

## Value Administrative Information System (SIADINSoft)

Ari Purnomo Aji

Sebelas Maret University, Surakarta

---

Article Info	ABSTRACT
<b>Corresponding Author:</b> Name : Ari Purnomo Aji E-mail: purnomoaji12@gmail.com	To increase efficiency and effectiveness in the value processing process at SMA XYZ, it is necessary to have a system that supports the process. For this reason, the author makes a value administration information system that is expected to facilitate the process. In making an information system, it is necessary to carry out several methodological steps including: data collection, system creation, implementation and evaluation, system design, database design, form design, and finally making system applications. To create a value administration system application, several stages need to be carried out, including: preparing hardware and software that can support the system, creating a hierarchy of input and output processes, making flowcharts for each application, entering scripts, and finally testing the program.8, while for photo editing using Adobe Photoshop CS2 and ACDSee 8. <b>Keywords:</b> System, administration, value, SIADINSoft

---

This is an open access article under the [CC BY-NC](#) license



### INTRODUCTION

The rapid advancement of technology is currently being felt by mankind, almost in all aspects of life from households to large companies taking advantage of the sophistication of technology which is increasingly creating useful breakthroughs for users of the technology.[1]Advances in information technology also have a role in developments in every area of life, because from raw data into information that is needed to make decisions, it takes a long time so it needs good information management.[2]It became easier once the smart machine or computer was invented.[3]How not, computers can make it easier to manage data into information quickly, efficiently, accurately, on time and in accordance with the wishes of information users.[4]So, the better information technology, the better the information obtained for its users[5].

One area that needs to be considered is the world of education, computer-based information technology in education has become an important curriculum in this field[6]. SMA Negeri 1 Kartasura, is an educational institution whose value administration information system is still done manually. The management of existing data is still in the form of archives in the form of hard copies, so it takes a long time in managing and re-finding the data if it is needed again by the school, it is very inefficient.

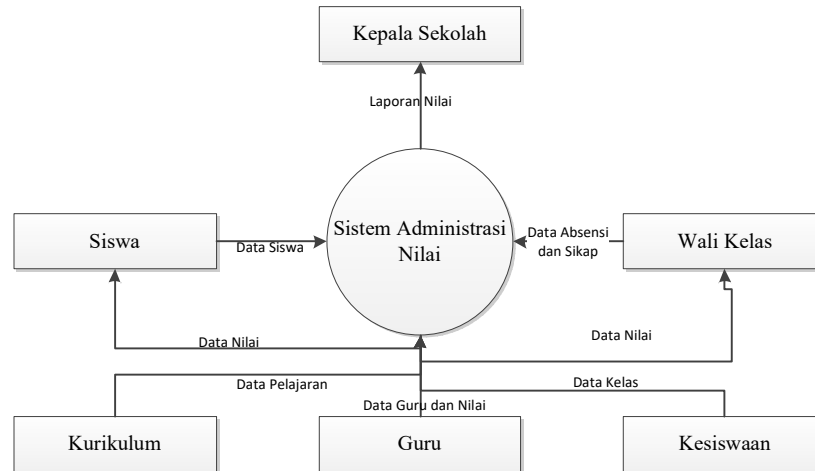
The above constraints indicate that the value administration information system at SMA XYZ needs to be developed with computer-based information technology.

### METHOD

In this study, the authors carry out a series of activities so that a good and correct methodology is needed, including collecting the data needed in analyzing the value

*Value Administration Information System (SIADINsoft)*. Ari Purnomo  
Aji

administration information system which is expected to obtain good results. In the analysis of this system, it is very useful to expedite the information system, especially the value administration section, so that it can function properly and maximally requires hardware, software and brainware. The following is a context diagram that describes the characteristics of the system associated with external entities which are users who are directly involved with the system.



**Figure 1.** Context Diagram

The external entities in the diagram are students, teachers, principals, homeroom teachers, administration, curriculum, and students.

The relationships that occur in the context diagram are:

- Students enter student data into the value administration information system whose input is carried out by the administration which then students will get value data information and class data where students study.
- The teacher enters teacher data and student score data into the value administration information system which then the teacher will get information in the form of class data.
- The homeroom teacher who is also a subject teacher provides attendance and attitude data which then the homeroom teacher will get class data and data on the grades of all students in the class.
- The curriculum includes subject data which will later be used in making grades according to subjects.
- Students enter class data in the form of students in the class which can later be used as student archives.
- The principal will get the information needed in the form of reports from teachers, students, lessons, classes and student grades from the value administration system.

