

CHAPTER 1

INTRODUCTION

1.1 Background

Department of informatics engineering at Soegijapranata Catholic University stored data of student's grade. Those data are stored in database. In those data consist of student's grade every semester from various course. One of the course in those data is system administration. In every year those course is taken by some student and the student's grade result will stored in CSV file. In those CSV file consist of student's grade, serial number, and year. Those serial number is used to replacement of student's name and student's number (nim).

During this time students and faculty difficult to evaluating student's achievement scores because the data that stored are raw data. Therefore needed assessment methods using PAP and PAN. The benchmark reference assessment (PAP) is usually called the criterion evaluation which is a different reference measure¹. Assessment of norm reference (PAN) is a classical approach, because the achievement of student scores on a test compared with the appearance of other students who take the same test.²

The PAP and PAN method is completed using some statistic formulas. If the data that processed is large amount then it will difficulty to calculation and will take a long time. Therefore needed computerization program to completed those calculation and make more effective and efficient. Data structure that will be used in this program is doubly linked list. It will be stored student's grade in system administration course in each year. This program will calculated student's grade using PAP and PAN formulas, so can simplify the evaluating student's achievement scores process.

1 Bhakti Y. B., "Penilaian Acuan Norma (PAN) & Penilaian Acuan Patokan (PAP)", 2017

2 Bhakti Y. B., "Penilaian Acuan Norma (PAN) & Penilaian Acuan Patokan (PAP)", 2017

By using this program is expected that informatics engineering department will can evaluating the student's achievement score more easier using assessment method of PAP and PAN. From those result the students and faculty can see the comparison of student's grade with two assessment method. Besides that, this program will represent the student's achievement scores into graph visualization

1.2 Scope

The scope of this program are :

1. The data which is used in this program is the student's grade data of system administration in department informatics engineering at Soegijapranata Catholic University.
2. User can calculate PAP or PAN assessment method.
3. This program can represent the student's achievement scores into graph visualization.
4. This program will compared the result from PAP and PAN assessment method.

1.3 Objective

The objective of this program is to simplify the students and faculty to evaluating student's achievement scores of system administration course using PAP and PAN assessment method. This program can complete the calculation of the PAP and PAN, represent the student's achievement scores into graph visualization, this program will compared the result from PAP and PAN assessment method.