

APPLICATION OF CODEIGNITER FRAMEWORK IN DETERMINING THE BEST EMPLOYEES USING THE MOORA METHOD AT THE IBUNDA GENERAL HOSPITAL IN SERANG CITY

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Abstract

This research is based on the need to select the best appropriate employees so that they can maximize employee performance potential. Meanwhile, the process of determining the best employees currently at the "IBUNDA" Maternity Hospital in Serang City is still less than optimal. Based on these problems, a solution was created for a decision support system application to help management assess the overall determination of employees at the "IBUNDA" Nursing Hospital in Serang City easily and quickly. The MOORA (Multi Objective Optimization On The Basis Of Ratio Analysis) method is a decision making method applied to solve problems with complex mathematical calculations. The results of this research are first, in analyzing determining the best employees at the "IBUNDA" public hospital in Serang City, namely by carrying out calculations based on existing criteria so that you can carry out calculations using the MOORA method and get the best results. Second, implementing a decision support system application using the Moora method for selecting the best employees, so that the calculation process can be carried out using this method, and third, in implementing a decision support system application using the MOORA method, implementing the algorithm of this method into the system that will be built to determine employees the best at the "IBUNDA" General Hospital in Serang City..

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INTRODUCTION

The best and most qualified employees are company assets that will make the company grow rapidly. Employee performance is quite influential in the profits obtained by a company. Therefore, human resources are needed who have high competence and loyalty. Maximum effort is required to improve employee performance. An employee is someone who works in an organization based on an agreed agreement to carry out work in a certain position, by receiving compensation based on performance [1]. One of them is selecting the best employees to stimulate employees to improve their performance. Increasing employee performance is an important point that can improve overall company performance.[2] To improve employee performance, companies really need to carry out an employee performance assessment process in determining outstanding employees every predetermined period. With the existence of quality human resources, there will be makes a company improve in its operations, develop rapidly and become famous. [3]

Determining the best employees is still in manual form, namely by means of performance assessment data recorded on sheets of paper consisting of employee data and 6 criteria data, namely attendance, ethics, time discipline, responsibility, teamwork and performance results. The data is then stored in a filing cabinet. In this process there are several weaknesses, namely that the assessment can be manipulated and inconsistent with the determined assessment results. With the increasingly rapid development of technology, it is now deemed necessary to implement an information system that will serve as a reference and recommendation in assessing employee performance at the "IBUNDA" General Hospital (RSU "IBUNDA") Serang City

The MOORA method is a multiobjective system that optimizes two or more conflicting attributes simultaneously. The Moora method is applied to solve problems with complex mathematical calculations. There are several applications of the Moora method formula, namely: Inputting criteria values, Changing criteria values into a decision matrix, Normalizing the Moora method, Reducing the maximum and minimum values, Determining the ranking from the Moora calculation results. The MOORA method has a level of flexibility and is easy to understand in separating the subjective part of an evaluation process into decision weight criteria with several decision making attributes. [4] In the description above, the author conducted further research which aims to assist the leadership of RSU "IBUNDA" in determining employees with good performance whose results can be used to make decisions in implementing company policies.[5].

RESEARCH METHOD

1.1 Research methods

To ensure that research is carried out effectively, efficiently, systematically and structured in accordance with applicable scientific standards, the research stages are arranged as shown in Figure 1 below.

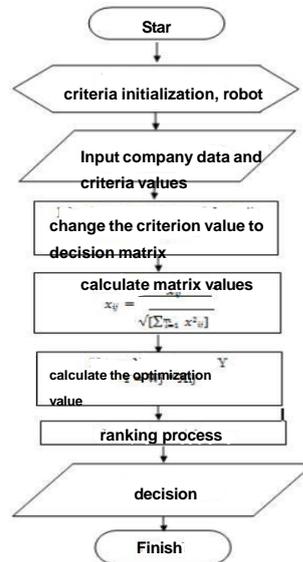


Figure 1. MOORA Research Method Flowchart

1.2 MOORA method

MOORA is a method applied to solve problems with complex mathematical calculations which was introduced by Brauers and Zavadskas in 2006.[6]

The Moora method uses multiplication to connect attribute ratings, where the attribute rating must first be raised to the power in question, Preferences for alternatives.[7]

The MOORA method consists of five main steps, namely as follows:

a) Step 1

The first step that will be taken is to determine the direction of objectives and identify the attributes of the evaluation in question.

b) Step 2

Displays all available information for attributes so that it can form a matrix in a decision. The data given by equation 1 is represented as a matrix x . where X_{ij} shows the size of the i th alternative on the j th attribute, m shows the number of alternatives and n shows the number of attributes. Then a ratio system is developed for each result of an alternative which is compared to a denominator which represents all alternatives regarding that attribute as in equation 1

$$X = \begin{bmatrix} X_{11} & X_{12} & \dots & X_{1N} \\ X_{21} & X_{22} & \dots & X_{2N} \\ \vdots & \vdots & \ddots & \vdots \\ X_{M1} & X_{M2} & \dots & X_{MN} \end{bmatrix} \quad (1)$$

c) Step 3

Denominator, the best choice of the square root of the sum of the squares of each alternative per attribute. This ratio can be expressed in equation 2.

$$X_{ij} = \frac{x_{ij}}{\sqrt{\sum_{j=1}^m x_{ij}^2}} \quad (2)$$

Where X_{ij} is the dimension value in the interval $[0,1]$ in the normalized results presented by the i th alternative on the j th attribute.

d) Step 4

For *multi-objective optimization*, the normalization result is addition in terms of maximization (from favorable attributes) and subtraction in terms of minimization (from unfavorable attributes. Next, the optimization problem becomes like equation 3.

$$Y_i = \sum_{j=1}^g x_{ij} - \sum_{j=g+1}^n X_{ij} \quad (3)$$

When the weight of this criterion is considered, the Y_i equation is in equation 4.

$$Y_i = \sum_{j=1}^g W_j X_{ij} - \sum_{j=g+1}^n W_j X_{ij} \quad (4)$$

e) Step 5

The Y_i value can be positive or negative depending on the maximum (favorable criteria) and minimum (unfavorable criteria) in the decision matrix.

