School Information Application Model Design at SMP Negeri 1 Subang Kuningan

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Abstract. The development of technology is increasing and the use of information technology is very much needed by educational institutions. SMP Negeri 1 Subang Kuningan is an educational institution that requires information technology in managing information and school administration to make it easier for schools to inform school activities quickly and accurately. One of the efforts to provide information to students is by using information technology at SMP Negeri 1 Subang. Currently, SMP Negeri 1 Subang has not maximally utilized information technology, the use of technology is only limited to the school environment. In this study, the system development was carried out using the waterfall method. The application is built using the PHP programming language and MySQL database. This research produces an application that is expected to be able to solve problems on school information in new student admissions, school activities and other information.

Keywords: Technology; Information; School.

1 Introduction

Information is one of the important factors in a school, today we encounter many applications of information systems in daily life such as business, hospitals, government, private business activities, education and others. There are many benefits of information and communication technology. In improving the quality of life, it is increasingly demanding that humans carry out various activities needed by optimizing their resources.

The development of information technology has penetrated all aspects of life, including in educational institutions, information technology plays a very important role in the world of education. The information system in schools serves to assist matters relating to non-technical and technical aspects of education. Such as human resource management, budget management and management of educational facilities and infrastructure. Inventory of goods is the recording of data related to goods or assets in the agency.

School is one of the institutions engaged in education, the school consists of several levels ranging from Kindergarten (TK), Elementary School (SD), Junior High School (SMP) and Senior High School (SMA) and Vocational High School (SMK) at the same level as SMA.

SMP Negeri 1 Subang Kuningan is one of the junior high schools located in Kuningan Regency, Subang District. Information management at SMPN1 Subang is done by using information directly through letters or information media at school. With this kind of management, information about school activities is limited to certain circles, information is not widely spread.

2 Theory Basis

Information systems are elements that are mutually integrated and also interact with each other that are useful in achieving certain goals, namely processing data processing into more meaningful and useful information in making decisions now or in the future (Kadir, 2003) According to Jogiyanto (2002), the system life cycle, or abbreviated as SLC is an evolutionary process followed in establishing computer-based information systems and sub-systems. (system life cycle) SLC consists of a series of tasks that closely follow the steps of the systems approach, (system life cycle) SLC is often referred to as the waterfall approach to system development and use.

While the System Development Life Cycle or abbreviated as SDLC (Jogiyanto, 2002) is a traditional method used to build, maintain and replace an information system.

3 Research Methodology

At the analysis stage there are several stages carried out including:
1. Analysis of the current system
   In the current system in schools, the system used by schools in informing school activities is carried out only through internal schools, carried out by means of socialization through meetings and through teachers in the classroom.
2. Business process analysis
   The process of displaying school profile information is carried out by the admin by logging in through the admin account. Admin includes information about the principal's remarks, history, vision, mission, goals and facilities. After the update process is carried out, the information will appear on the user's web page.

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The process of displaying news about schools, updating data is carried out through the admin which will then change the user's web page. In the process of displaying a gallery containing information on photos of activities carried out by the school, the process of updating data is also carried out by the admin.
3. System design
   In designing the system to be built, the steps taken are to design the data flow using a data flow diagram, to describe the relationship between entities in the system using Entity Relationship Diagram.
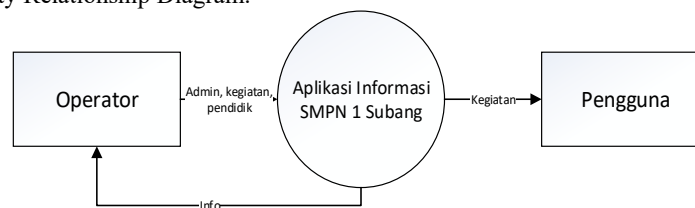

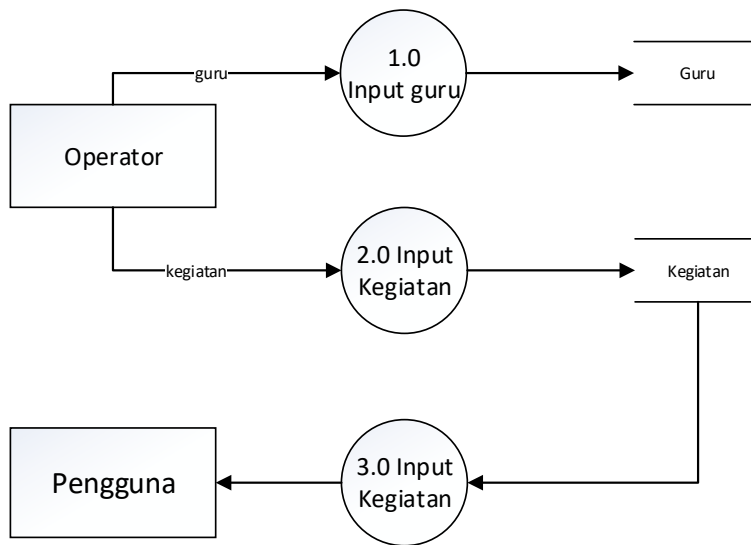**Figure 3.1.** Information Application Context Diagram

