SYSTEM OF THE SUPERVISION AND THE EVALUATION OF TRAINING PROCESS TOWARD ELEMENTARY SCHOOL IN KECAMATAN HAURGEULIS KABUPATEN INDRAMAYU WITH GEOGRAPHIC INFORMATION SYSTEM (GIS)

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ABSTRACT

Unit Pelaksana Teknis Dinas (UPTD) Pendidikan Kecamatan Haurgeulis is the one of the *UPTD Pendidikan* in *Kabupaten Indramayu* that have function as trainer, developer, observer, coordinator assessor, and teaching and learning organizer supervisor in school level. The one of the responsibilty of the *UPTD Pendidikan Kecamatan Haurgeulis* are improving the teaching and learning activity and school administration that did by elementary school supervisor with giving a training for adminstration staffs and teachers at school. For the implementation, the training that did by elementary school supervisor is less monitoring, caused by the result of school training report that received by *Koordinator Kelompok Jabatan Fungsional* is often late because of the ratio between school and trainer is not proportional. Besides, the problem that appears while training session causing the training does not finish in the expected time.

Supervision of training in school is needed as the consideration for determining the school training in the next year. Based on the problems stated before, it needs the information system that can help the supervision and the evaluation toward elementary school for consideration of determining the school training in the next year. The system that builded will use Geographics Information System (GIS) approach to facilitate the supervision of training process. This information system applied Decision Support System (DSS) Weighted Product (WP) for helping to determine the training toward school.

Based on the test on black box and beta test that conducted, it can be concluded that the system can help *Koordinator Kelompok Jabatan Fungsional* in monitoring the implementation of the guidance to schools and help in evaluating the provision of training school.

Keywords: Elementary School, Geographic, Geographic Information System, *UPTD Pendidikan Kec. Haurgeulis Kab. Indramayu*.

1. INTRODUCTION

Unit Pelaksana Teknis Dinas (UPTD) Pendidikan Kecamatan Haurgeulis is the one of the *UPTD Pendidikan* in *Kabupaten Indramayu* that have function as trainer, developer, observer, coordinator assessor, and teaching and learning organizer supervisor in school level either formal or non formal education in order to realize the vision and mission of *Dinas Pendidikan Kabupaten Indramayu*. According to the report of the list Elementary Schools in October 2015, *Kecamatan Haurgeulis* has 40 elementary schools which consists of primary schools of the country and the private primary school, where each of the elementary schools were under direct supervision by *Pengawas SD* for the education of elementary school in *Kecamatan Haurgeulis*. One of the common tasks that are performed by *Pengawas SD* toward his school is improving the quality of teaching and learning, and school administration that is done by giving coaching toward administration staff and teachers in schools. Coaching that given to the school consisted of the managerial coaching and academic coaching, whereby each coaching is determined based on the results of the assessment have been carried out before by *Pengawas SD*. Besides, coaching toward schools that have been implemented in the previous year also become consideration in determining the coaching of the school in the school year in progress.

Based on interviews with Mr. Ali Nurdin, s. Pd., MM. as *Koordinator Kelompok Jabatan Fungsional* stated that the activities of the coaching process that carried by *Pengawas SD* toward the schools less monitored. That is because the result of school training report that received by *Koordinator Kelompok Jabatan Fungsional* is often late that is known caused by many things, one of them because of the many schools that are 40 are not comparable with the energy builder which amounted to only 5 members, besides the problems often encountered when implementing the coaching takes place resulting in coaching was not completed at the time determined. The importance of monitoring the

implementation of the coaching of school because of the information obtained from the report on implementation of coaching will be used as a consideration in determining the coaching toward schools in the next school year. Therefore, *Koordinator Kelompok Jabatan Fungsional* trying to anticipate problems that arise in the process of coaching schools through monitoring and evaluation so that the implementation of coaching in the next school year can be optimized and achieve the targets set.

Based on the problems that have been described, needed an information system that can help in the process of monitoring and evaluating giving coaching of elementary school in *Kecamatan Haurgeulis*. To facilitate the monitoring provision of school of coaching, information systems which will be built using Geographic Information Systems approach (GIS).

1.1 Purpose and Objectives

The purpose of the research conducted in this final assignment is to build the system of supervision and the evaluation of training process toward elementary school in *Kecamatan Haurgeulis Kabupaten Indramayu* with Geographic Information System (GIS). While the goal to be achieved in this research is to help *Koordinator Kelompok Jabatan Fungsional* in monitoring the implementation of coaching toward schools in order to obtain information as an evaluation to determine the guidance in the next school year.

