Abstract

An association rule is a method to find out the frequent hidden relationship from a large amount of datasets in a database. Association analysis into existing database technology is very useful for indexing and query processing capabilities of database system and developing efficient and scalable mining algorithms as well as handling user specified or domain specific constraints and post processing the extracted patterns. In the present work, a methodology known as association analysis is presented which is very useful for discovery of interesting relationship hidden in large dataset, and an algorithm for generation of frequent data itemset known as Apriori algorithm is used and validated the relations through Unified Modeling Language (UML). Authors used the lattice structure and also discussed the various association rules for the frequent data itemset which is found by Apriori algorithm. The different strategies in generation and traversal are breadth first and depth first search traversal. These techniques provide different tradeoff in terms of the input and output memory and computational time requirements. The entire concept is implemented by considering a real case study of Vehicle Insurance Policy system (VIPS) in context of Indian scenario.
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Index Terms

Computer Science Information Sciences

Keywords
Association rule  Frequent data item sets  Apriori  Lattice structure  VIPS