

Jordan University of Science and Technology

Enhancing Cluster Quality Using User Browsing Time

Authors: R. M. Duwairi, K. Al-Jada'

Abstract: The World Wide Web currently contains billions of documents; this causes difficulty in finding the desired information by users. Search engines help users in finding their desired information but search engines still return hundreds of irrelevant web pages that do not fulfill the user's query. Several search engines use clustering to group documents that are relevant to the user's query before returning them to the user, but there is no document clustering algorithm that has an accuracy that can prevent retrieving irrelevant documents. In this research, the researchers have introduced a new technique to enhance cluster quality by using user browsing time as an implicit measure of user feedback, rather than using explicit user feedback as in previous research and techniques. The major contributions of this work are: investigating user browsing time as an implicit measure of user feedback and proving its efficiency, enhancing cluster quality by using a new clustering technique that is based on user browsing time, and developing a system that tests the validity of the proposed technique.