2. RESEARCH CONTENTS

2.1 Information System

In this modern age either consciously or unconsciously, most human activities have been supported by information systems. The information system has been widely applied in various fields and activities, including in offices, supermarkets, airports and even at home when the user interacted with the world via the Internet or phone.

The things that can be done by the information system of course related to the ability to do, including the [1]:

1. Implement numerical computing, large-volume, with high speed
2. Providing communication within organizations or between organizations that are cheap, accurate and fast
3. Storing information in a very large amount in a small room but easily accessible
4. Allows access to information that is very much around the world quickly and cheaply
5. Improving the effectiveness and efficiency of the people who work in groups in one place or at various locations
6. Presenting information clearly evocative of the human mind
7. Automate prose-semiautomatic business processes and tasks are done manually.
8. Fast typing and editing
9. Implement the above matters much cheaper than if done manually.

These abilities include support business goals [1]:

1. Increased productivity
2. Cost reduction
3. Improved decision-making
4. Improved service to customers, and
5. Development of strategic applications newly

The information system has four important role in the organization, which [2]:

1. Participate in the implementation of the tasks,
2. Improving the planning, execution and control within a subsystem,
3. Coordinate subsystems,, and
4. Integrating subsystems.

2.2 Geographic Information System (GIS)

2.2.1 Definition

GIS is a computer system to capture, store/ record, checking, integrating, manipulating, analyzing and displaying data related to positions on the Earth's surface.

Basically, the term geographic information system (GIS) is a combination of three main elements: systems, information, and geographic. With seeing of its constituent parts, it is clear that GIS is also a type of information system, but with the added element of "Geographic". Thus, GIS is a system that emphasizes the element of "geographic information". The use of the word "Geographic" implies something about the earth's surface either two-dimensional or three-dimensional. Thus, the term "geographic information" comprises information about the places located on the surface of the earth, knowledge of the position where an object is located in the earth, or information about the object information contained in the earth's surface whose position is known [3].

2.2.2 GIS Sub-Systems

GIS can be described into several sub-systems as follows [3]:

1. Data Input: collecting, preparing, and storing spatial data and its attributes. Sub-system is responsible for converting the original data format into its GIS format.
2. Output Data: displays and generate output softcopy and hardcopy spatial databases such as tables, graphs, reports, maps, etc.
3. Data Management: organizing spatial data and attribute table into the database system to easily be retrieved, updated and edited.
4. Data Manipulation and Analysis: determining the information generated by the SIG. In addition, sub-systems to manipulate and model data to produce information is expected.

If the sub-system SIG above clarified by description of the type of input, process and output type that is therein, then the sub-system of the above GIS can also be described as in Figure 1.

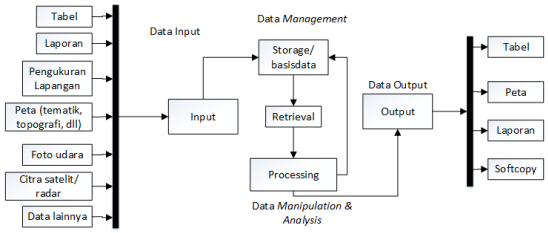


Figure 1 Description of GIS Sub-Systems

2.2.3 GIS Component

SIG consists of components with different characteristics [3]:

1. **Hardware**. SIG is available on a variety of hardware platforms; starting from a deskop PC class, workstations, to a multi-user host. However, the GIS functionality is not strictly related to the physical characteristics of the hardware to the PC memory limitations can be overcome.
2. **Software**. GIS is a software system where the database addressable system plays a key role. At old SIG, sub-system is implemented by software modules until it is not surprising if there is a device that consists of hundreds of GIS program modules (* .exe) that can be executed separately.
3. **Data and geographic information**. GIS can collect and store data / information required either indirectly (by clicking on the import of his) or directly with the digitizing of spatial data (on-screen / head-ups on the monitor screen or manually with digitizer) on the map analog and enter data attributes of tables / reports by using the keyboard.
4. **Management**. GIS project will succeed if managed properly and done by people who have the right skills at all levels.