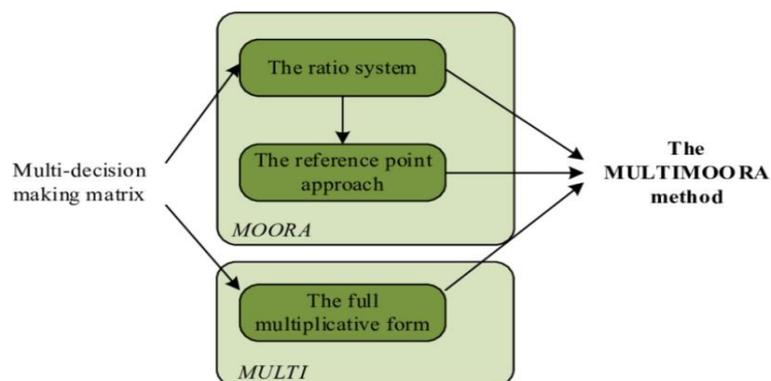
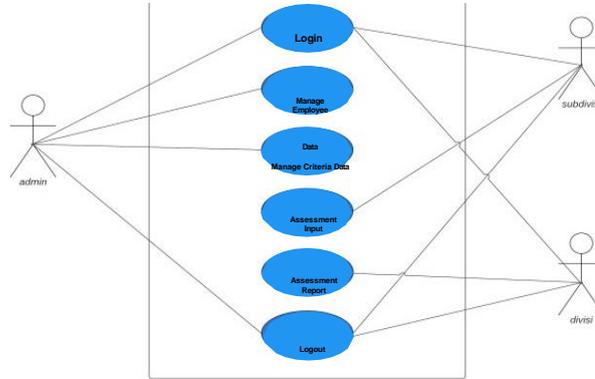


Figure 2. Moora method

1.3 System Design

This system design was designed using UML (Unified Modeling Language)



modeling using *draw.io* to create the system design.

Figure 3. Use Case Diagram of the Proposed System

Use case diagrams or *Use Case Diagrams* describe interactions between use cases and actors. This modeling is intended to describe the processes and relationships that occur between actors and use cases in the proposed system. The use case diagram of the proposed system can be seen in Figure 3.

1. Activity Diagram Login

The Login Activity Diagram is explained in the image below:

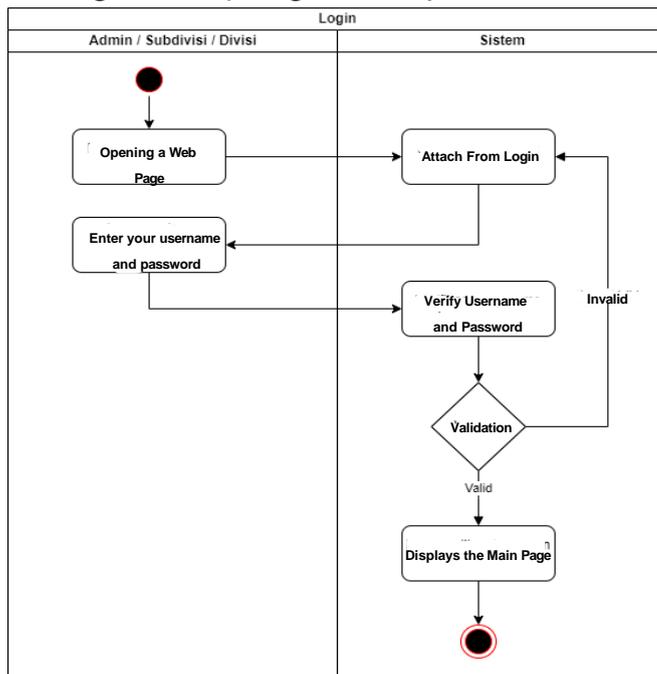


Figure 4. Login Activity Diagram

2. Activity Diagram Manage Employee Data

The Activity Diagram for Managing Employee Data is explained in the image below:

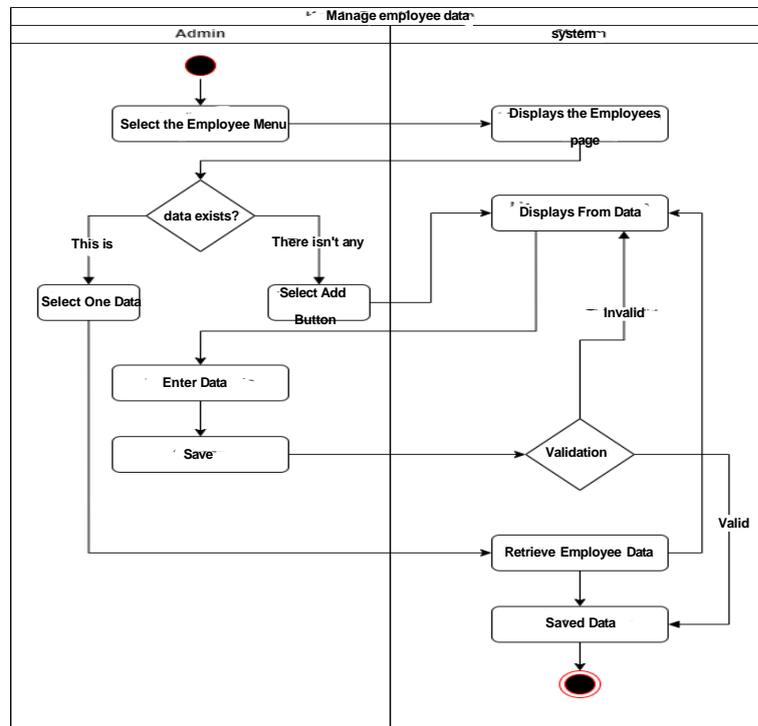


Figure 5. Activity Diagram for Managing Employee Data

3. Activity Diagram Manage Criteria Data

Activity Diagram Manage Data Criteria is explained in the image below:

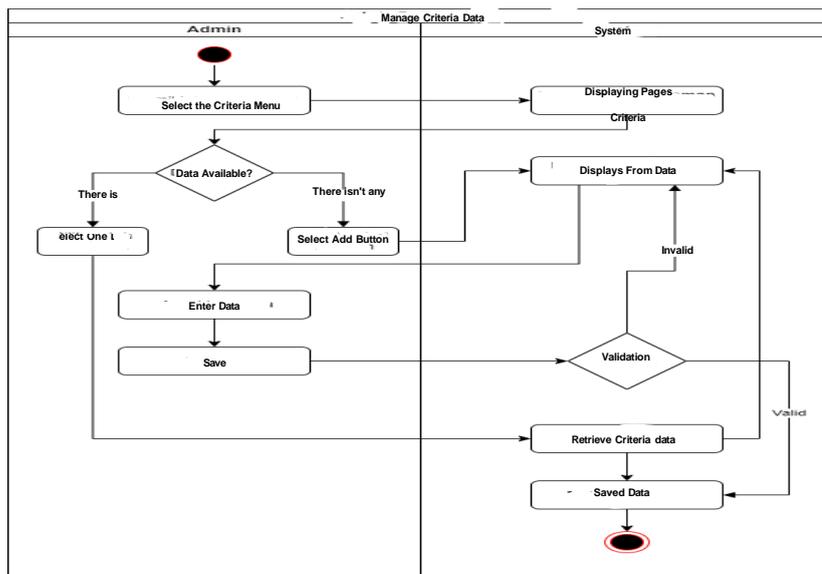


Figure 6. Activity Diagram for Managing Criteria Data

4. Assessment Input Activity Diagram

Activity Diagram is explained in the image below:

