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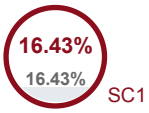

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Application Decision support System for superior and high Achieving using the AHP Method(case study : SMP TPI Porong)

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Received on dd-mm-yyyy, revised on dd-mm-yyyy, accepted on dd-mm-yyyy
OPEN ACCESS Vol. 1, No. 1, pp.001-010, Mei 2023 ISSN : 2622-8106 (ONLINE) DOI: xxxxxx Journal of Informatics, Information System, Software Engineering and Applications (INISTA)

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Abstract
This research aims to develop a mobile-based Decision Support System (DSS) for identifying high-achieving students at SMP Taman Pendidikan Islam (TPI) Porong using the Analytical Hierarchy Process (AHP) method. The study addresses the need for a systematic, efficient, and accurate approach in selecting students based on multiple criteria, including religious competence (Quran recitation), academic performance (exam scores), extracurricular activities, and ethics. The system calculates the rankings of students by processing these criteria with a weighted priority system. This DSS supports teachers and school administrators in making informed decisions regarding student achievements, thus enhancing the accuracy and efficiency of identifying top students. The results of this study are expected to improve the school's ability to recognize and foster high-achieving students in a way that aligns with its educational values.
Keywords: Decision Support System, High-Achieving Students, Analytical Hierarchy Process, Student Ranking

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Introduction

According to Law No. 20 of 2003 on the National Education System, education is a conscious and planned effort to create a learning environment and learning process that enables students to actively develop their potential. This includes fostering spiritual strength, self-control, personality, intelligence, noble character, and skills necessary for themselves, society, the nation, and the state. education plays a central role in shaping future generations to be competent and full of integrity. Amid the dynamic challenges of global development, it is crucial for educational institutions to focus not only on academic achievements but also on fostering positive character and strong leadership. Schools are places where a child's character is molded, and they must also produce outstanding and accomplished future leaders to drive national progress.

High-achieving students are crucial to guide and nurture to support the development of their individual potential. However, outstanding and high-

achieving students are often judged solely based on their academic abilities, while other aspects such as non-academic achievements, honesty, morality, and behavior are often overlooked. Therefore, these important aspects must be included in the assessment of high-achieving students. Schools and education stakeholders have made significant efforts to enhance students' academic performance to meet national education standards. A student's level of success reflects the quality of the education system. In many schools, the selection of high-achieving students tends to prioritize their identity and background. During the selection process, each school establishes its own criteria for high-achieving students, resulting in variations in standards across schools.

The determination of student achievement is generally conducted using conventional methods, primarily based on the average report card grades, which often require considerable time to identify high-achieving students. At SMP Taman Pendidikan Islam Porong, there is currently no established system for identifying high-achieving students. Therefore, a Decision Support System has been developed to process all the variables that determine outstanding and high-achieving students and produce results indicating which students fall into this category. At this school, priority is given to students who can recite the Quran, aligning with the school's vision and mission. This is combined with report card grades. Other important aspects include Religious Competence (Quran recitation and reading religious texts), Average Exam Scores, Extracurricular Activities, and Ethics.

A decision support system application is a system designed to assist in solving problems related to decision-making within an organization or specific environment. Below is an example of research that utilizes the Simple Multi-Attribute Rating Technique (SMART) method. This system is capable of processing student score calculations. The SMART method uses five assessment criteria for selecting high-achieving student candidates. In this research, the decision support system (DSS) is developed as a web-based application. Another study employed the Simple Additive Weighting (SAW) method, which can accelerate the evaluation process with greater accuracy. This is achieved by using criteria values and the required weight importance, where decision-makers can also assign their own weight values. In Dwi Lestari et al.'s study, the system was implemented as a web-based application. In contrast, I aim to develop it as a mobile version.

An information system has been developed to assist in identifying high-achieving students across all aspects mentioned earlier. This system utilizes the Analytical Hierarchy Process (AHP) method to support the decision-making process in determining outstanding students. The resulting system is a mobile-based decision support system. The collected data is processed using the AHP method to generate a ranked list of high-achieving students based on various aspects. These aspects are divided into four categories: Religious Competence (Quran recitation and reading religious texts), Average Exam Scores, Extracurricular Activities, and Ethics, each assessed on a scale of 1-100. This information system is designed to make the selection of high-achieving students more efficient, with the results presented in a ranking format to motivate students further. It is expected that this decision support system will enable SMP TPI to determine and identify high-achieving students quickly and accurately.

