## ABSTRACT

## DECISION SUPPORT SYSTEM FOREMOST STUDENT USING SIMPLE ADDITIVE WEIGHTING METHOD (STUDY CASE : METHODIST-2 SENIOR HIGH SCHOOL PALEMBANG)

## By : Noprihan 3.10.011

Students featured are students who have a competitive spirit, good quality and has the ability in the field of academic and non-academic. However, in determining the superior student is not easy, necessary considerations and process long enough to see the students who qualified students from a number of nominations. This is because every student has the same chances and can lead to errors in decision making. Problems arise when the return value only determinant criteria alone, so that a small difference in value between the students, giving a big difference in results. If the students derived from the largest superior, it will seem less fair and be a burden for students to make a big difference to the value of the other students.

Therefore, we need a decision support system to determine student superior on a number of nominations of students, in which case the system does not only use the valuation criteria value, but added other criteria namely, the number of extracurricular achievement level of points, number of absences, and student council involvement. In the process of system development, using Waterfall methodology and the implementation of methods FMADM with SAW to get the best alternative that is superior students through a series of calculations.

Based on testing, showed that the criteria value is a major benchmark in the system followed by other criteria as support. In addition, the system can give results in the form of suggestions to Student Section of the superior students of class X in the school year, which later students will gain an appreciation of the school and be a reference to be included in the competition at the next event.

Keyword: FMADM, SAW, foremost student