ABSTRACT

Data mining refers to extracting and analyzing large amounts of data to get meaningful knowledge. Association analysis as a functionality of data mining is a process of observating frequent patterns from a set of objects.

This final project will apply MinZoomUR as an association algorithm to find unexpected (frequent) pattern. Tthe process of searching those patterns, MinZoomUR works by two mwthods, zoomin and zoomout. In the first phas eof ZoomUR, zoomin discovers all unexpected patterns that are refinements to any belief. In the second phase of ZoomUR, starting from all the unexpected refinements, zoomout discovers more general rules that also unexpected. This approach generated far fewer and more interesting patterns than traditional approach.

Though ZoomUR discovers only unexpected rules, it still discovers large numbers of rules many of which are redundant in the sense that they can be inferred from other discovered rules. Thus, to address this issue, we formally characterize minimality of a set of unexpected patterns based on the monotonicity assumption. MInnZoomUR has good performance in term discovering relevant association rules. This paper describe how MinZoomUR discover minimal set of unexpected patterns.

Keywords :   data mining, MinZoomUR algorithm, zoomin, zoomout, frequent
                patern, redundant