Word Completion Algorithm

Objective:

Using knowledge of the spelling of simple words, create a database of corrected words to display if the user makes a mistake.

Complexity level:

* Hard

Business Scenario:

* John Doe is constantly making spelling errors while typing.

Problem Statement:

1. Write an algorithm that recognizes the incorrect word and fixes it for the user (for three, 4 letter words and one 5 letter word for this algorithm).
2. Write an algorithm that acts like a “spelling bee” and takes the spelling from the user, and then displays the correct spelling if incorrect, or if it’s correct, says “congratulations” in this algorithm, if the user spells correctly, increase the difficulty of the word, and if incorrect, decreases the difficulty.

Expectation Outcome:

Spell check is a useful tool seen through autocorrect type of programs (google / texting platforms). This will give an introduction into this area.

Tools:

* Open office for designing the flow chart.

Reference URL:

1. Tam, C. & Wells, D. (2009). Evaluating the Benefits of Displaying Word Prediction Lists on a Personal Digital Assistant at the Keyboard Level. Assistive Technology, 21, 105-114.
2. Anson, D., Moist, P., Przywara, M., Wells, H., Saylor, H. & Maxime, H. (2006). The Effects of Word Completion and Word Prediction on Typing Rates Using On-Screen Keyboards. Assistive Technology, 18, 146-154.
3. Trnka, K., Yarrington, J.M. & McCoy, K.F. (2007). The Effects of Word Prediction on Communication Rate for AAC. Proceedings of NAACL HLT 2007, Companion Volume, 173-176.