

CS102

Spring 2020/21

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Group

G2H

Assistant:

Project

Criteria	TA/Grader	Instructor
Presentation		
Overall		

Spell Checker and Corrector for English

G2H

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Requirements Report

(version 2.0)

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1. Introduction

Keeping track of the spelling errors for especially long and sophisticated texts is a devastating task for students of all steps of education but especially for college students. Common causes of spelling mistakes can be listed among college students as silent consonants, variable spellings of the same word ending, words with a difficult pronunciation, etc. To avoid these mistakes, we propose a spell checking aid that will provide users a convenient and time-saving spell checking tool that can also assign several writing tips to

improve the caliber of the text. The tool will also provide practicing opportunities to students via a spelling knowledge game within the system. Eventually, students will be able to correct their errors, develop their writing style through handy advice, and keep fresh of their spelling knowledge.

2. Details

2.1 Features

- The program is going to be a desktop program.
- The program will have two main modes: free writing mode that contains spell checking, text editing and comment adding features and, practice mode that contains games, trivia about the English language and words, etc. Mode selection will be done at the beginning of the program
- After selecting the free writing mode, users can either type or copy and paste their text in the box displayed on the screen or drag and drop their text file in the box.
- The user can also directly open Word [1] documents with file formats such as docx, doc by only dragging the file to the box as well.
- The program will enable the user to copy the text, delete the text, correct all the words or ignore all the words, and will show how many words are written so far, number of mistakes in the current text.
- The program will detect the misspelled words, poorly capitalized letters, multiple spaces, wrong punctuations and, lists them on the right side of the screen and encircle them on the text.
- The program enables users to correct mistakes, to ignore the mistake and to add words to “My List” which is a virtual list that includes the words that we choose to study later in the misspelled word list displayed on the right side of the screen under each misspelled word. If there is more than one possibility for the wrongly spelled word, the program will show these possibilities to the user as a suboption of “correct mistake option”.
- For text editing, the program provides following properties:
 - Underlining: It will include different types of lines: single line, double line, and zigzag, and those colors will be decided by the user.
 - Highlighting: It will include different color choices and opacity preferences decided by the user.
 - Turning words into italic, adjusting the font size, making the text bold, etc. will be similar to existing word processors.
- The program enables the user to add comments in the text. Those comments will be displayed on the left side of the screen as a list.
- The program includes a “Practice” mode that starts “Game” that helps the user to study the words that he/she wrote wrong and added to “My List”.
 - Description of the practice game: The game will show the wrong version of random words. Users can try to find the true version of the word. When the user finds a true version of the word 5 times, give the user the option to delete a word from "My List". The game first shows us the words that we misspelled or the commonly misspelled words.
- The program will also list the words which are most frequently used in the text.
- The user may choose to use the program using night mode.
- Program includes a “Help” mode that provides our mail for users to send suggestions from users to develop our program further.

2.2 Why People Should Choose Our Spell Checker

- Grammarly, one of the popular Spell Checker programs, helps users to correct both spelling and grammar mistakes in users' texts. Besides, gives suggestions based on thousands of rules, and Includes modes like "Academic", "General" etc [2]. We can help solve our users' problems quickly and make changes according to their specific needs, since our program doesn't have millions of users. The other program named Ginger is similar to Grammarly. But Ginger has some problems with complex grammar problems. Also, easy to access Ginger by downloading, and users can buy limitless subscriptions [3]. Since Ginger has some problems with complex sentences. Therefore, users can easily be distracted and have trouble with what is going on, our program does not require subscriptions or extra payments. Another program Google Docs enables people, especially students, to use Google Docs simultaneously, so this enables students to work together, and Google Docs is free to use [3]. However, users need to have an Internet connection to use Google Docs, our program does not require an Internet connection, it is easier to access.
- In general, our program has a practice mode that helps users to learn from their mistakes, and users can develop themselves by practicing commonly misspelled words. Also, unlike other spell checkers in the market, our program provides a memory feature that saves the spelling mistakes and then displays these errors for the benefit of the user. For example, the program gives recommendations at the start screen like "Last time you made a mistake while you were adding plural suffixes. Did you pay attention this time?"

3. Summary & Conclusions

This report demonstrates the features of a new product intended to assist any kind of writer in their spell-checking process. With the help of computer technology, we offer users a solution that is innovative via combining spell checker features and practicing features, informative via passing on writing tips and opportunities to keep fresh user's spelling knowledge, entertaining via proposing an appealing user interface and a game you will be passionate about.

4. References

- [1] Microsoft. Microsoft Office. (1983). (16.0.13801.20266). [Computer App]. Microsoft Word Website. <https://www.microsoft.com/tr-tr/microsoft-365/word>.
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