Abstract

A spell checker is a basic requirement for any language to be digitized. It is a software that detects and corrects errors in a particular language. This paper proposes a model to spell error detection and auto-correction that is based on n-gram technique and it is applied in error detection and correction in English as a global language. The proposed model provides correction suggestions by selecting the most suitable suggestions from a list of corrective suggestions based on lexical resources and n-gram statistics. It depends on a lexicon of Microsoft words. The evaluation of the proposed model uses English standard datasets of misspelled words. Error detection, automatic error correction, and replacement are the main features of the proposed model. The results of the experiment reached approximately 93% of accuracy and acted similarly to Microsoft Word as well as outperformed both of Aspell and Google.

References
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Automatic Spelling Correction based on n-Gram Model

Index Terms

Computer Science

Artificial Intelligence

Keywords

N-gram - Spelling correction - Misspelling detection - Spell checker - Information retrieval.