The author uses the Analytic Hierarchy Process (AHP) method because it allows for a systematic and structured approach to decision-making, especially when multiple criteria are involved. AHP helps to prioritize and weigh different factors based on their importance, enabling a more accurate and objective evaluation. In the context of identifying high-achieving students, AHP is useful for considering various aspects, such as academic performance, extracurricular activities, religious competence, and ethics, and weighing each factor appropriately. By using AHP, the author can ensure that the final decision reflects the relative importance of each criterion, leading to a more reliable and comprehensive assessment of student achievement.

The method is expected to enable a more precise evaluation of high-achieving students by relying on criteria values and their respective weights, resulting in more accurate outcomes. Based on the explanation above, the author conducted a study titled " **Decision Support** System for Outstanding and High-Achieving Students Using the AHP Method (Case Study at SMP TPI Porong)." This research aims to provide a solution-oriented approach to identifying outstanding and high-achieving students based on the scores they attain during their learning activities.

Research Method

This research utilizes the Software Development Life Cycle (SDLC) method in developing **a decision support** system application using **the Analytical Hierarchy Process (AHP) method. To** ensure the success of the application, from development to publication, several steps are required. The process begins with problem identification, which involves conducting interviews at SMP TPI Porong to identify and resolve issues. Following this, a literature review is conducted, referring to previous studies to find solutions to the identified problems. Next, a system design is created to ensure that the system functions as expected. Subsequently, system testing is carried out within the school by inputting the necessary data. Figure 1 illustrates the research workflow in the application development process. The application will be tested at SMP TPI Porong, located at Jl Pesantren 176, Porong, and will be utilized by the teachers at the school.

Fig. SEQ Fig. * ARABIC 1. Research Method

AHP (Analytical Hierarchy Process) is a general theory of ratio measurement used to determine ratio scales, either through comparisons. AHP can break down complex multi-factor problems into a hierarchy. It represents **a complex problem in a multi-level structure, where the first** level represents **the** goal, **followed by** levels for factors, **criteria, sub-criteria, and so on, down to** the final level. Using **a hierarchy, a complex problem can be** solved by dividing it **into** groups, which are **then organized into a hierarchical** form, making **the problem** appear more **structured and systematic.** To represent complex multi-objective problems in a hierarchy, Thomas L. Saaty developed a decision support model called AHP. In a multilevel structure, the hierarchy is intended to provide a comprehensive **representation of a complex problem.** The first level **is the goal, followed** by levels for elements, **criteria, sub-criteria,** and finally, the alternatives. This process makes the problem more structured and systematic. AHP transforms broad **and unstructured problems into a flexible and easy-to-understand model.**

Results and Discussion

To develop a system, a well-thought-out concept is essential to ensure the system functions effectively. Figure 2 illustrates a flowchart diagram that explains the workflow or process of the application. The use of a flowchart makes the process more structured and easier to understand. This diagram represents each system activity or process using symbols and directional arrows. In Figure 2, the system process begins with logging into the system. After logging in, the user is directed to the main page. On the main page, users can input student scores. These scores are then processed using the AHP method. Once the scores are processed, the system directs the user to the student ranking page. Afterward, the system returns to the main page.

Fig. SEQ Fig. * ARABIC 2. Flowchart System

Next is the Use Case Diagram, which illustrates how the system operates based on its functionalities and how users can interact with the features within the application. As shown in Figure 3, users are required to log in first before accessing the application. Once logged in, users can view the available student data. After reviewing the student data, they can input scores. Finally, users can view the student rankings generated using the AHP method.

Fig. SEQ Fig. * ARABIC 3. Usecase Diagram

Design

This application is designed to meet the needs of identifying outstanding and high-achieving students on an Android-based platform. The application includes several interfaces: (a) the login page user must login with username and password, (b) the main page , (c) the student scores page, and (d) the student rankings page.