2.2.4 Spatial Data

Spatial data have two important parts that make it different from other data, the location information and attribute information that can be described as follows [4]:

1. The location information or spatial information. A common example is the coordinate information (latitude and longitude), including datum and projection information. Another example of spatial information that can be used to identify the location for instance is a zip code.
2. Descriptive information (attributes) or non-spatial information. A locality may have some attributes or properties related thereto; for example, the type of vegetation, population, income per year, and so on.

In GIS, spatial data is represented in two formats, among which [4]:

1. Vector
   In the data vector format, our earth is represented as a mosaic of the line (arc / line), polygon (area bounded by the line that starts and ends at the same point), point / points (nodes that have the label), and nodes (a point of intersection between the two lines).
2. Raster
   Raster data (also called grid cells) are generated maps of remote sensing systems. In raster data, geographic object represented as a grid cell structure called a pixel (picture element). In raster data, the resolution (visual definition) depending on the size of its pixels. In other words, the pixel resolution describes the actual size on the earth's surface represented by each pixel in the image. The smaller the size of the Earth's surface is represented by a cell, the higher the resolution. Excellent raster data to represent the boundaries were changed gradually, such as soil type, soil moisture, vegetation, soil temperature, etc. The main limitation is the amount of raster data file size; the higher the resolution of its grid-the larger the file size.

2.3 Decision Support System (DSS)

2.3.1 Definition

According to Raymond McLeod, Jr. defining decision support system (DSS) is an information system that is intended to assist management in solving its problems [5].

Definitions according Little mengemukaan that the decision support system is a computer-based information system that produces a variety of alternative decisions to assist management in dealing with various problems in a structured or unstructured using data or model [6].

2.3.2 DSS Objective

The purpose of decision support systems have three objectives to be achieved, among others [5]:

1. Help managers make decisions to solve the problem of semi-structured.
2. Support the assessment manager, not trying to replace it.
3. Improving the effectiveness of decision making managers rather than efficiency.

2.3.3 DSS Characteristics

In the following figure, demonstrated the characteristics and capabilities of a decision support system [7].

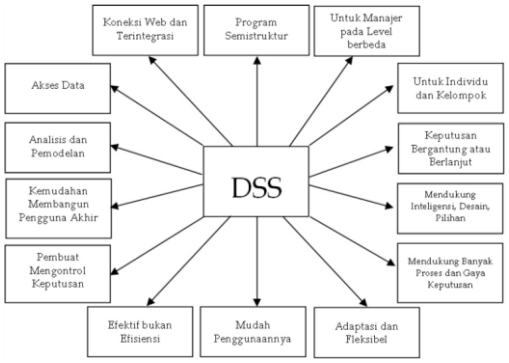


Figure 2 Characteristics of Decision Support System

Explanation of the picture above on the characteristics and capabilities of a decision support system is as follows [7]:

1. Provides support to make decisions primarily on circumstances semistructured and unstructured by combining human judgment and computerized information.
2. Provides support to the managerial level mulai dari eksekutif sampai manajer.
3. Provides support for individual groups, the problems are less structured requires the involvement of multiple individuals from other departments within the organization.
4. Provide support to independent or decision continued.
5. Provide support to all phases of the decision-making process, including Intelligence, design, choice and implementation.
6. Supports many processes and decision-making styles.
7. Adaptive to time, the decision maker must be reactive to cope with the changes accurately and changing decision support system should be flexible so that the user can add, delete, combine, change and rearrange the basic elements.
8. Easy to use.
9. Raising the effectiveness of decision-makers both in terms of timeliness and quality rather than the cost of making the decision or the cost of computer time.
10. Decision makers can control the decision-making tahapantahapan like at this stage of intelligence, choice and implementation and decision support system aimed at supporting the decision maker is not in his place.Memungkinkan pengguna akhir dapat membangun sistem sendiri yang sederhana.
11. Using models of standard or user-created to analyze the circumstances of the decision allows experimenting with different strategies under different configurations also vary.
12. Supports access from a variety of data sources, formats, and types, range of geographic information system on the orientation of the object.

2.3.4 Weighted Product (WP) Method

Weighted product (WP) method is one of several decision analyzes multi - criteria (MCDA - multi-criteria decision analysis) or decision-making methods of multi - criteria (MCDM - multi-criteria decision making). WP use multiplication method for menghubungankan rating attributes, where each attribute rating should be raised to advance with the corresponding attribute weights.