Figure 3.2. Information Application DFD

4 Results And Discussion

On the start page of this web-based information application, it displays menu information contained in the application, information on school photos through slide shows, news information and gallery. As in Figure 4.1.
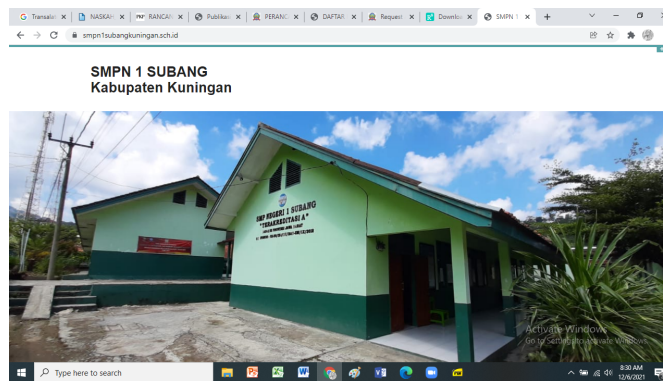

Figure 4.1. Main Page Display

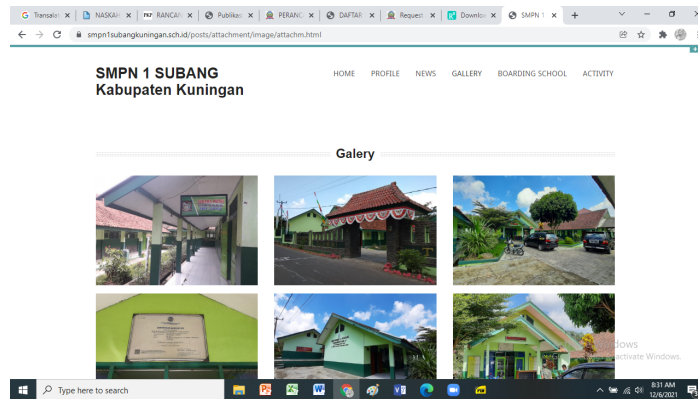By clicking on the gallery menu, visitors can see school photos and school activities. As in Figure 4.2.

Figure 4.2. Gallery Page Display

The admin page contains information about web applications, menus that can be processed to change data on web pages. The process of changing this data can only be done by the admin. As in figure 4.3 .
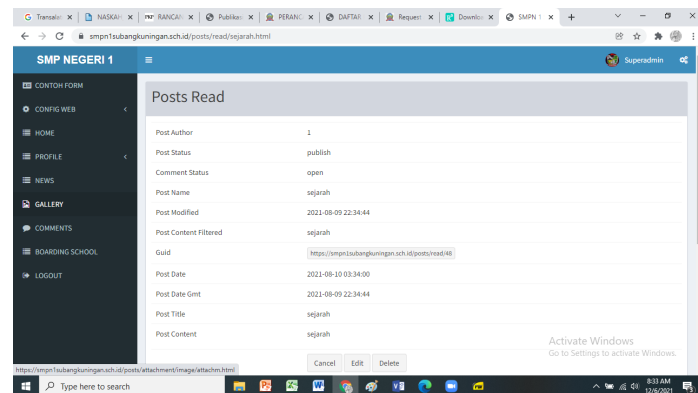

Figure 4.3. Admin Page Display

5 Conclusion

Based on the analysis and design of the Information Application at SMP Negeri 1 Subang, it can be concluded several things as follows:

1. Classification of users into three parts, namely administrators, teachers and the general public with certain access restrictions who have the rights, authorities and obligations of the user concerned.
2. This SMP information system makes it easier for school administrators to provide school information (such as student attendance, student assessments, scheduling student learning activities) to the entire academic community of SMP Negeri 1 Subang quickly and accurately.

3. This SMP information application can be used by school administrators to collect data, students, teachers, employees and alumni.

6 Suggestions

Suggestions for the development of this application are:
1. Applications can be developed by adding features for academic, financial and school administration management.
2. Android-based makes it easier for users to access.
3. Applications can also be added with LMS features.

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