(a) (b) (c) (d)

Fig. SEQ Fig. * ARABIC 4. User Interface Applications

AHP Calculation

The values assigned to the weights are determined based on the decision-making process considering the level of importance of the specified criteria . Table 1 presents the criteria weights to be calculated. There are four criteria: Religion, The average exam score, Extracurricular, and Ethics.

TABLE SEQ TABLE * ROMAN I. WEIGHT CRITERIA

Code	Criteria
C1	Religion
C2	The average exam score
C3	Extracurricular
C4	Ethics

After that, the weight of each criterion is calculated as a comparison between the weights. Table 2 shows the calculation of the comparative weights for each criterion. Then, the values in each column are summed, as shown in the example for the first column: 1 + 0.2 + 0.333 + 0.333 = 1.866. Thus, the total for the first column is 1.866, and the same process is applied to the subsequent columns.

TABLE SEQ TABEL * ROMAN II. WEIGHT CRITERIA CALCULATION

Criteria	C1	C2	C3	C4
C1	1	5	3	3
C2	0,2	1	0,333	0,333
C3	0,333	3	1	2
C4	0,333	3	0,5	1
Total	1,866	12	4,833	6,333

After obtaining the total weight of the criteria, the matrix is normalized by dividing each criterion weight by the total weight of the criteria. Table 3 shows the results of normalizing the matrix for the priority weight calculation. The normalization process involves dividing each matrix element by the column total [10]. For example, cell C1-C2 = 1/1.866 = 0.5357, and C2-C3 = 0.333/4.833 = 0.0689. This process is repeated for all other cells. The priority weight column is obtained by averaging each row in the normalized matrix.

TABLE SEQ TABEL * ROMAN II. NORMALIZED MATRIX

Criteria	C1	C2	C3	C4
C1	0,5357	0,4167	0,6207	0,4737
C2	0,1071	0,0833	0,0689	0,0526
C3	0,1786	0,25	0,2069	0,3158
C4	0,1786	0,25	0,1034	0,1579

Next, we calculate the priority weight for each criterion. For example, the priority weight for the first row is calculated as follows = (0,5357 + 0,4167 + 0,6207 + 0,4737) / 4 = 0,5117 Similarly, for the subsequent rows, the values in each row are summed and then divided by 4. Table 4 presents the resulting priority weights.

TABLE SEQ TABEL * ROMAN IIIV. PRIORITY WEIGHT

Criteria	C1	C2	C3	C4	Priority Weight
C1	0,5357	0,4167	0,6207	0,4737	0,5117
C2	0,1071	0,0833	0,0689	0,0526	0,078
C3	0,1786	0,25	0,2069	0,3158	0,2378
C4	0,1786	0,25	0,1034	0,1579	0,1725

After obtaining the priority weights, they can be directly applied to the scores. Since I am using a 0-100 interval for all scores, there is no need to adjust the weights for the interval, as the range is already uniform, ensuring fairness in the calculation. Table 5 presents the student scores to be calculated, using 10 student data entries as examples.

TABLE SEQ TABEL * ROMAN IV. STUDENT GRADE DATA

Name	C1	C2	C3	C4
Ali Rizqillah	90	80	80	79
Ana Natasya Alfa Syafitri	70	60	85	80
Ananda Nicolas Saputra	85	89	80	95
Cintya Ramadhani	75	78	90	80
Farach Fathimatuzzahro	80	95	86	95
Jennifer Nayshifa Adinda Putri. W	95	60	90	90
Mas Silviyatus Suwaibah	70	80	85	85
Moch. Syafiq Akmal Fahrezi	60	85	75	75
Muhamad Ilham Faqih	94	75	83	80

Muhammad Daffa Pratama 89 90 85 89

After inputting the scores in Table 5, the results are calculated to determine the rankings. For example, the calculation for the first row is as follows = ((90 x 0,5117) + (80 x 0,078) + (80 x 0,2378) + (79 x 0,1725)) / 4 = 84,9445 The same process is applied to the subsequent rows. The calculation results can be seen in Table 6.

