ABSTRACT

Decision Support System for Determining Scholarship Recipient Using Naive Bayes Algorithm (A Case Study: STT MUSI Palembang)

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Scholarship is a way to help students with academic or personal achievement who have limited fund, to continue their study. The large amount of scholarship applicant can affect the difficulty of selecting the scholarship recipients. Lots of similarity between applicants' scholarship criteria, which is average score of school reports, experiences in organizations, academic or personal achievement, average amount of electricity bill, house conditions, the amount of vehicles owned, and their self description. To help on this problem, a decision support system will be created.

The decision support system will use Naive Bayes Algorithm because of the nature of those criteria that related to each other. Naive bayes calculation is based on thosecriteria to weight the recipient.

The result of the system, using seven testing data as input, to measure the performance of the system by comparing results produced by the system with the actual results calculated manually, five of the results match with the actual result and two doesn't. Based on that, the system has a success rate of 71.42%.

Keywords: Scholarships, Naive Bayes Algorithm, criteria