Abstract

The foremost mission of any information retrieval algorithm is the efficient extraction of user interests. The rapid growth of web data, intense competition and user’s option to choose from several alternatives increases this issue. In this context Web usage mining can provide valuable contributions in terms of ideas and methods, as it fissures useful knowledge from the pattern of user interactions with the Web. The user interest can be identified by analyzing the access pattern of user browse, the web pages they save, collect, or print. These valuable information’s are available in server logs, which can be exploited to satisfy user needs by optimizing the document-retrieval task. This article is a review conducted in the field of web usage mining and its latest works for supporting the research on efficient information retrieval based on user access pattern. This survey analyzes 25 released information retrieval models to find out the major mining techniques applied in them and also to analyze the effect of diverse parameters like feedbacks, time, content, frequency etc in information retrieval. The goal of this survey is to find the best composition of features to be included in an efficient information retrieval model. Using those features a new retrieval model is then proposed.
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**Index Terms**

Computer Science     Web Services

**Keywords**

Information retrieval     User navigational patterns     Web usage mining     Web personalization

Retrieval parameters.