TABLE SEQ TABEL * ROMAN VI. RESULT RANKINGS STUDENT

Name	C1	C2	C3	C4	Grade	Rankings
Weight Priority	0.5117	0.078	0.2378	0.1725		
Jennifer Nayshifa Adinda Putri. W	48,6115	4,68	21,402	15,525	90,2185	1
Muhammad Daffa Pratama	45,5413	7,02	20,213	15,3525	88,1268	2
Muhamad Ilham Faqih	48,0998	5,85	19,7374	13,8	87,4872	3
Ananda Nicolas Saputra	43,4945	6,942	19,024	16,3875	85,848	4
Farach Fathimatuzzahro	40,936	7,41	20,4508	16,3875	85,1843	5

The following display shows the rankings in the decision support application. The application highlights the top-performing and outstanding students, ranked from 1st to 5th place.

Fig. SEQ Fig. * ARABIC 5 Display Shows The Rankings

Testing

In the testing phase, it is essential to verify whether all features within the application function correctly or if there are any bugs in certain features. This testing is necessary to minimize errors in the processing of the application's features. Table 7 below presents the testing results of the application.

TABLE SEQ TABEL * ROMAN VI. TESTING RESULT

No.	Section	Testing	System Respons		Description
		Good	Fair	Poor	
1	Home Pages		√		
		√			
		√			
		√			
2	Score Pages		√		
		√			
		√			
		√			
		√			
		√			
		√			
		√			
		√			
		√			
		√			
3	Rankings Page		√		

Table 7 shows the testing results for the buttons and features within the application. The results indicate that all features are functioning properly without any issues.

Distribution

The decision support system for outstanding and high-achieving students is distributed to assist in selecting top-performing students at SMP TPI Porong. This application will be used by the homeroom teachers of grades 7, 8, and 9. Figure 5 below shows the testing phase of the application distribution conducted by the homeroom teachers.

Fig. SEQ Fig. * ARABIC 6 Display Shows The Rankings

This application underwent feasibility testing by teachers at SMP TPI Porong. The feasibility test was conducted based on several predetermined assessment categories. The "very poor" category was assigned a score of 1, while the "very good" category was assigned a score of 5. Table 8 below illustrates the Likert scale used for this evaluation..

TABLE SEQ TABEL * ROMAN VII. LIKERT SCALE SCORE CATEGORY

Score	Percentage	Description
1	0% - 20%	Very Poor (VP)
2	21% - 39%	Poor (P)
3	40% - 61%	Fair (F)
4	62% - 79%	Good (G)
5	80% - 100%	Very Good (VG)

The feasibility test was conducted by distributing a survey to homeroom teachers, covering questions about the application's usability, satisfaction, and design. Respondents were then asked to provide their assessments. Figure 7 below presents the evaluation results from the user questionnaire.

Fig. SEQ Fig. * ARABIC 7 User Response Questionnaire

The results of the user response questionnaire as a feasibility test are presented in Table 8. Scores were calculated using a Likert scale. The symbol X represents the highest score on the Likert scale, with the maximum score being 5. Therefore, a score of 5 is multiplied by 3, the number of respondents,

resulting in 5 x 5 = 25. The expected score is represented by the symbol Y, calculated by multiplying the total score by the predetermined number of respondents, expressed as Y = 50 x (number of respondents). The formula for evaluating user responses for this application is as follows:

(1)

(2)

Description :
f = Total Score Questions
T = Total Number of Respondents
F = Likert Scale Score
Pn = Feasibility Percentage
Y = Expected Score
The result is calculated as :
f = (14 x 5) + (1 x 4)
f = (70 + 4) = 74

Pn = 98,7%
The Decision Support System application using the AHP method achieved a frequency score of 74 for the questions and a feasibility percentage of 98.7%. This indicates that the application is excellent and suitable for use.
conclusion
The developed Decision Support System (DSS) using the AHP method offers an efficient and accurate way of identifying high-achieving students by evaluating multiple criteria. By considering various aspects such as religious competence, academic performance, extracurricular activities, and ethics, the system ensures that students are ranked based on a comprehensive and fair assessment. The mobile-based approach makes it accessible and user-friendly for teachers and administrators, enabling them to easily manage student evaluations. The implementation of this system at SMP TPI Porong will help improve the identification process for high-achieving students and contribute to the overall development of a more holistic educational system. Achieving a feasibility test result of 98.7% indicates that this application is useful and easy to use as an assistive tool for ranking outstanding and high-achieving students.