Here are some steps in the calculation using the weighted product (WP):

1. Specifies the alternative (A_i) which will be given action based on the value of the calculation result.
2. Specifies criteria (C_i) to be used as a reference in the decision.
3. Determining the type criteria. Type criteria in methods WP consists of two types, which is the criteria of benefit and the criteria of cost, where the type of criteria of cost greater acquisition value criteria by an alternative to the less value calculation end, while on the type of criteria benefit more major acquisition by an alternative criterion value, the greater the value calculation end.
4. Determining the weight of preference / importance value (W_j) of each of the criteria that have been determined.
5. Normalization / repair criteria weights, so that the total weight of all the criteria (ΣW_j) is 1. Normalization can be performed using the following weights.

$$W_j = \frac{W_j}{\sum W_j} \quad (1)$$

6. Make a decision matrix for each alternative against each criterion by providing value to each criterion of each alternative.
7. Determining the value of the vector (S_i) of each alternative, which can be calculated using the following formula.

$$S_i = \prod_{j=1}^{n} X_{ij}^{Wj} \quad (2)$$

Wherein:

S_i : vector value of each alternative
X_{ij} : the value of each alternative (A_i) against each criterion (C_j).
W_j : weight normalized value of each criterion j.

8. Calculating the preferences of each alternative (V_i), which can be calculated using the following formula.

$$V_i = \frac{\prod_{j=1}^{n} X_{ij}^{Wj}}{\prod_{j=1}^{n} (X^*_{ij})^{Wj}} \quad (3)$$

9. Calculating the percentage of the acquisition value V_i of the maximum value that can be calculated using the following formula.

$$Presentase = \frac{V_i . 100}{Nilai\ V_i\ maksimum} \quad (4)$$

10. Vi maximum value obtained from the calculation formula V_i calculation, only the value S_i used value calculation matrix values S_i with the decision criterion value maximum value entirely.
11. Perform perangkingan based on the calculation preferences (V_i) and implement measures against perangkingan results.

2.4 Object Oriented Analysis and Design (OOAD)

OOAD merupakan suatu metode untuk memodelkan perangkat lunak yang pertama kali diperkenalkan oleh Grady Booch. Metode ini mencakup bahasa pemodelan untuk menunjukkan class, state, transisi state, interaksi, modul dan proses. [8]

OOAD characteristics and advantages are as follows:

1. **Flexibility**, the ability to meet customer needs in the development of software.
2. **Encapsulation**, enabling reusable program code, or it can be used many times. Ensure that the same code is not repeated and to ensure that the programmer does not try to solve problems that other programmers have been completed.
3. **Functionality**, ensures that the code used repeatedly to keep separate from the code relatively frequent changes. It will be easier for programmers to make changes to the program code without damaging other code.
4. **Design patterns**, allows the software to change and evolve without rework from scratch and make sure the application does not become brittle or applications that can be easily damaged.

2.5 Analysis of Spatial Data

Spatial data is the data manifold spatial object spatial data consists of three types, namely the form of points, lines and areas. Spatial data is used to provide information about schools in the District Haurgeulis. Spatial data used in the manufacture of this system can be seen in the following table.

Table 1 Analysis of Spatial Data

Layers	Descriptions	Type	Symbols
Earned value assessment component	Schools with very good value on a component assessment (range of 91- 100% value)	Point	
	Schools with good value on a component of the assessment (value range 76-90%)	Point	
	Schools with enough value on the assessment component (value range 60-75%)	Point	
	Schools with less value on the component assessment (range of values <60%)	Point	
Guidance giving state	Schools that have been given guidance	Point	
	Schools that have not given guidance	Point	
The development of assessment after guidance	School increases in value after guidance	Point	
	The school did not increase or decrease in value after guidance	Point	
	School impaired after guidance	Point	

2.6 Analisis Data Non Spasial

Non-spatial data is the data supporting that contain information objects in spatial data. Non-spatial data that are used can be seen in the following table.

Table 2 Non-Spatial Data Analysis

No	Data	Deskripsi	Atribut
1	Earned value assessment component	Contains school information along with the acquisition of an estimation component ratings.	NPSN, Nama Sekolah, , Alamat, No telp, Presentase Perolehan, Jenis Pembinaan, Detail pembinaan sekolah.
2	Status guidance Award	Contains information schools that have or have not given guidance by the *Pengawas SD*	NPSN, Nama Sekolah, Status, Alamat, No telp, Nama Pengawas SD, Satus pemberian pembinaan, Tanggal pemberian pembinaan, Detail pembinaan.
3	The development of assessment after guidance	Contains information on the progress assessment after guidance by the *Pengawas SD*	NPSN, Nama Sekolah, Status, Alamat, No telp, Grafik perolehan penilaian.

