

The purpose of this project is to modify the Spellchecker program to improve user interaction. You should add the following functionality to the existing program:

1. Create a user menu that provides users the following options when the program begins:
  - a. Spellcheck a word
  - b. Add a word to the dictionary
  - c. Output the dictionary
  - d. Write dictionary to file (i.e. after adding a new word)
  - e. Exit
2. When the user selects “Spellcheck a word”, the program should spellcheck the word, and then ask the user whether they want to check another word.

Example interaction:

```
Enter a word: string
string is a valid word! Check another word? y/n: y
Enter a word: zoom
zoom is a valid word! Check another word? y/n: n
[ exit the loop and display the user menu ]
```

3. When the user selects “Add a word to the dictionary” the program should prompt the user for a new word, and then add that word to the list in the correct position. You do NOT have to insert the word into the text file for this step.
4. When the user selects “Output the dictionary” the program should print out all the words in the list.
5. When the user selects “Write dictionary to file” the program should replace the contents of the text file with the contents of the list.
6. When the user selects “Exit” the program should print “Goodbye!” and exit.