Visualizing the construction of incremental Disorder Trie Itemset data structure (DOSTrieIT) for Frequent Pattern Tree (FP-Tree)

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ABSTRACT

In data mining, visual representation can help in enhancing the ability of analyzing and understanding the techniques, patterns and their integration. Recently, there are varieties of visualizers have been proposed in marketplace and knowledge discovery communities. However, the detail visualization processes for constructing any incremental tree data structure from its original dataset are rarely presented. Essentially, graphic illustrations of the complex processes are easier to be understood as compared to the complex computer pseudocode. Therefore, this paper explains the visualization process of constructing our incremental Disorder Support Trie Itemset (DOSTrieIT) data structure from the flat-file dataset. DOSTrieIT can be used later as a compressed source of information for building Frequent Pattern Tree (FP-Tree). To ensure understandability, an appropriate dataset and its processes are graphically presented and details explained.

KEYWORDS

Visual Representation; Data Structure; Data Mining; Visual Informatics

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