ABSTRACT

ANALYSIS AND SIMULATION OF DECISION MAKING SYSTEM FOR SELECTION ASSISTANT OF LABORATORY AND MEMBERS OF PROFESSION USING NAIVE BAYES ALGORITHM (CASE STUDY: DEPARTEMENT INFORMATION SYSTEMS OF TELKOM UNIVERSITY)

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Study Program Information System Telkom University is one of the study programs that implements skill development programs for students. This is intended to support the Telkom University program in producing the best graduates who can support the workforce. One of the academic facilities provided by the Information Systems Study Program for students is a place of laboratory learning and professionalism. The Information System Study Program alone houses 6 laboratories along with 6 professions. In order to maintain the quality of learning, every laboratory and profession has a Recruitment stage that must be passed by Prospective Members.

The recruitment process is aimed at filtering out the best people who can advance the laboratory and profession itself. In the recruitment process itself there are selection stages such as file collection and self competency tests. The recruitment phase is carried out in conjunction with the lecture process, therefore the recruitment process for prospective assistants and professional members often takes a long time in the process. For this reason, an analysis of the factors that influence the acceptance of prospective laboratory members and profession is needed, and a system that can be used to make decisions on the process of receiving laboratory and professional members based on the results of previous recruitment evaluations. The stages of this research were carried out by collecting academic files and recruiting assessments which would then go through the pre-processing process and then data classification. In this study classification will be carried out using the Naive Bayes algorithm. Where, this algorithm will be tested for accuracy by using RapidMiner tools. After testing the level of accuracy and obtaining factors that can influence the acceptance of prospective laboratory members and professionalism, the Naive Bayes algorithm will be applied to web-based systems to be used as input to laboratory and professional membership admissions decisionmaking processes.

Keywords: Naive Bayes, Decision Making, Recruiting, RapidMiner, classification