

# CHAPTER I

## PRELIMINARY

### 1.1 Background

In the context of developing human resources, especially in the world of education, it is an excellent means and vehicle for developing human resources. Therefore, education needs to get more serious attention both by the government, families, and education managers in particular. With the rapid development of technology, educational facilities and infrastructure must also follow suit, one of which is the computerized media, namely the internet. With the internet where students and teachers can access information anytime and anywhere. Plus at this time the use of the internet, especially websites, is already familiar in the life of the wider community, for example the activity of processing student grades.

The 2013 curriculum is a new curriculum that applies to the current education system where there is a lot of data as a parameter for student assessment (Huda & Siska, 2020). With so much data that must be processed, the teacher or homeroom teacher has difficulty due to the large number of reference values that must be entered manually in the Microsoft Excel application. In the use of Microsoft Excel, value processing is considered less effective, because the data is less structured. This causes frequent re-entry in the following semester, of course with the number of files increasing every semester. A good curriculum requires the support of a good, sustainable and planned information system (Sari & Muhartini, 2017). This is very supportive of school activities, considering that schools also need to store other data such as student data, classes, subjects and teacher biodata. Based on the effectiveness of its use, web-based information systems are the choice compared to other platforms. This is because web information systems have several advantages over desktop information systems (Yulianto & Atmaja, 2017). The advantage of a web information system is that it can be accessed from various devices, this certainly increases the effectiveness of teachers and homeroom teachers who only need to access through a web address in a web browser.

The processing of student grades is one way teachers use to help students learn. It helps teachers understand what students have learned, and it helps them keep track of how students are doing.. Processing that has

been done manually can be overcome with a system that can help expedite the process of processing student grades.

SMP Citra Negara is a school that applies an approach to organizing the learning. We are working to create a single, integrated curriculum that includes both General Education and Islamic Education. This way, all subjects and all school activities will be based on Islamic teachings and values. Integrated Islamic schools try to integrate different methods of teaching into the classroom so that students learn more effectively. This includes using online applications that don't use a report card system that sends information about grades to students quickly via the internet. There are still some weaknesses with the existing system, such as it taking a long time for the assessment process, frequent errors in the summation results, and frequent data loss. This data is then used to measure the progress of student achievement..

To overcome the problems faced by SMP Citra Negara, improvements are needed to the ongoing system and its development must be adapted to current needs, namely an information system that is specifically used for processing teacher data, student data, class data, folder data, achievement data and student report cards, so that the processing process becomes faster and more accurate. So, we need an Information System for Assessment Reports and Web-Based Scheduling at SMP Citra Negara.

Based on the explanation above, the title in this study is "Implementation Of a Web-Based E-Raport Design System in SMP Citra Negara".

## **1.2 Formulation of the problem**

Based on the background of the problem described above, the formulation of the problem to be discussed is as follows:

1. To create a web-based report card scoring system and scheduling system for your students, you will need to create a website that contains a scoring system and a schedule. This system will allow students to see their grades and information about when their classes are next.
2. How to design a value system that can help teachers and students in processing report card value data?
3. How to design a report card scoring system and scheduling that can cut time and minimize errors in value calculations?

### **1.3 Scope of Problem**

So that the discussion of the problems carried out can be well directed and not deviate from the subject matter, the authors limit the problems to be discussed, namely:

4. This application is built using PHP as the Server Side Programming Language, MySQL as the database server and the CodeIgniter Framework
5. This information system refers to the assessment of report cards and student scheduling in SMP Citra Negara
6. In this study, the Waterfall development method was used. The Waterfall model has a process that flows systematically from one stage to another. These stages are analysis, design, coding, testing, maintenance

### **1.4 Research Purposes**

There are several objectives to be achieved in writing this research as follows:

7. There is a web-based system that can provide information about grades to students quickly, such as through assessment reports and scheduling.
8. Provide a value system that can help teachers and students in processing report card value data
9. Provide a system that can cut time long enough and minimize the occurrence of errors in calculating the value of

### **1.5 Benefits of research**

The benefits that are expected by the author in writing this research are as follows:

10. Benefits for Writers

The benefits that are expected by the author after making this thesis, in order to be able to implement the knowledge that the author has obtained in lectures

11. Benefits for Readers

Can increase knowledge in the world of information technology as well as the value of report cards and student scheduling

12. Benefits for SMP Citra Negara

Improve the online student report card processing system to the teacher, in order to make it easier to manage the structured grades at SMP Citra Negara

13. Benefits for Academics

Make one source of information and studies to add to the literature

