ABSTRACT

To increase the enthusiasm and the ability of students in self-development, Telkom University helps students by guiding students to take part in the Student Achievement Election (PILMAPRES) activities. In the 2022/2023 academic year, the Faculty of Industrial Engineering (FRI) has more than 1,000 active students spread across 3 undergraduate study programs. However, of these, only 3 students registered to take part in this activity. The lack of information regarding aspects of student assessment causes efforts to identify potential students carried out by student affairs not to get maximum results, so a decision support system is needed to help find students.

In designing a decision support system using the Weighted Sum Model (WSM) method. This method is carried out by multiplying the weight value of each identified criterion with the value of each criterion in each of the existing decision alternatives. The result of this WSM process is in the form of ranking alternative decisions based on the final score in the form of the sum of each criterion value that has been multiplied by the weight value for each alternative.

In designing the system, the criteria values for each student are collected, including Organizational Student Activity TAK (TAK), learning and student competition (belmawa) TAK, independent competition TAK, number of papers, English Proficiency Test (EPrT) score, and number of English language competitions. This value is then multiplied by the weight value to get the final score.

In the process of testing the system, accurate results were obtained based on a comparison of manual calculations, then the user test results obtained a score of 97% which can be concluded that the system design is in accordance with user needs. From the results of designing and testing a decision support system, an alternative is obtained that can help student parties to determine potential participants in PILMAPRES activities.

***Keywords:* PILMAPRES, *Decision Support System*, WSM.**