Data Flow Diagram level 0 is divided into three processes, namely data collection, assessment and reporting. In the data collection process is data processing and several activities occur including the teacher entering teacher data which is then stored in the teacher database, the curriculum entering lesson data which is then stored in the lesson database, students entering class data which is then stored in the class database, students entering student data which is then stored in the class database. stored in the student database. In the assessment process, it is the processing of value data for all students who need data in the database of students, teachers, lessons and classes which are then stored in the value database. In the reporting process the system will provide the necessary reports to those in need by processing the data already contained in the database of teachers, students, classes, lessons and student grades. In this

process the principal gets reports in the form of reports from teachers, students, lessons, classes and grades.

In this application there is a database to store data that can later be processed as needed. The database design for the Application of the Value Administration Information System of SMA XYZ is as follows: Tabel\_Siswa.dbf, Tabel\_Guru.dbf, Tabel\_Wali.dbf, Table\_Kelas.dbf, Table\_Nilai.dbf, Table\_Learn.dbf and Table\_Login.dbf. The splash design consists of: SIADIN SOFT application logo and waiting animation in the form of boxes and percent starting from 0% to 100%.

## RESULTS AND DISCUSSION

The value administration system application facilities at SMA XYZ (SIADIN Soft) are as follows:

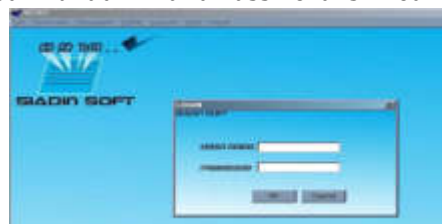
- a. Student Menu. Contains two input forms, namely student and class forms, in each form there is a list of data that has been inputted into the program.
- b. Teaching Menu. Contains four input forms, namely homeroom, grades, lessons and teachers
- c. List Menu. Contains four forms, namely a list of students, a list of teachers, a list of classes, a list of subjects that all function to view and search for data that has been entered in the program.
- d. Report menu. Contains three report forms, namely student reports, homeroom reports and grade reports.
- e. Help menu. Contains two forms, namely the about form which is the identity of the program maker and the help form which functions as a program manual or instructions for using the program application.
- f. Change Password menu. It is a facility to change the existing password and user name in the application program with the aim of data security in the application program so that only operators can enter the program application who understands it and can change it periodically.
- g. Menu Backup and Restore Database. It is a facility to back up data and restore data as data maintenance in program applications.

The Splash page is the page that appears when the application program starts to run, waiting for the login page to appear. This page appears only seconds after clicking on an application from the program.



**Figure 2.** Splash

Login page is a page for program user identification that has been set by the program operator. In Username is filled with admin and Password is filled in administrator.



**Figure 3.** Login Form

Figure 4 is a student form design for the student input sub menu of the SMA XYZ (SIADINSoft) value administration information system application program which is useful for inputting, editing and deleting student data. For this photo search facility, it will search for photos that are on the computer's hard disk and will be automatically stored in the database.

Figure 4. Student Input Form

In inputting the student's NIS, they must first input the other data. If the written NIS already exists, a confirmation box will appear. In the student form, a student list submenu is also available, namely a form that displays data in the database or data that has been inputted into the program. This form also provides a search facility by selecting a search based on the ComboBox and the keywords you want to search. If you have found and want to edit the data, return to the student input submenu then click the edit button. Figure 5 is a list of students in the student form.

NIS	Kode Kelas	Nama Siswa	Alamat Siswa
071101	1101GL	Ari Juanda	Manahan
071102	1101GL	Burhan Sinaga	Pucangan Kartasura
071103	1101GL	Neni	Pucangan Kartasura
071201	1202GB	Lala Sari	Pajang No.23
071202	1202GB	Rony	Manahan

Nama Ayah	Pekerjaan Ayah	Nama Ibu	Pekerjaan Ibu
Nudin	Buruh	Semi	Lain-lain

Figure 5. Student Form, student list submenu

Figure 5 is a teacher form design for the teacher input sub menu of the SMA XYZ (SIADINSoft) value administration information system application program which is useful for inputting, editing and deleting teacher data. For the photo search facility, it will search for photos that are on the computer's hard disk and will be automatically stored in the database. In inputting the teacher code, it must be inputted first and then other data. If the teacher code storage already exists, a warning dialog box will appear.

**Figure 6.** Teacher Input Form

In the teacher form, there is also a teacher list submenu, namely a form that displays data in the database or data that has been inputted into the program. This form also provides a search facility by selecting a search based on the ComboBox and filling in the keywords you want to search for. If you have found and want to edit the data, return to the teacher input submenu then press the edit button.

Figure 7 is a class data input form design from the SMA XYZ (SIADINSoft) value administration information system application program which is useful for inputting, editing and deleting class data. In filling the form, the class code is entered first, then the other data. If the class code storage already exists, a warning dialog box will appear.

**Figure 7.** Class Input Form

In the class form there is also a class list sub menu, namely a form that displays data in the database or data that has been inputted into the program. Through this list form, if you want to edit data, select the data you want to edit on the list, return to the class input submenu then press the edit button.

