Analyze Novel

Introduction

There’s a longstanding theory that Roger Bacon actually wrote some of Shakespeare’s plays. Whether that’s true or not, one way this possibility has been investigated has been to do an analysis of certain aspects of the writing styles in various works attributed to Shakespeare. If some works tended to use, say, short words, while others used much more grandiloquent ones, perhaps this was just a single author being in various moods. Or maybe they were written by different authors. You can also compare, for example, sentence length. And so on.

This program was designed to show various (but hardly all) aspects of the C# language and the .Net runtime. It offers the following peeks:

* .Net classes
  + The Dictionary (hash table) class, making it easy and efficient to count, say, the number of occurrences of each word.
  + File I/O, reading the entire contents of a text file in a single expression, returning the result as an array of lines.
  + Directory (Folder) support, retrieving the names of all \*.txt files in a specified directory.
  + Splitting a string into its component words
* UI (User Interface) features, including
  + Populating a combo box (pull-down list) with the names of the \*.txt files, allowing them to be selected when a Go button is clicked.
  + A ListView (grid) control (widget) that shows results of the analysis of a .txt file in multiple columns.
  + A Search TextBox, allowing the user to highlight selected lines of the results.
  + Formatting integers with commas every thousand (e.g. 1,234,567)
* C# language features
  + Simple user-defined class, with fields and methods
  + LINQ (Language Integrate Query)
  + Tuples