

Shortcut Links Suggestion by Web Usage Mining

Ei Mon Hlaing, Nang Saing Moon Kham

University of Computer Studies, Yangon

estarllessky@gmail.com

Abstract

Today's websites are having a lot of small parts or details arranged in a complicated way and are therefore sometimes difficult to understand for the visitors. The web sites designers are faced with increasing challenges when it comes to organizing large amounts of information in such a way that includes quick access to relevant information and does not require too much user effort. Shortcutting aims to reduce the number of clicks required in a user's navigational path to reach a target document, assisting the user in navigating through a website and thereby also improving the website's organization. This paper presents an approach to find shortcut links by web usage mining and aims to suggest shortcut links to the website designer based on the collective user access patterns obtained from that site's web logs. In this system, similar navigational paths are grouped together by using PAM (Partitioning Around Medoids) clustering method and find wayposts, hyperlinks, that can act as potential shortcuts points by identifying documents that commonly co-occur in these paths. Shortcut links that need to be established between previously unrelated web pages or documents can be drawn out of these patterns. In this paper, K-fold cross-validation was used to evaluate the system.