Figure 8 is a lesson input form design from the academic information system application program of SMA XYZ (SIADINSoft) which is useful for inputting, editing and deleting subject data. In inputting the lesson code, it must be inputted first and then other data. If the lesson code storage already exists, a warning dialog box will appear. If you want to edit the data, select the data in the list, then press the edit button.

Figure 8. Lesson Form

Figure 9 is the design of the value data input form from the value administration information system application program of SMA XYZ (SIADINSoft) which is useful for inputting, editing, and deleting value data. In inputting the NIS, it must be filled in first and then fill in other data. If the NIS storage and the academic year already exist, a warning dialog box will appear.

Figure 9. Value Input Form

Figure 10 is the homeroom form design for the administration information system application value of SMA XYZ (SIADINSoft) which is useful for inputting, editing and deleting homeroom data. In inputting the homeroom code, it must be inputted first and then other data. If the homeroom code store already exists, a warning dialog box will appear,

Figure 10. Homeroom Teacher Input Form

The Change Password form functions to change the Password and Username used for data security in the application program (SIADINSoft).

**Figure 11.** Change Password Form

The Application Output Form consists of: student (Student Parent Book and Student Biodata), Teacher Training (Teacher Parent Book and Teacher Biodata) and Grades. The Shiva Parent Book is a report that shows student data in a certain entry year or the desired entry year. This report is in the form of a landscape on A4 size paper. the data that appears there are no photos of students. There is a school identity logo on the top as well as a time recording when printing. Student Biodata is a report containing desired individual student data. This report is in portrait form on A4 size paper. the data that appears there are photos of these students and more complete data. There is a school identity logo on the top as well as a time recording when printing.

The Teacher's Master Book is a report containing teacher data. This report is in the form of a landscape on A4 size paper. the data that appears there is no photo from the teacher. There is a school identity logo on the top as well as a time recording when printing. Teacher Biodata is a report containing teacher data. This report is in the form of a portrait on A4 size paper. the data that appears there is no photo of the teacher and the data is more complete. There is a school identity logo on the top as well as a time recording when printing. Value is a report that contains the value of student subjects. The form of this report resembles a student report card. This report is in the form of a portrait with A4 size paper. there is a school identity logo on the top as well as time recording when printing.

In the information system that the author made there are advantages and disadvantages of the application program, including:

A. Advantages

1. The program has facilities for data collection of students, teachers, classes, subjects, homeroom teachers and student grades.
2. The program can search for data such as student data and teacher data.
3. In terms of security, this program is facilitated by means of changing passwords so that passwords are only known to certain people.
4. There is a means for backup and restore so that stored data can be avoided from loss or damage to data.

B. Deficiency

1. This program has not been developed into a program with a client-server system so that the input and output of data and information is more efficient.

2. The program has not been made for multiuser which can be used by more than one person with different access restrictions.

### **CONCLUSION**

Based on the analysis and discussion, it was concluded that the siadinsoft program was the first value administration program at SMAN I Kartasura, so with the presence of this program it helped a little more in creating value archives at SMAN I Kartasura and with some of the advantages and disadvantages of this program. the value administration process has not been fully fulfilled, although some of the program's uses have been useful, but this program still has to be developed in line with the development of the world of education.

### **REFERENCE**

- Sitohang, "SISTEM INFORMASI PENGAGENDAAN SURAT BERBASIS," *J. Inform. Pelita Nusant.*, vol. 3, no. 1, 2018.
- Yoki Firmansyah, R. Maulana, and N. Fatin, "Sistem Informasi Pengaduan Warga Berbasis Website ( Studi Kasus : Kelurahan Siantan Tengah , Pontianak Utara )," *J. Cendikia*, vol. XIX, no. April, 2020.
- Y. A. Pratiwi, R. U. Ginting, H. Situmoran, and R. Sitanggung, "Perancangan Sistem Informasi Akademik Berbasis Web Di Smp Rahmat Islamiyah," *J. Teknol. Kesehat. dan Ilmu Sos.*, vol. 2, no. 1, 2020.
- A. Akbar and N. Noviani, "Tantangan dan Solusi dalam Perkembangan Teknologi Pendidikan di Indonesia," *Pros. Semin. Nas. Pendidik. Progr. Pascasarj. Univ. Pgri Palembang*, vol. 2, no. 1, 2019.
- F. Syukur NC, *Teknologi Pendidikan*. 2008.
- F. F. Hanum and Suprayekti, "PENERAPAN TEKNOLOGI PENDIDIKAN DI LEMBAGA PENDIDIKAN NONFORMAL," *JIV-Jurnal Ilm. Visi*, vol. 14, no. 1, 2019, doi: 10.21009/jiv.1401.1.