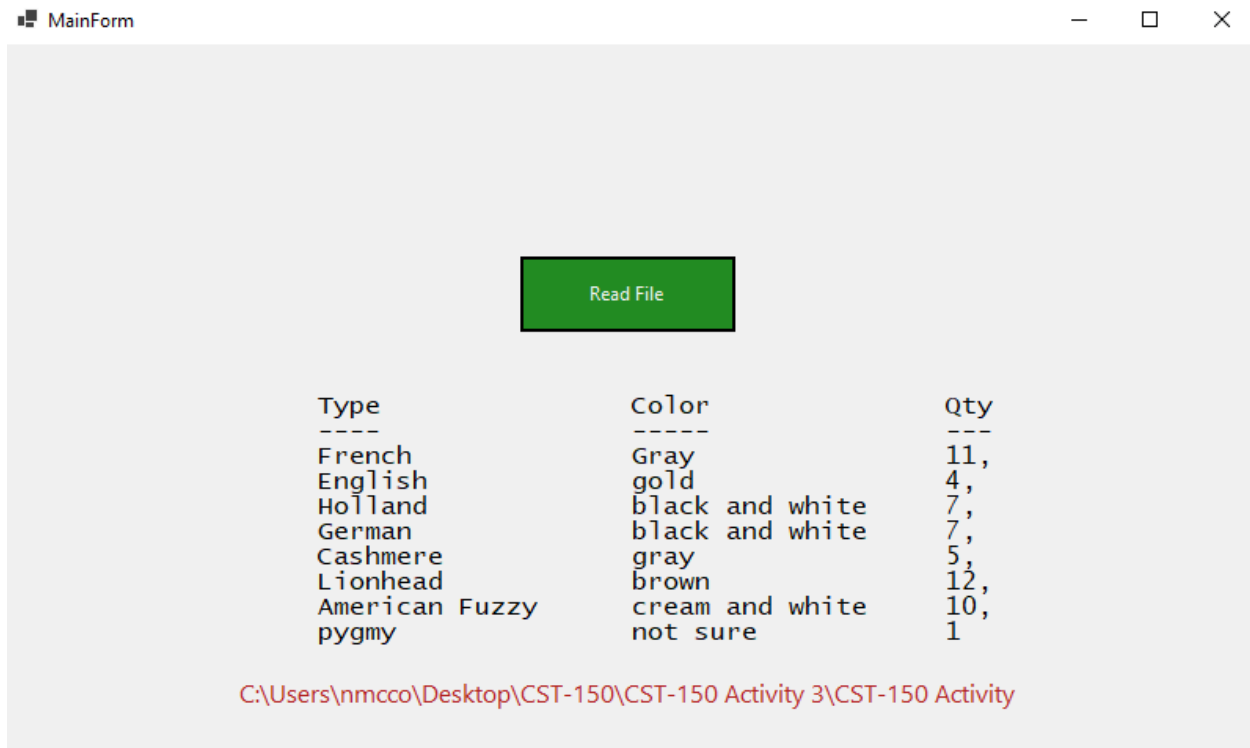


```
Form1.cs Form1 [Design]
CST-150 Activity 3 CST_150_Activity_3.FrmMain FrmMain()
38 }
39
40 string[] lines = File.ReadAllLines(txtFile);
41
42 lblResults.Text = "";
43 lblResults.Text = string.Format("{0}{1}{2}\n", header1.PadRight(PadSpace), header2.PadRight(PadSpace), header3.PadRight(PadSpace));
44 lblResults.Text += string.Format("{0}{1}{2}\n", headerLine1.PadRight(PadSpace), headerLine2.PadRight(PadSpace), headerLine3.PadRight(PadSpace));
45 foreach (string line in lines)
46 {
47     string[] inventoryList = line.Split(", ");
48     for (int i = 0; i < inventoryList.Length; i++)
49     {
50         lblResults.Text += inventoryList[i].PadRight(PadSpace);
51     }
52     lblResults.Text += "\n";
53 }
54 lblResults.Visible = true;
55 }
56 }
57 }
```