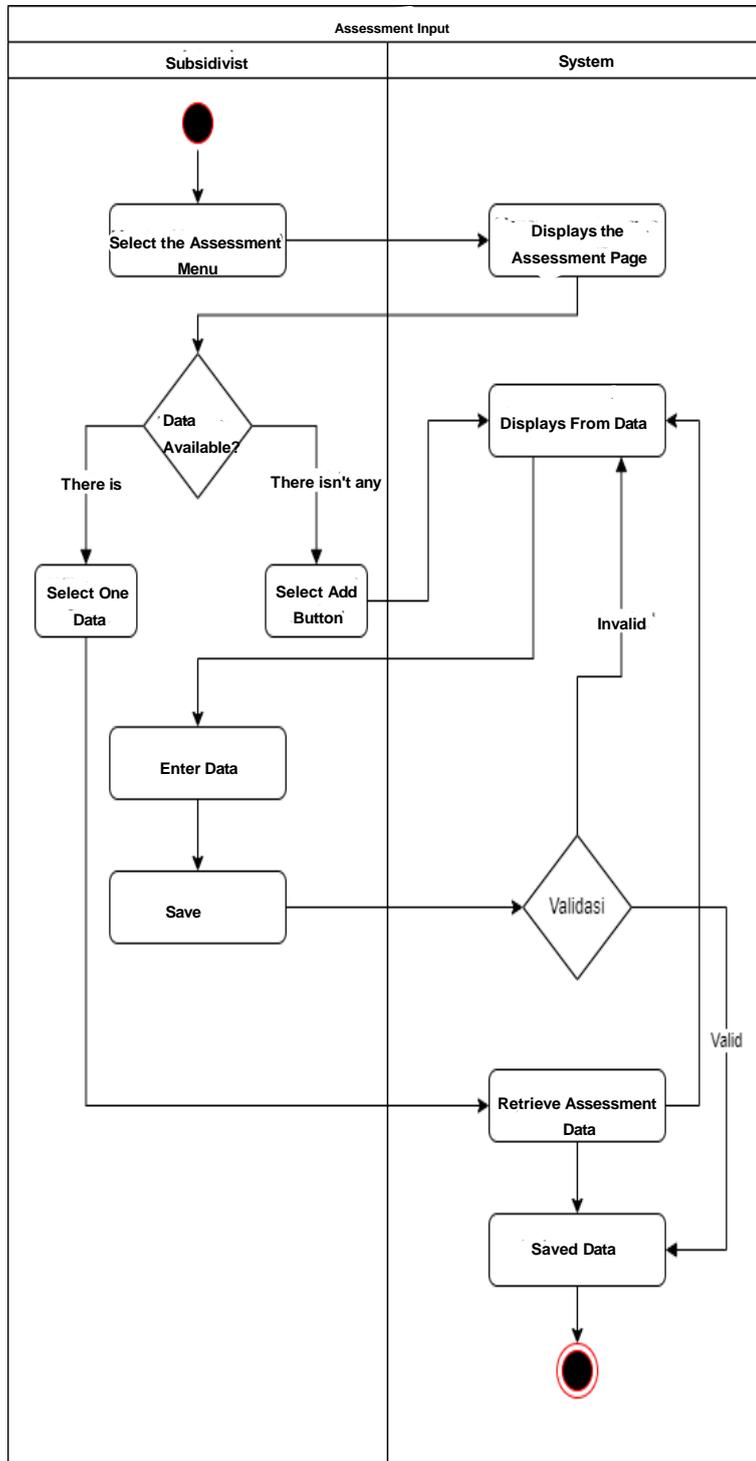


Figure 7. Assessment Input Activity Diagram

5. Activity Diagram Assessment Report

Activity Diagram is explained in the image below:

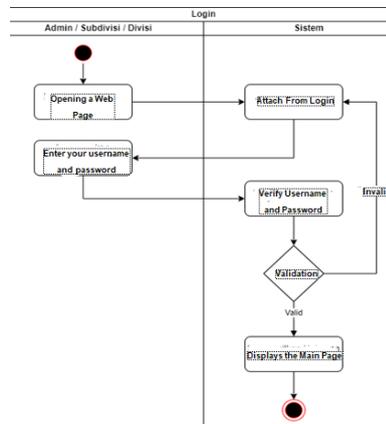


Figure 8. Activity Diagram for Assessment Report

6. Activity Diagram Logout

The Logout Activity Diagram is explained in the image below:

a) Proposed Sequence Diagram

Sequence Diagrams describe the behavior of objects in a Use Case Diagram by describing the life time of objects and messages sent and received between objects. The proposed sequence diagram design is as follows:

1. Login Sequence Diagram

Sequence Diagram Design Login to the Employee Performance Assessment Decision Support System at IBUNDA General Hospital is explained in the image below:

2. Sequence Diagram for Managing Employee Data

The design of the Sequence Diagram for Managing Employee Data in the Employee Performance Assessment Decision Support System at IBUNDA General Hospital is explained in the image below:

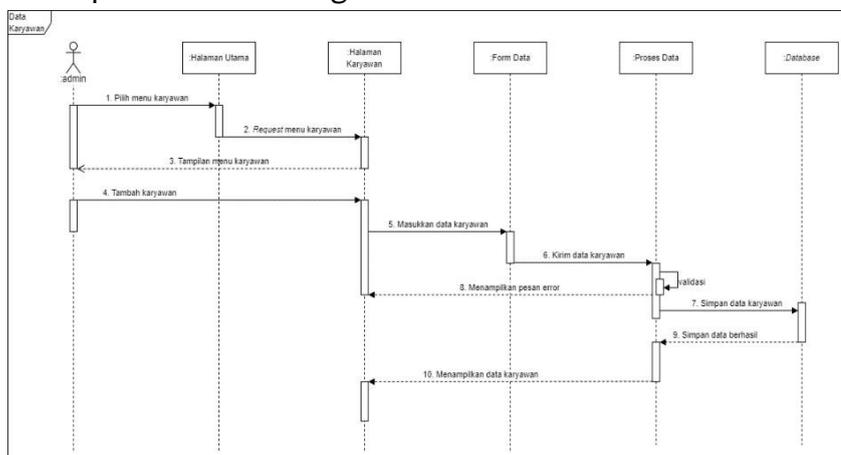


Figure 9. Sequence Diagram for Managing Employee Data

3. Sequence Diagram Manage Criteria Data

The design of a *sequence diagram* for managing criteria data in the decision support system for employee performance assessment at IBUNDA General Hospital is explained in the image below:

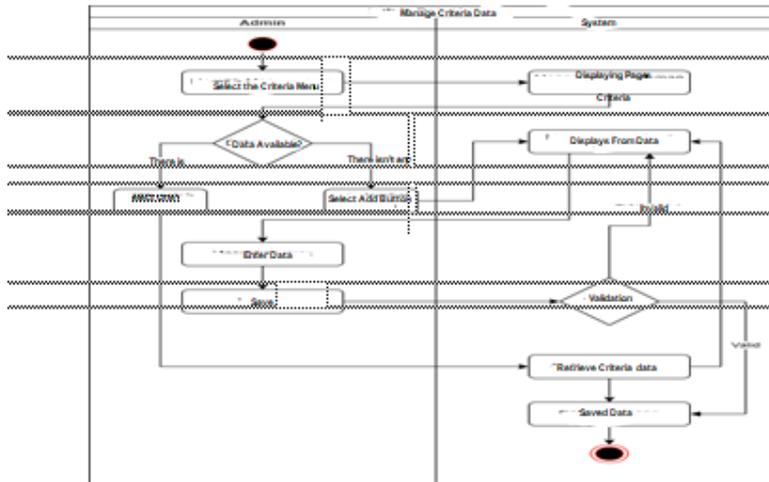


Figure 6. Activity Diagram for Managing Criteria Data

Figure 10. Sequence Diagram for Managing Criteria Data

4. Assessment Input Diagram Sequence

The design of the Assessment Input *Sequence Diagram* for the Employee Performance Assessment Decision Support System at IBUNDA General Hospital is explained in the image below:

