ABSTRACT

MODELLING OF DECISION SUPPORT SYSTEM FOR FIELDS OF INTEREST SELECTION WITH SIMPLE ADDITIVE WEIGHTING METHOD

CASE STUDY: BACHELOR PROGRAM OF INFORMATION SYSTEM TELKOM UNIVERSITY

By

AYU CAHYANI FEBRYANTI

NIM: 1106134187

As a graduates of Information System that required a high quality, competence and special expertise in the field of information system, the study program of Information System Telkom University provides a group of expertise field in information system. Selecting fields of interest for students will affect in selecting topic for the final project, the lack of understanding and information about the field of interest will affect the quality and comprehension of the final project. In selecting the field of interest some of students faced a problems in which they can not determine the field that suits their competence. Selecting the field from their friends recommendation, feeling they in the right field, or just having a desire to learn about their field are some of their reason before selection the field of interest. To assists student in determining the area of interest in accordance with their selfcompetence, author decide to conduct a research in order to design decision support system in selection the field of interest with criteria such as courses grades and potential trends of the students. Decision support system is a system that assisted the decision making. The algorithm which used is Simple Additive Weighting (SAW) that uses the weighting of each alternatif based on its performance rating. To define the criterion weight, used the pair wise matrix comparison of AHP algorithm. The results of decision support system in selecting field of interest shows that course grade and potential trends affect the suitability in selection the field of interest that suits their self-competence.

Keywords: field of interest, decision support system, simple additive weighting algorithm