

Programming Assignment #1

Write a small program that will read text from the clipboard and output to the console the first 1000 unique words in sorted order, one word per line. You should remove the punctuation marks (. , ; : ? !) and all newlines and carriage returns. You can use the `System.String.Split` method to accomplish this. If you look at the resulting array you can determine the character keys for newlines, etc. Make sure no empty strings are output as those are not words. Also all unique words should ignore case. You can output the words in all lowercase. The final output should be sorted.

Hints:

- Your Main method must have an **attribute** indicating that it needs to run in a Single Threaded Apartment (STA). This allows .NET to communicate with COM and allows the clipboard to work between native and managed codes. Before Main, add the following line
`[System.STAThread]`
- There is a Clipboard class. Use the MSDN help to determine the methods and how to call them. Also, note from the help the namespace needed for this class, as well as the Reference or dll needed. You can add the required reference by right-clicking the project's references and selecting Add Reference. You will want the .NET reference indicated in the help page.
- While you could use arrays, the **generic** list data structure works much better for this problem (`List<string>`). However, since we haven't covered that yet, you are required to use arrays.
- My entire Program.cs file (the only file I modified) is less than 35 lines of code, so do not overthink it. Use the support given to you in the .NET framework. You should be able to have this nearly complete by the end of class.

Additional Tasks

1. In the Properties folder, Open the AssemblyInfo.cs file and fill in the Title through the Copyright information. This information will be displayed if you look at the properties of your .exe file.
2. Make sure your program does not crash with large clipboards, no text in a clipboard, etc.
3. Provide comments explaining your logic. Also, add a block comment to the beginning of the file listing your name, the course and a description of the lab (from above but in a completed tense).
4. Do a Build Clean and then submit your assignment using submit directory for this class (see course web site).