2.7 Analysis of Primary School Assessment

In the analysis of the primary school assessment perhitungan WP method is used in assessing the primary school based assessment component. Stages in the elementary school assessment analysis can be seen in the flowchart in the following figure.

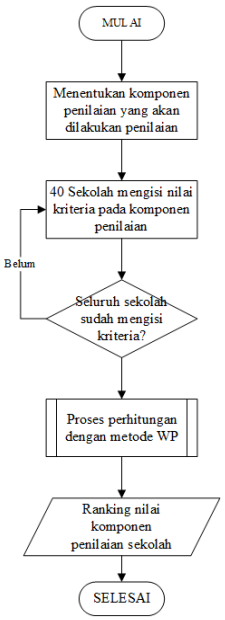


Figure 3 Stages Flowchart Analysis Elementary School Ratings

The calculation process using the WP can be seen in the following figure.

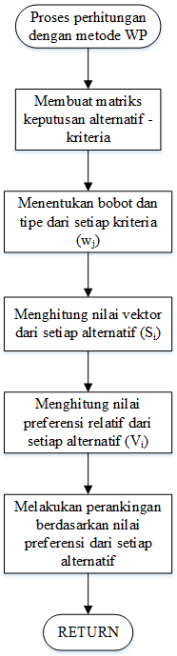


Figure 4 Flowchart of Weighted Product (WP) Calculations

2.7.1 Determining the Rate Components That Will Do Ratings

Assessment of the Primary School in District Haurgeulis consists of many components of the assessment are divided into managerial and academic assessment. for example on the analysis of primary school this assessment will be carried out an ***Komponen Penilaian Standar Penilaian*** ratings on managerial assessment of the school.

Table 3 *Komponen Penilaian Standar Penilaian*

C_j	Criteria
C_1	Adanya rancangan, jadwal pelaksanaan penilaian dan remedial
C_2	Adanya rancangan, jadwal pelaksanaan penilaian dan program pengayaan.
C_3	Adanya perangkat penilaian berupa format penilaian
C_4	Adanya bahan ujian/ulangan (berupa kumpulan soal)
C_5	Adanya hasil analisis terhadap perangkat penilaian
C_6	Adanya dokumen laporan hasil belajar siswa
C_7	Penilaian dilakukan sepanjang semester
C_8	Teknik penilaian sesuai dengan kompetensi dasar yang harus dikuasai siswa, dapat berupa tes tertulis, observasi (pengamatan), tes praktek dan penugasan terstruktur atau kegiatan mandiri tidak terstruktur (KMTT)
C_9	Setiap guru mata pelajaran melakukan penilaian pengamatan mapel IPTEK minimal satu kali dalam satu semester
C_{10}	Penerbitan sertifikat kelulusan pada mata pelajran dilakukan melalui ujian nasional/ujian sekolah
C_{11}	Seluruh pendidik telah melakukan hasil belajar untuk memantau proses, kemajuan dan perbaikan hasil dalam bentuk ulangan harian, UTS, UAS dan UKK.
C_{12}	Peserta didik minimal mencapai batas KKM.
C_{13}	Rata-rata nilai UN tiga tahun terkhir minimal 7,00
C_{14}	Presentasi kelulusan UN > 90% untuk tiga tahun terakhir

2.7.2 Alternatives Will determine Assessed

Alternatives that will be evaluated in this assessment analysis which is all schools in the District of Haurgeulis totaling 40 schools. Alternative methods of assessment at WP is assumed to A_i. Thus, the number of alternatives that will be rated A_1 through A_{40}.

2.7.3 Filling Value Of Component Assessment Criteria

Having determined the components of assessment, evaluation, then the whole school to fill in components of the assessment criteria assessment standards. Range of values / Scale allowed in each component of the assessment criteria in the assessment standards obtained based assessment system already existing in the District UPTD Haurgeulis, using a Likert scale with renatang between 1 to 5. With the following caption:

5: Excellent
4: Good
3: Enough
2: Less
1: Very less

2.7.4 Calculation Method Using WP

The calculation process using the WP has the following phases.

