ABSTRACT

Decision Support System (DSS) which is built in this Final Assignment is to help teachers in guiding students of the first Senior High School to choose majors IPA, IPS, or Bahasa when the students pass to second Senior High School through a majoring program. This DSS will process the academic assesment and results of psycho-test of students and then this DSS will release evaluation results of students achievement in each major, IPA, IPS, and Bahasa and recomendate a major that suits to a student's capability as consideration in choosing a major to the first Senior High School Student.

This DSS processing the inputs with Fuzzy Decision Making Method *(FDM)* using Weighted Subsethood-Based Rule Generation Algorithm (WSBA) to generate the fuzzy rules because WSBA is very simple to be implemented in generating weight in data clasification in fuzzy approach and rules which is generated is more accurate.

This Final Assessment testing covers functionality testing and result of system testing by comparing result of system with student achievement after specializeing. Testing Result of this result of system show existence of incompatible result equal to 8,5 % for IPA and 9,4 % for IPS.

Key Words : majoring program, evaluation, fuzzy decision making method(FDM), Weighted Subsethood-Based Rule Generation Algorithm (WSBA)