

INTELLIGENT RECOMMENDATION SYSTEM USING CLUSTERING AND CLOSED SEQUENTIAL PATTERN MINING

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ABSTRACT

The World Wide Web is a massive source of information that is gaining wide usage due to constant availability of huge subject content, ability to share resources, better presentation, dynamically changing content, flexibility of time, discussion facility through chats, blogs and forums etc. However, many web based learning systems lack assessment of user activities and learners are confused by huge number of web pages in the website. Searching and visiting several web pages to get the relevant content also increases the network traffic as well as the load on the server. The proposed system aims to overcome the drawback of accessing relevant web pages from the huge number of similar web pages that are available in the website by providing automatic online navigation recommendations to the users. It uses techniques such as Pre-Processing, Rough Set Clustering, Sequential Pattern Mining using Prefix Span and Closed Sequential Pattern Mining using post pruning strategy. The recommendations generated are evaluated for accuracy based on four parameters namely Precision, Recall, Miss Rate and Fallout.

KEYWORDS: Preprocessing, Rough Set Clustering, Upper Approximation, Sequential Pattern Mining, Prefix Span, Closed Sequential Pattern Mining