2.7.4.1 Make a Decision Matrix Alternative Against Criteria

The decision matrix is the value given to each criterion by each alternative.

Table 4 Decision Matrix

	C_1	C_2	C_3	C_4	C_5	....	C_{14}
A_1	4	5	4	5	3	...	5
A_2	4	5	3	4	4	...	2

A_3	4	5	5	3	4	...	4
⋮	...	...	...	...	...	...	...
A_{40}	4	3	4	4	3	..	4

2.7.4.2 Determining Criteria Weights

Furthermore, the weight of each of the assessment criteria specified. Criteria weight is an indicator of the importance of a criterion to the other criteria. Thus, the greater the weight of the criteria, the more important these criteria. The weights of each component of the assessment criteria in the assessment standards of assessment that has been normalized by the formula (1) are as follows.

Table 5 The weight of each criterion

C_i	Weight
C_1	0,02
C_2	0,02
C_3	0,03
C_4	0,13
C_5	0,13
C_6	0,11
C_7	0,05
C_8	0,08
C_9	0,04
C_{10}	0,09
C_{11}	0,11
C_{12}	0,07
C_{13}	0,06
C_{14}	0,06

2.7.4.3 Calculating Value Vector (S_i) From Any Alternatives

Calculating the value of the vector (Si) of each alternative can be done by using the formula (2). Therefore, when the formula is applied to the decision matrix calculation results are as follows.

Table 6 S_i Vector Calculation Results

A_i	Vektor S_i
A_1	3,309003
A_2	3,775644
A_3	3,895972
⋮	⋮
A_{40}	3,777051

2.7.4.4 Calculating the Value Preference Relative (V_i) From Any Alternatives

Calculating the relative preference value (V_i) of each alternative can be done by using the formula (3). Therefore, when the formula is applied to the decision matrix calculation results obtained as follows.

Table 7 Calculation Results Relative Preferences (V_i)

A_i	Preferensi Relatif (V_i)
A_1	0,022344
A_2	0,025495
A_3	0,026308
: ·	: ·
A40	0,025504

2.7.4.5 Determining Type perform on Ranking and Development

The next stage is to do sorting well as to determine the type of coaching of sorting from the calculation of relative preference (V_i). Type guidance is determined based on a percentage of the acquisition value obtained from the calculation of relative preference that has been done before. The calculation of the percentage of the acquisition value can be calculated using the formula (4).

Determining the type of guidance is based on the results of the assessment sorting assessment standards can be seen in the following table.

Table 8 Type Development Assessment Standards

Training type	Value Range(%)	Training Description
Apresiasi atas perolehan nilai penilaian dengan predikat SANGAT BAIK	90 – 100	Pemberian penghargaan atas perolahan nilai standar nasional pendidikan standar penilaian
Peningkatan standar penilaian tingkat rendah	76 – 89	Pembinaan pelaksanaan dan evaluasi penilaian siswa sekolah; Pemberian pembinaan terhadap manajemen penilaian siswa sekolah
Peningkatan standar penilaian tingkat menengah	60 – 75	Pembinaan perencanaan, pelaksanaan dan evaluasi penilaian siswa sekolah; Pemberian pembinaan terhadap manajemen penilaian siswa sekolah
Peningkatan standar penilaian tingkat tinggi	< 60	Pemeriksaan kriteria standar penilaian secara menyeluruh; Pembinaan perencanaan, pelaksanaan dan evaluasi penilaian siswa sekolah; Pemberian pembinaan terhadap manajemen penilaian siswa sekolah

2.8 Monitoring and Evaluation

Monitoring and evaluation is needed to determine whether the type guidance that has been suggested by the system through the calculation process is in accordance with the needs of the actual school situation. Monitoring and evaluation process consists of several stages, which are as follows:

2.8.1 Supervision on school assessment results.

After an assessment of the entire school, *Koordinator Kelompok Jabatan Fungsional* monitoring the results of the assessment has been done previously, including the components of the assessment value and also the value of each criterion in the assessment component.

