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AN ENCODED TEMPORAL MINING METHOD FOR FREQUENT ITEMSET IDENTIFICATION BASED ON APPLICANT'S PERCEPTION

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Abstract

The principle of data mining is better to use complicative primitive patterns and simple logical combination than simple primitive patterns and complex logical form. Mining of association rules has become vital in organizations for decision making. This paper overviews the concept of temporal database encoding, association rules mining. It proposes an innovative approach of data mining to reduce the size of the main database by an encoding method which in turn reduces the memory required. The Apriori family of algorithms is applied on the encoded temporal database and their performances are compared. The proposed method, priority based temporal mining (PBTM) is found to have better performance than the time based Apriori when compared in terms of the execution time and computation. Also an important method on how to track the association rules that change with time is focused. Thus the results obtained are lower complexities of computations involved, time and space with effective identification of changing association rules resulting in good decisions making. This helps in formalizing the database metrics in a better way.

Keyword: Temporal mining, Anti-Apriori algorithm; Apriori family of algorithms, Encoded database; Time based apriori; Priority based temporal mining