5. Sequence Diagram of Assessment Report

The design of the *Sequence Diagram* for the Assessment Report in the Employee Performance Assessment Decision Support System at IBUNDA General Hospital is explained in the image below:

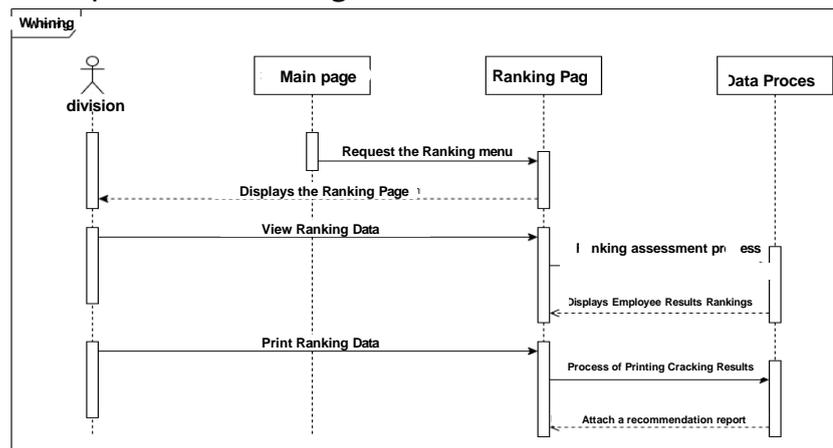


Figure 11. Sequence Diagram of the Assessment Report

6. Logout Sequence Diagram

Sequence Diagram Design Logout to the Employee Performance Assessment Decision Support System at IBUNDA General Hospital is explained in the image below:

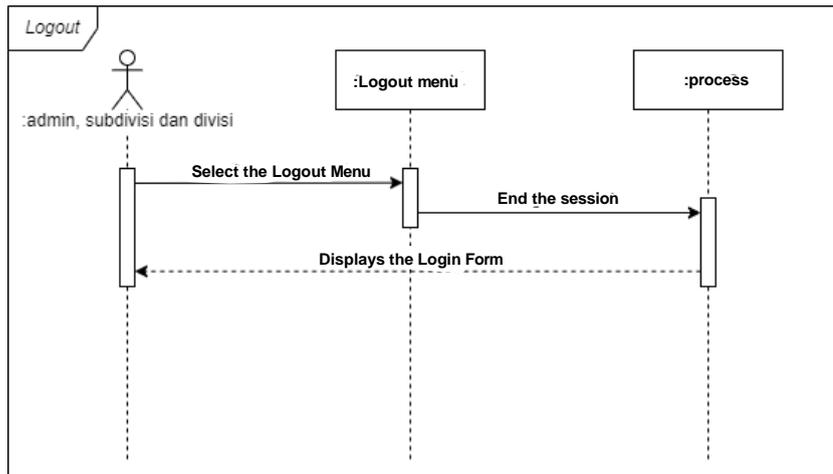


Figure 12. Logout Sequence Diagram

1.4 Data processing.

The following is the data used to obtain the system design:

Table 1 Assessment Criteria

Criteria	Criteria Code	Information
Presence	C1	Benefits
Ethics	C2	Benefits
Time Discipline	C3	Benefits
Responsibility	C4	Benefits
Teamwork	C5	Benefits
Performance Results	C6	Benefits

In the decision support system application for determining the best employees, criteria must be determined that are used as a reference for assessment in the testing process.

a) Work result

Table 2 Weight of Performance Results Criteria

Criterion Scale	Weight
High (21-25) Days	3
Medium (15-20) Days	2
Low (10-14) Days	1

b) Teamwork

Table 3 Weight of Teamwork Criteria

	Criterion Scale	Weight
o.		
.	Very good	3
.	Enough	2
.	Not enough	1

c) Responsibility

Table 4 Weight of Responsibility Criteria

	Criterion Scale	Weight
o.		
.	Very responsible	3
.	Responsible	2
.	Less Responsible	1

d) Time Discipline

Table 5 Time Discipline Criteria Weights

	Criterion Scale	Weight
o.		
.	Punctuality	3
.	Not on time	2
.	Not Punctual	1

e) Ethics

Table 6 Weight of Ethical Criteria

	Criterion Scale	Weight
o.		
.	Ethical	3
.	Simply Ethical	2
.	Less Ethical	1

f) Presence

Table 7 Weight of Attendance Criteria

o.	Criterion Scale	Weight
.	High (21-25) Days	3
.	Medium (15-20) Days	2
.	Low (10-14) Days	1

The MOORA algorithm in the decision support system for determining the best employees can be described as follows.