Table 9 Supervision on school assessment results

Nama Sekolah	Kriteria (Nilai)
SDN Sindangjaya	C_4 (3), C_{11} (2), C_8 (3), C_{12} (2), C_{13} (3), C_7 (3), C_9 (2)

SDN Sumurbandung	C_4 (3), C_5 (2), C_{11} (2), C_8 (3), C_{12} (2) , C_9 (3)
SDN Gempol	C_4 (3), C_5 (3), C_{11} (3), C_8 (3), C_{12} (1), C_{13} (3), C_{14} (3), C_7 (3), C_1 (3), C_2 (3)
SDN Sukahati	C_4 (3), C_5 (2), C_{11} (2), C_{12} (2), C_{13} (3), C_{14} (2), C_9 (3), C_1 (3)
SDN Haurgeulis IV	C_4 (3), C_5 (2), C_8 (3), C_{13} (3), C_{14} (3), C_9 (1), C_1 (3), C_2 (3)

2.8.2 Supervision value development after school guidance implemented.

Supervision of the development of school guidance value after execution is required to determine the extent of assessment criteria that have been made guidance met by schools. Supervision is done by comparing the results of the assessment currently being undertaken by the results of the assessment has been carried out the previous school year.

Based on the comparison of the yield of the component ratings votes assessment standards in the academic year 2014/205 and 2015/2016 can be seen the development status of these schools are as follows.

Table 10 Supervision value development after school guidance implemented.

Schools Name	2014/2015 (%)	2015/2016 (%)	Status
SDN Sindangjaya	70,09083882	66,09085882	Down
SDN Sumurbandung	78,84222678	64,64222678	Down
SDN Gempol	63,20850585	63,20850585	Same
SDN Sukahati	56,79524803	61,59524803	Up
SDN Haurgeulis IV	64,83401362	60,73401362	Up

2.8.3 The evaluation of the results of supervision

After monitoring the results of the assessment and the value criteria, the next step is to give the action based on the results of monitoring conducted previously by checking the school with a value of 2 (less) and 1 (very poor) on the assessment criteria. Then the action is in the form of approval or rejection of the kind of guidance suggested by the object of surveillance systems. After that, the next evaluation of the results of monitoring the development of criteria values after guidance did the previous school year.

Table 11 Evaluation Results

Nama Sekolah	Status	Tindakan	Deskripsi Pembinaan
SDN Sindangjaya	Menurun	Peningkatan standar penilaian tingkat tinggi	Pemeriksaan terhadap seluruh kriteria penilaian pada komponen penilaian (diperlukan untuk mengetahui faktor penyebab penurunan nilai penilaian sekolah)
SDN Sumurbandung	Menurun		
SDN Sukahati	Meningkat	Peningkatan standar penilaian tingkat menengah	Pemberian apresiasi atas peningkatan nilai kriteria penilaian.
SDN Gempol	Tetap		-
SDN Haurgeulis IV	Menurun		Pemeriksaan terhadap seluruh kriteria penilaian pada komponen penilaian (diperlukan untuk mengetahui faktor penyebab penurunan nilai penilaian sekolah)

2.9 System Design

The system design is a picture of the system to be built intact and ready to be implemented.

2.9.1 Relation scheme

A relation schema design process to determine the table - the table that will be implemented on the database. Scheme relation to the system can be seen in the following figure.

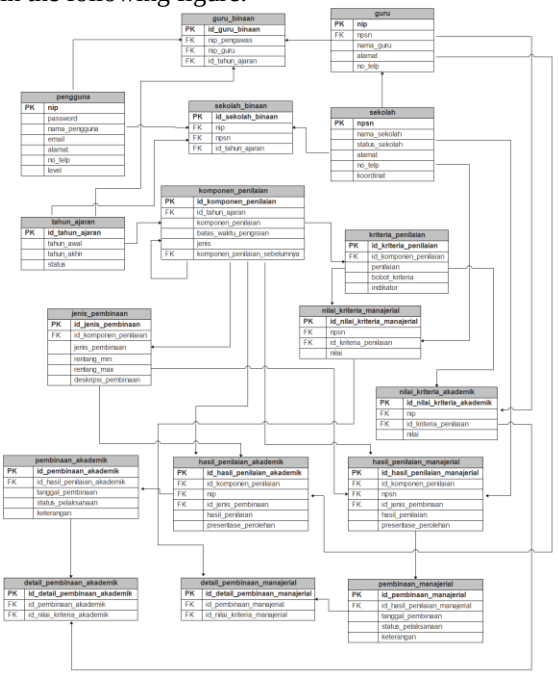


Figure 5 Relation Scheme

2.9.2 Menu Structure Design

The design of the menu structure describes the menus contained in the system consists of three levels of users. As seen in the following figure.

