Abstract

This paper essentially analyses the sequential pattern of mining algorithms. The discovery of Association relationship seeks more attention in data mining due to the constantly increasing amount of data stored in the real application system. Mining for association rules has its usage in several areas of business such as the process of decision making and the development of customized marketing programs & strategies. Therefore, the primary objective of data mining is to transform “data into knowledge”. As a result of which, mining association rules from enormous databases has been a significant topic in recent research for knowledge discovery in databases.

It is known that database can be both dynamic and static. Static databases are the ones that do not change or alter with the passage of time. On the other hand, in dynamic databases, various new transactions append as time passes by. This might result in the production of some new itemsets while it is possible that certain frequent itemsets might as well become invalid.
Therefore, in dynamic databases, the maintenance of large itemsets can be extremely expensive, in case rerun of previous mining algorithms on updated database is applied as it repeats a major portion of work done during previous computations. Apart from this, there is also lack of space for the storage of all the data and its processing. Therefore, it is recommended that instead of finding enormous itemsets again, certain heuristics be used for mining of dynamic databases. It brings forth the study of sequential pattern-mining algorithms, classified into five varied classes.

1. on the basis of Apriori-based algorithm.

2. on the basis of FP-Growth Algorithm.

3. on the basis of Fast Algorithm.

4. on Partition Based Algorithm.

5. on the basis of Fast Update algorithm.

References


7. David W. Cheung, Jiawei Han, Vincent T. Ngt C.Y. Wongj," Maintenance of Discovered Association Rules in Large Databases: An Incremental Updating Technique", in proceedings of the 12th ICDE, New Orleans, Louisiana (IEEE), pp 106-114,February 1996.


Index Terms

Computer Science

Pattern Recognition

Keywords

Sequential Pattern, Data Mining, Pattern analysis,