

A recommender system approach for classifying user navigation patterns using longest common subsequence algorithm.

ABSTRACT

Prediction of user future movements and intentions based on the users' clickstream data is a main challenging problem in Web based recommendation systems. Web usage mining based on the users' clickstream data has become the subject of exhaustive research, as its potential for web based personalized services, predicting user near future intentions, adaptive Web sites and customer profiling is recognized. A variety of the recommender systems for online personalization through web usage mining have been proposed. However, the quality of the recommendations in the current systems to predict users' future intentions systems cannot still satisfy users in the particular huge web sites. In this paper, to provide online predicting effectively, we develop a model for online predicting through web usage mining system and propose a novel approach for classifying user navigation patterns to predict users' future intentions. The approach is based on the using longest common subsequence algorithm to classify current user activities to predict user next movement. We have tested our proposed model on the CTI datasets. The results indicate that the approach can improve the quality of the system for the predictions.

Keyword: Recommender Systems; Web Usage Mining; Longest Common Subsequence.