Abstract

World Wide Web, in short www or simply web, is interconnection of hypertext documents through internet and accessed with the help of web browser. The web search is enabled by navigating hyperlinks in a webpage or through search engines or by web programming. The search queries are classified mainly in four types as Informational queries, Navigational queries, Transactional queries and Connectivity queries. We can classify the evolutionary development of web query processing from database query processing and SQL optimizations as Learning and Adaptive query processing, Web query through HTML and web search taxonomies, Web search query and search engines, Web query languages and its models, Semantic web and Ontologies, Web query optimizations on distributed web as well as on semantic web and Use of context-based techniques in web query processing. In this survey we are discussing on each of these topics and including how synonyms adding approach and Linguistic based approach are used in web query processing. There are three stages of query processing in general namely, Statistics generation, query optimization and query execution. Further, queries are optimized using performance and correctness measures namely Precision, Recall, Fall-out, F-measure, Average precision, R-Precision, Mean average precision, discounted cumulative gain and some more measures. Some of this surveyed paper discusses these details and others concentrate on their research work in different contexts. Our further work will be on the query using
synonym based classifier or statistical classifiers, such as Naive Bayes (NB) and Support Vector Machines (SVMs). Other future work will be how to use unlabeled query logs to help with query classification and also on solution to adapt the changes of the queries and categories. We propose to use web query modeling using soft-computing techniques.

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Index Terms

Computer Science

Information Sciences

Keywords

Web query- Semantic Web - Ontology - query classification - query optimizations