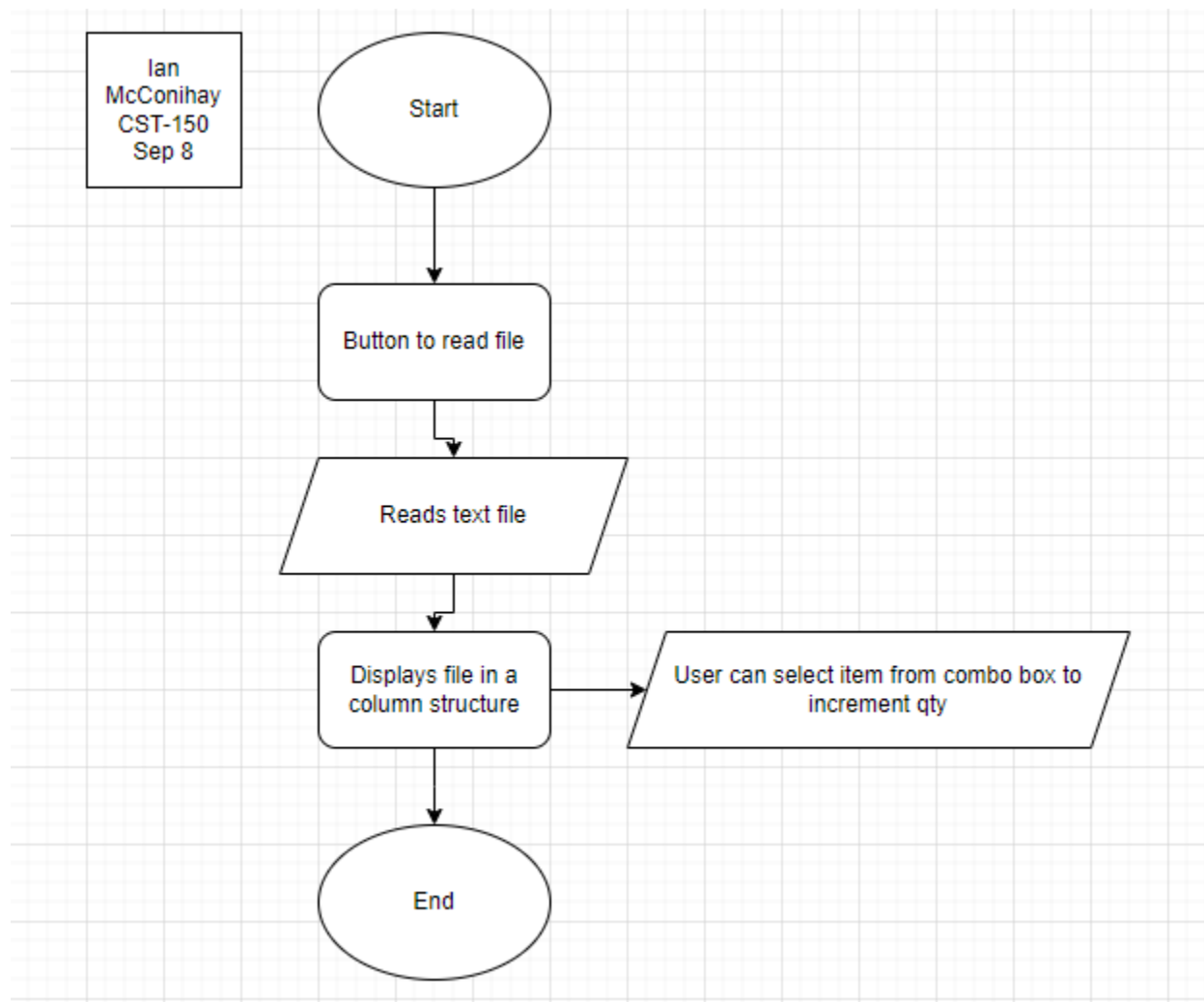
In this screenshot we have the continuation of the method. We use `File.ReadAllLines` in order to persist the information from the txt file. Using a `string.Format` we can set up the display for the inventory items.



Here I have the application running. We have only the green Read File button ready for the user to select the text file. We can also see the name for the application is changed to MainForm.



Here I have the application running with the data displayed. Three columns iterating the data set by the instructor. There is also the file path displayed in red using a label component on the bottom.

Part 2 of Activity 3**Flowchart**

Activity 2 part 2 required a flowchart for Activity 4. This application allows the user to read a text file but with added handling for better validation. We also added the ability for the user to use a combo box to select an item and increment the quantity.

1. What was challenging?

I had some issues with reading the text file. I didn't know I needed to have my file look a certain way to persist the data correctly.

2. What did you learn?

I learned about formatting data from txt files.

3. How would you improve on the project?

I would use better handling builders for the txt file formatting.

4. How can you use what you learned on the job?

I can use this for reading files and capturing the data in objects.