ABSTRACT

Self-Assessment is an instrument which is used by the Faculty or Department to determine the level of accreditation based on the internal evaluation. The system which is developed in this Thesis uses primarily Datawarehouse concept which saves and maintains historical data from time to time for the sake of decision making process. The data schemes used in the system are those of star-schemes with one fact table surrounded by its dimensional tables. In regards of the knowledge seeking process, the system uses data mining association rules which implements FP-Growth algorithm and FP-Tree Data structure, that is a method which finds the rule of association of a collection of data, from which will be observed the relations between one attribute to another, and how tight the relations are. The association analysis can help the executives to make decisions, in this case, will be those of maintaining the level of accreditation of each faculty. The result of the system's tests will be determined whether the it will pass the criterion of datawarehouse system in accordance with Bill Inmon's 4 datawehouse characteristics, The ETL (Extract, Transform, and Load) Process has been successfully tested, The results provided is in accordance with the expected value which is the more minimimum support and minimum confidence , the more level of association rules will be produced. From the results of the tests can also be gathered the information of minimum support and minimum confidence value of each case.

Keywords: data warehouse, star schema, fp-growth, fp-tree