References
1.
[1] Indrayanti Sang, Putra Made, and Marlinda Mery, “VOLUME : 6 NO 2 JURNAL SISTEM & TEKNOLOGI INFORMASI KOMUNIKASI 36,” 2023.
[2] F. Puja Ainun et al., “ **Peran Pendidikan Sebagai Pondasi Utama dalam Menyikapi Dekadensi Moral pada Generasi** Z,” Jurnal **Pendidikan Sosial** Humaniora, vol. 3, no. 1, pp. 14-24, 2024, doi: 10.30640/dewantara.v3i1.1971.
[3] **D. Oktario Dacwanda and Y. Nataliani, “Implementasi k-Means Clustering untuk Analisis Nilai Akademik Siswa Berdasarkan Nilai Pengetahuan dan Keterampilan,” AITI: Jurnal Teknologi Informasi, vol. 18, no. Agustus, pp. 125-138, 2021.**
[4] A. Dwi Ksatria, D. Arifianto, and S. Hidayatullah, “ **Sistem Pendukung Keputusan Siswa Berprestasi Menggunakan Metode Weighted Product (WP) (Studi Kasus SMK Al-Qodiri Jember) Decision Support System For Achieving Students Using The Weighted Product (WP) Method (Case Study** Of SMK Al-Qodiri Jember),” 2023. [**Online].** Available: http://jurnal.unmuhjember.ac.id/index.php/JST
[5] M. **N. D. Satria, “Sistem Pendukung Keputusan Penerimaan Staff Administrasi Menggunakan Metode VIKOR,” Journal of Artificial Intelligence and Technology Information** (JAITI), vol. 1, **no. 1, pp. 39-49, Feb. 2023, doi: 10.58602/jaiti.v1i1.24.**
[6] S. Aisa, A. Akhriana, D. Qadri Ramadhani, and M. Siola, “ Edumatic: **Jurnal Pendidikan Informatika Sistem Pendukung Keputusan** Siswa Berprestasi **menggunakan Metode Simple Multi Attribute Rating Technique** berbasis Web,” **vol. 8, no. 1,** pp. 93-102, 2024, doi: 10.29408/edumatic.v8i 1.25425.
[7] A. Dwi Lestari and F. Irfan Syafiq, “OKTAL : Jurnal Ilmu Komputer dan Science PERANCANGAN **SISTEM PENDUKUNG KEPUTUSAN PEMILIHAN SISWA BERPRESTASI DENGAN METODE SIMPLE ADDITIVE** WEIGHTING (STUDI **KASUS: SMK** WIRABUANA 2),” vol. 3, no. 6, 2024.
[8] **M. Y. Firmansyah, A. C. Murti, and R. Nindyasari, “ANALISIS PERBANDINGAN METODE AHP (ANALYTICAL HIERARCHY PROCESS) DAN SAW (SIMPLE ADDITIVE WEIGHT) DALAM PEMILIHAN TEMPAT USAHA,”** Jurnal Dialektika Informatika (Detika), **vol. 3, no. 2, pp.** 71-78, May 2023, **doi: 10.24176/detika.v3i2.10455.**
[9] J. T. I. M. Wisnumurti **and** N. Lestari, “ PERANCANGAN **METODE AHP DALAM SISTEM PENDUKUNG KEPUTUSAN UNTUK PENERIMAAN SISWA BARU.”**
[10] M. Yanto, “ SISTEM **PENUNJANG KEPUTUSAN DENGAN MENGGUNAKAN METODE AHP DALAM SELEKSI PRODUK,” Jurnal Teknologi Dan Sistem Informasi Bisnis, vol. 3, no. 1, pp. 167-174, Jan. 2021, doi: 10.47233/jteksis.v3i1.161.**
[11] L. M. Ancelina **Kegou,** A. Endy Budianto, **and W. Harianto, “PEMILIHAN SISWA TERBAIK DI SMA SELAMAT PAGI INDONESIA MENGGUNAKAN METODE** AHP,” 2019.
[12] M. J. Maulana, I. Rahdiana, and F. Aprilyani, “ **Sistem Pendukung Keputusan Penerimaan Karyawan Baru Pada PT.** Visiontech Indograha **Menggunakan Metode Analytical Hierarchy Process”.**