

Abstract

All of the University or institution of education always have problem with Scheduling Courses. This is had a big impact for students and lecturer on lecturing process. The problem's scheduling courses is clash of conflict. ITT is one of institution that had scheduling problem, in every registration's step, students that choose courses beside courses that students have to got every grade, sometimes there is a conflict. For resolving this problem, writer was combining data mining and heuristic algorithm. Data mining Association Rule that used for finding frequent itemsets is FP-Growth algorithm and genetic algorithm for heuristic algorithm. So that based on the result of testing , schedule courses solutions that produced is more effective with reduce number of possible solutions. Getting less of number of possible solutions, so long time that used to get optimal schedule will be faster. So, execution time is faster and more efficient.

Keyword : Scheduling Courses, Association Rule, Frequent Itemsets, FP-Growth, Genetic Algorithm.