1. Give alternative values for the criteria and then create a matrix value

Table 8 Alternative Assessment Table

o.	Alternative	Criteria					
		C1	C2	C3	C4	C5	C6
.	Juhem Disastra, Amd. Kep	1	3	2	3	3	2
.	Firman Darjati, Amd. Kep	2	3	1	3	3	3
.	Adhis Erlyn Adieza, Amd. Kep	3	3	3	2	3	2
.	Rila Nurlita	3	2	3	2	1	2
.	Widi Pratiwi, Amd. Kep	3	2	3	3	2	2
.	Enjoy E., Amd. Kep	3	2	1	2	1	1
.	Piawati, Amd. Kep	2	3	1	2	3	3

$$\begin{pmatrix} 1 & 3 & 2 & 3 & 3 & 2 \\ 2 & 3 & 1 & 3 & 3 & 3 \\ 3 & 3 & 3 & 2 & 3 & 2 \\ 3 & 2 & 3 & 2 & 1 & 2 \\ 3 & 2 & 3 & 3 & 2 & 2 \\ 3 & 2 & 1 & 2 & 1 & 1 \\ 2 & 3 & 1 & 2 & 3 & 3 \end{pmatrix}$$

2. Decision Matrix Normalization

After the changes are made, then carry out normalization. The following is the normalization of the data.

$$x_{ij} = x_{ij} / \sqrt{\sum_{i=1}^m X_{ij}^2}$$

Attendance Criteria (C1)

$$\begin{aligned}2 &= 2/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,3381 \\3 &= 3/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,5071 \\2 &= 2/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,3381 \\2 &= 2/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,3381 \\2 &= 2/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,3381 \\1 &= 1/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,169 \\3 &= 3/\sqrt{2^2+3^2+2^2+2^2+2^2+1^2+3^2} = 0,5071\end{aligned}$$

Ethical Criteria (C2)

$$\begin{aligned}3 &= 3/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,4629 \\3 &= 3/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,4629 \\3 &= 3/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,4629 \\1 &= 1/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,1543 \\2 &= 2/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,3086 \\1 &= 1/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,1543 \\3 &= 3/\sqrt{3^2+3^2+3^2+3^2+1^2+2^2+3^2} = 0,4629\end{aligned}$$

Time Discipline Criteria (C3)

$$\begin{aligned}3 &= 3/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,4575 \\3 &= 3/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,4575 \\2 &= 2/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,3050 \\2 &= 2/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,3050 \\3 &= 3/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,4575 \\2 &= 2/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,3050 \\2 &= 2/\sqrt{3^2+3^2+2^2+2^2+3^2+2^2+2^2} = 0,3050\end{aligned}$$

Responsibility Criteria (C4)

$$\begin{aligned}2 &= 2/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,3430 \\1 &= 1/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,1715 \\3 &= 3/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,5145 \\3 &= 3/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,5145 \\3 &= 3/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,5145 \\1 &= 1/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,1715 \\1 &= 1/\sqrt{2^2+1^2+3^2+3^2+3^2+1^2+1^2} = 0,1715\end{aligned}$$

Teamwork Criteria (C5)

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4330$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4330$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4330$$

$$2 = 2 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,2887$$

$$2 = 2 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,2887$$

$$2 = 2 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,2887$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4330$$

(C6) Performance Results Criteria

$$1 = 1 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,1491$$

$$2 = 2 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,2881$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4472$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4472$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4472$$

$$3 = 3 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,4472$$

$$2 = 2 / \sqrt{3^2 + 3^2 + 3^2 + 2^2 + 2^2 + 2^2 + 3^2} = 0,2981$$

Based on the calculations above, the following is the normalized matrix as follows:

$$\begin{pmatrix} 0,15 & 0,43 & 0,34 & 0,46 & 0,46 & 0,33 \\ 0,30 & 0,43 & 0,17 & 0,46 & 0,46 & 0,51 \\ 0,45 & 0,43 & 0,51 & 0,30 & 0,46 & 0,34 \\ 0,45 & 0,29 & 0,51 & 0,30 & 0,15 & 0,34 \\ 0,45 & 0,29 & 0,51 & 0,46 & 0,31 & 0,34 \\ 0,45 & 0,29 & 0,17 & 0,30 & 0,15 & 0,17 \\ 0,30 & 0,43 & 0,17 & 0,30 & 0,46 & 0,51 \end{pmatrix}$$

table.

It is known that the weight of each assessment criterion determined by the author can be seen in Table 9 Table of Criteria Weights

No.	Kriteria	Bobot Kriteria
1.	Hasil Kinerja	10 %
2.	Kerjasama Tim	10 %
3.	Tanggung Jawab	15 %
4.	Disiplin	15 %
5.	Etika	25 %
6.	Kehadirannya	25 %

Next, optimize the attribute values with the following equation: $Y = X_{ij} * W$. Here are the results.

$$\begin{pmatrix} 0,15 & 0,43 & 0,34 & 0,46 & 0,46 & 0,33 \\ 0,30 & 0,43 & 0,17 & 0,46 & 0,46 & 0,51 \\ 0,45 & 0,43 & 0,51 & 0,30 & 0,46 & 0,34 \\ 0,45 & 0,29 & 0,51 & 0,30 & 0,15 & 0,34 \\ 0,45 & 0,29 & 0,51 & 0,46 & 0,31 & 0,34 \\ 0,45 & 0,29 & 0,17 & 0,30 & 0,15 & 0,17 \\ 0,30 & 0,43 & 0,17 & 0,30 & 0,46 & 0,51 \end{pmatrix}$$

So the result is the multiplication value $Y = X_{ij} * W$ namely as follows:

$$\begin{pmatrix} 0,15 & 0,43 & 0,34 & 0,46 & 0,93 & 0,68 \\ 0,30 & 0,43 & 0,17 & 0,46 & 0,93 & 1,01 \\ 0,45 & 0,43 & 0,51 & 0,30 & 0,93 & 0,68 \\ 0,45 & 0,29 & 0,51 & 0,30 & 0,31 & 0,68 \\ 0,45 & 0,29 & 0,51 & 0,46 & 0,62 & 0,68 \\ 0,45 & 0,29 & 0,17 & 0,30 & 0,31 & 0,34 \\ 0,30 & 0,43 & 0,17 & 0,30 & 0,93 & 1,01 \end{pmatrix}$$

3. Calculating Maximum and Minimum Values

Then, after multiplying X_{ij} and W_j , the next step is to calculate the optimization value Y_i which is shown in the table.

