Text File Analyzer

Software Requirements Specification (SRS)

Team Members:

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Revision History

Date	Revision	Description	Author
11/1/17	49aa18d	First Commit	Jacob Anderson
11/1/17	a6d7bb5	Upload files	Jacob Anderson
11/16/17	2298510	Partially completed parser	Dylan Brabec
11/16/17	71676cf	Update to parser	Dylan Brabec
11/16/17	c8c5b1c	Adding light GUI to parser	Branden Phillips
11/17/17	31b7e3c	Commenting and fixing variable names	Branden Phillips
11/25/17	1523a3f	Adding help page	Branden Phillips
11/30/17	1efa1d6	Completed parser	Dylan Brabec
12/1/17	514bcd9	Fix to GUI and got everything running	Jacob Anderson
12/1/17	3d4946a	Final Updates	Jacob Anderson

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1. Project Overview

1.1 Overview

For this project, our goal was to create a java program that takes a text file as input and then analyzes and reports several statistics about the file.

These statistics include

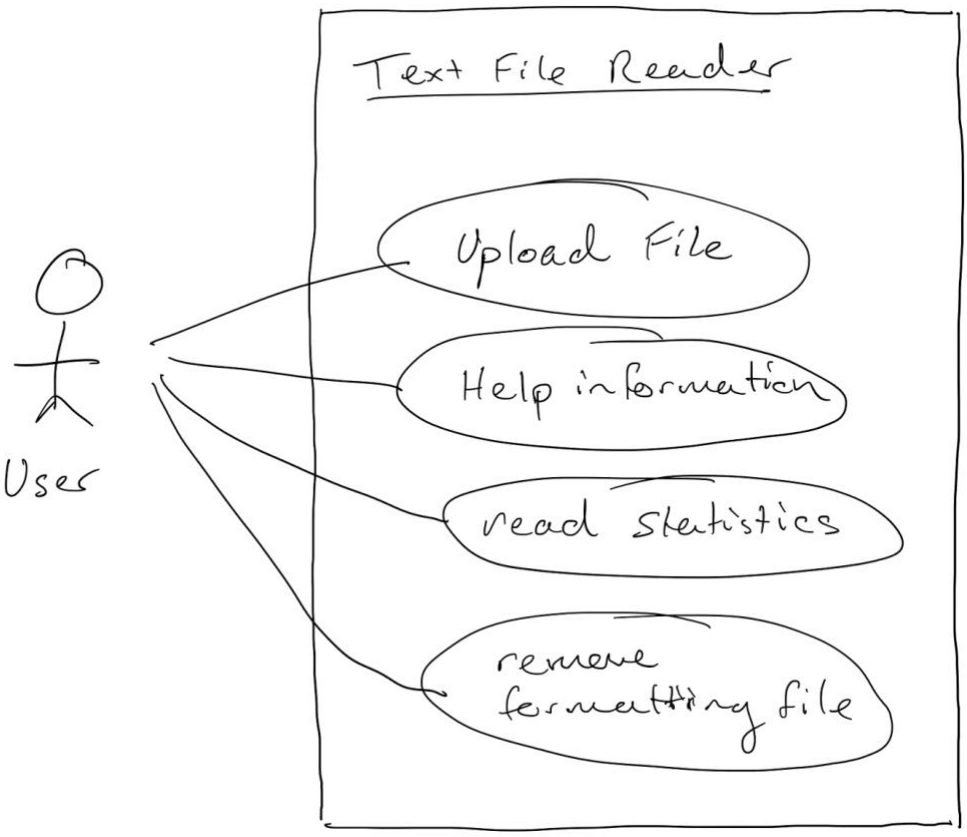
- Number of Lines
- Number of Blank Lines
- Number of Spaces
- Number of Words
- Average Characters Per Line
- Average Word Length
- Most Common Word

This program's goal was also to save the history of all files that had been uploaded and report the lifetime averages of the previously mentioned statistics. Along with this file analysis, the program includes a help page that gives a brief explanation of what each statistic is, along with other general instructions.

This program began as a java script program which used HTML to create the GUI. Early on it was changed to a singular java file which contained all of the code. We began with a partial version of the text parser along with a GUI which still only updated statistics in the command line. This is the stage where the help button and the help page was added to the program. Our next goal was to complete the parser and display statistics to the GUI. Once this was completed, our last task was to handle multiple files over the program's history and to display their averages on the GUI.

2. Use Cases

1.1 Use Case Diagram



1.2 Use Case Scenarios

- As a user, I want to upload a text file, because that way the program can analyze it and report the statistics.
- As a user I want a help page, because I want an explanation of what each piece of the program does and what the statistics mean.
- As a user I want to be able to read the statistics of the file(s) that I have uploaded, because that is the purpose of the program and there wouldn't be any other reason to upload a file if I cannot see the statistics.
- As a user I want the program to remove the file formatting, because that way I do not have to worry about the formatting myself, the program will take care of that for me.

3. Test Plan

3.1 Test Cases

	Feature	Description	Possible Input	Expected Output
1	Upload File	Click on the upload file button and choose a file from directory.	Text File	File statistics
2	Help Button	Click on the help button and a new window pops up with help information.	Button Click	New window with help information.
3	Parser	Trying text files with different text in them, blank lines, no blank lines, lots of spaces, no spaces, short words, long words, etc.	Text Files	The correct statistics for what is in that file

4. Project Plan

4.1 Plan for the First Deliverable

	Task	Description	Assignment
1	Class Diagram	Class Diagram of the project will be drawn using the in GenMyModel.	Dylan
2	Use of GitHub	Making sure to commit changes to GitHub to keep track of history.	Branden, Jacob, Dylan
3	Begin Parser	Begin to create the file reader and parser for the program.	Dylan, Jacob
4	Begin GUI	Get a GUI to load when program is started, have a button for uploading a file.	Branden

4.2 Plan for the Second Deliverable

	Task	Description	Assignment
1	Updated Doc.	Keep our documentation of the project up to date.	Dylan, Jacob, Branden
2	Add more functionality to parser	Add more features and statistics to the parser that had not yet been added.	Dylan, Jacob
3	Convert GUI	Convert GUI from the HTML/JavaScript program to our new java program.	Jacob, Branden

4.3 Plan for the Third Deliverable

	Task	Description	Assignment
1	Documentation	Finish the project's documentation file. (Software Requirements Specification).	Branden
2	Complete the Parser	Adding the final piece of the parser to the program, finding most common word.	Dylan
3	Finish GUI and Help Page	Adding statistics to the GUI along with a help button that leads to a help page.	Jacob, Branden
4	Handling of Multiple Files	Being able to save previous file statistics and average them out after each new file has been uploaded.	Jacob