Abstract

In the heart of this research work lies the proposed algorithm, which prioritizes the phrases of the search queries. This algorithm suggests the methodology of fetching phrases and then searching all possible phrases, so that recall value can be increased. The most important issue in this regard is the usage of such data structure, which facilitates the efficient search of phrases in documents. For this purpose, Linked Representation of Sparse Matrix has been suggested, which consists of linked lists not only rowwise but also columnwise. Columns correspond to the documents and hence make the search of every possible phrase efficient. Rows correspond to the dictionary of words. Linked Representation maintain the dynamic nature of documents as well as insertion and deletion of words from the documents.

Emphasis has also been given to the categorization of dictionary and query words into specific and general words, which will increase the precision of search results. Specific words will be given higher priority as compared to the general words.
Synonyms have also been considered for retrieval of documents, hence increasing the understanding between user requirement and search engine.

**References**

8. Marie Boltz et al., 2010 "Building a framework for a geriatric acute care model", Leadership in Health Services, Vol. 23 Iss: 4, pp.334 – 360

**Index Terms**

- Computer Science
- Algorithms

**Keywords**

Linked Representation, Search Engine, Precision, Recall, F-measure, Algorithms, Database