Table 10. Table for Finding Y_i Values

o.	Alternative	Max (C1 C2 C3 C4 C5 Minimum C6)	Minimum (C1)	$Y_i = \text{Max}-\text{Min}$
.	Juhem Disastra, Amd. Kep	2.98	0	2.98
.	Firman Darjati, Amd. Kep	3.30	0	3.30
.	Adhis Erlyn Adieza, Amd. Kep	3.30	0	3.30
.	Rila Nurlita	2.54	0	2.54
.	Widi Pratiwi, Amd. Kep	3.00	0	3.00
.	Enjoy E., Amd. Kep	1.86	0	1.86
.	Piawati, Amd. Kep	3.15	0	3.15

4. Determine the ranking from the MOORA calculation results

Table 11 Decision Table

o.	Alternative	Total value	Decision
.	Juhem Disastra, Amd. Kep	2.98	Not elected
.	Firman Darjati, Amd. Kep	3.30	Not elected
.	Adhis Erlyn Adieza, Amd. Kep	3.30	<i>Selected</i>
.	Rila Nurlita	2.54	Not elected

Widi Pratiwi, Amd. Kep	3.00	Not elected
Enjoy E., Amd. Kep	1.86	Not elected
Piawati, Amd. Kep	3.15	Not elected

From the ranking results above, it can be seen that the one with the highest final score, namely 3.30, is **Adhis Erlyn Adieza, Amd. Kep** was declared the best employee. Based on the decision of the leadership of RSU "IBUNDA:", employees with a score of 3.30 can be declared as the best employees at RSU "IBUNDA".

RESULTS AND DISCUSSION

The results implemented include:

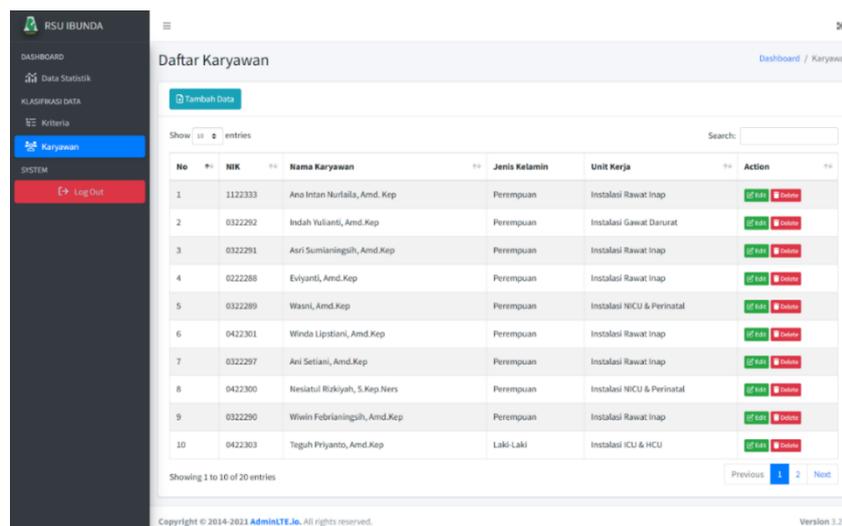
3.1. Login View

The image below is the login screen. In this section the admin must enter the username and password. If the username and password do not match, the login process cannot be carried out. The login menu is useful so that not just any user can access the menu in the application. [9]



Figure 15 Login Display

3.2. Main Menu Display.



After the login process is successful, the admin will be directed to the main menu where there are 9 (nine) data processing sub menus that can be accessed, namely criteria data and company data. However, if the login process is unsuccessful, the system will return to the login page, and the system will ask you to enter the correct username and password. The main menu page can be seen in the image below:

Figure 16 Main page display

3.3. Employee Data Input Display

In company data input what is meant is the process of adding, changing, saving and deleting employee data contained in the database. The page that functions to process employee data is the employee form page shown in the image below:

No.	Alternatif	Kriteria									Action
		C1	C2	C3	C4	C5	C6	C7	C8	C9	
1	Juhem Disastra, Amd. Kep	800	780	860	800	860	830	820	800	800	[Edit] [Delete]
2	Firman Darjati, Amd. Kep	800	780	880	800	860	800	820	850	800	[Edit] [Delete]
3	Adhis Erlin Adieza, Amd. Kep	750	750	750	600	750	600	600	600	600	[Edit] [Delete]
4	Rila Nurlika	850	750	800	800	800	800	800	750	750	[Edit] [Delete]
5	Widi Pratiwi, Amd. Kep	850	850	800	800	850	800	800	750	700	[Edit] [Delete]
6	M. Nikmatin Erbakhan, Amd. Kep	850	850	800	850	850	800	800	800	700	[Edit] [Delete]
7	Prawati, Amd. Kep	700	750	700	700	700	700	650	650	700	[Edit] [Delete]
8	Dede Hilda Nurhidayatun, Amd. Kep	850	900	900	900	900	900	900	900	800	[Edit] [Delete]
9	Alpin Dwiandy, Amd. Kep	800	700	800	700	800	700	700	700	700	[Edit] [Delete]
10	Cikha Deschia Tantri, S. Kep. Ners	850	800	800	850	850	850	800	800	800	[Edit] [Delete]