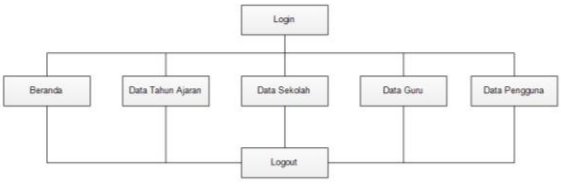


Figure 6 Operator UPTD Menu Structure

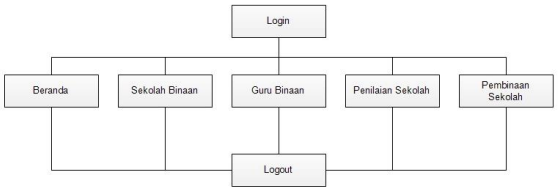
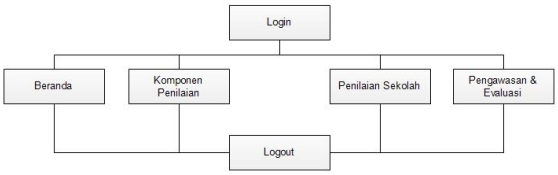


Figure 7 Pengawas SD Menu Structure



Gambar 8 Koordinator Kelompok Jabatan Fungsional Menu Structure

2.9.3 Interfaces Design

Interface design is the design view for every page that will be implemented on a web system. The design of the interface on this system can be seen in the following pictures.

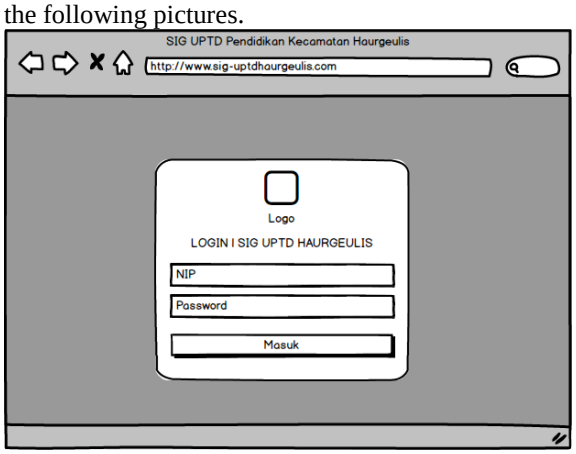


Figure 9 Login

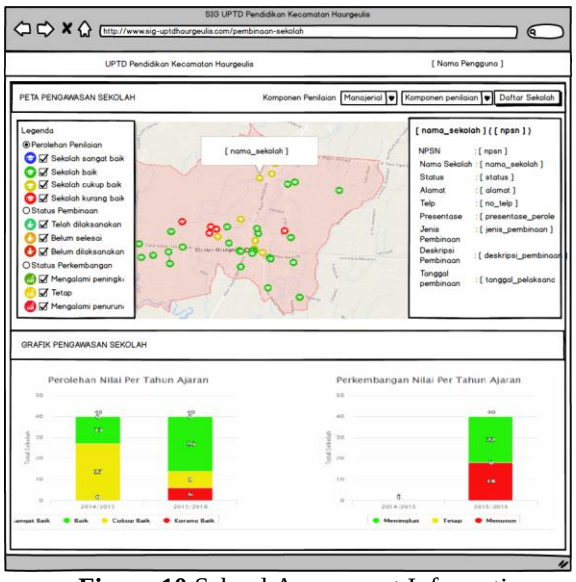


Figure 10 School Assessment Information Results



Figure 11 School Assessment Information Detail Results



Figure 12 Coaching School Evaluation Form

3. CLOSING

3.2 Conclusion

Based on the results obtained in this final assignment it is concluded that a system built to facilitate *Kordinator Kelompok Jabatan Fungsional* in the monitoring of the guidance conducted on the school as well as Award coaching of evaluation process of the primary school becomes easier to do.

3.3 Suggestion

Based on the results that have been achieved in the development of monitoring and evaluation system Award guidance elementary school in *Kecamatan Haurgeulis Kabupaten Indramayu* with the approach of geographic information system still has shortcomings, therefore it is advisable to add features that can be equipped in the future which is need their assistance features or a short tour of the features that exist on the system so that when there

are new users who want to use this system no longer need to conduct training / training.

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