Figure 17 Employee Input Display

3.4. Criteria Data Input Display

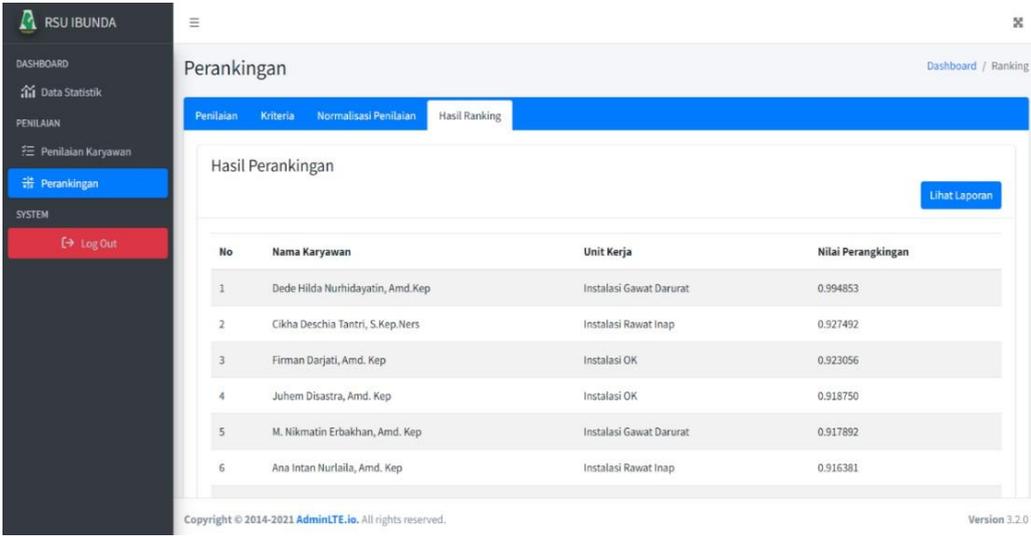
The criteria form is an interface display for inputting criteria data that will be used as a reference for evaluating each employee. The following is a picture of the implementation results of the criteria assessment input form interface design, namely:

No	Nama Kriteria	Jenis Kriteria	Bobot Nilai	Action
1	Disiplin	Benefit	0.125000	[Edit] [Delete]
2	Tanggung Jawab	Benefit	0.125000	[Edit] [Delete]
3	Etika	Benefit	0.112500	[Edit] [Delete]
4	Kerjasama	Benefit	0.125000	[Edit] [Delete]
5	Kejujuran	Benefit	0.125000	[Edit] [Delete]
6	Ketrampilan	Benefit	0.112500	[Edit] [Delete]
7	Prakarsa	Benefit	0.087500	[Edit] [Delete]
8	Komunikasi	Benefit	0.100000	[Edit] [Delete]
9	Kepekaan Terhadap Lingkungan	Benefit	0.087500	[Edit] [Delete]
Total Bobot :			1.000	

Figure 18 Criteria Input Display

3.5. Calculation Results Data Input Display

The calculation results form is an interface display to display the results of the data processing of the criteria values for each criterion that has been entered into this system. The following form displays the calculation results, which can be seen in the



No	Nama Karyawan	Unit Kerja	Nilai Perankingan
1	Dede Hilda Nurhidayatin, Amd. Kep	Instalasi Gawat Darurat	0.994853
2	Cikha Deschia Tantri, S.Kep.Ners	Instalasi Rawat Inap	0.927492
3	Firman Darjati, Amd. Kep	Instalasi OK	0.923056
4	Juhem Disastra, Amd. Kep	Instalasi OK	0.918750
5	M. Nikmatin Erbakhan, Amd. Kep	Instalasi Gawat Darurat	0.917892
6	Ana Intan Nurlaila, Amd. Kep	Instalasi Rawat Inap	0.916381

image below:

Figure 19 Calculation Results Input Display

From the ranking results above, it can be seen that the one with the highest final score, namely 3.30, is **Adhis Erlyn Adieza, Amd. Kep** was declared the best employee. Based on the decision of the leadership of RSU "IBUNDA:", employees with a score of 3.30 can be declared as the best employees at RSU "IBUNDA" .

CONCLUSION

Based on the analysis and testing that has been carried out, the conclusions regarding the decision support system for implementing the Moora Method in Determining the Best Employees at RSU "IBUNDA" Serang City are as follows:

1. This application can facilitate the process of determining the best employees.
2. This application can provide information regarding determining the best employees based on 6 assessment criteria.
3. The calculation process using the Moora method has obtained consistent results.
4. Computerized systems are easier to process data even though they are not very effective and efficient, when compared to the manual systems used so far.

5. So Nurhayati was declared the best employee with the highest score of 3.30 based on the decision of the Decision Support System at RSU "IBUNDA, Serang City." .

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