



Android-based FTKI UNAS Employee Performance Monitoring System Using Rating Scale Method

Adi Agungkusuma Wardana, Fauziah, dan Novi Dian Nathasia

Fakultas Teknologi Komunikasi dan Informatika Universitas Nasional Jl. Sawo Manila, Pasar Minggu, Jakarta Selatan, 12520

e-mail: ¹adiagungkusuma29@gmail.com, ²fauziah@civitas.unas.ac.id, ³novidian@civitas.unas.ac.id

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ABSTRACT

A system is needed to be used to improve the quality of human resources. Performing performance appraisals is the system that will be used. Employee performance appraisal has a main function in the work environment. This problem is related to the provisions achieved by the company, related to the performance of its employees. The monitoring system of the performance appraisal of the FTKI Secretariat staff at the National University is still fairly manual due to the absence of applications to assess the performance of its employees. Assessing the ability of employees when implementing Rating Scale is the purpose of this study at the FTKI Secretariat at the National University. Many companies currently apply very global and very simple methods through rating scales. To evaluate the ability of this employee to use the rating scale method, if starting from the scale of "Very Good" to "Not Good". And here I use the Android mobile system. One of the factors I chose this device because of the nature of the mobile that is easy and fast to adjust besides being easier to use and develop.

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1. Introduction

In a company or organization that has a very important contribution is human resources, related to obtain the target company or organization resources are used to encourage and generate other resources. Within a company or organization of effective natural resource management, it is able to build good human resources. By evaluating the ability of employees can be arranged human resources. Capability evaluation, is a management system that will be carried out in order to evaluate the quality of performance in a company or organization. The assessment process will be compiled directly by the supervisor. This is because the boss will later write a form filling in the standard values that will be the evaluation of each individual. To understand the employee's ability to plan, in order to obtain more advanced career development arrangements for related employees, by knowing the effectiveness of the employee, this ability evaluation takes into account and estimates expertise, expertise, acquisition with the development of an employee. This capability evaluation is often applied by a company or organization for the sake of plans to increase salaries, promotions, bonuses as well as for demotion and termination of employment. In addition, to obtain the desired target of a company or organization by adding employee loyalty and enthusiasm, evaluation of the ability to use effectively and professionally is the solution. The company's ability is really influenced by the ability of its employees, because employees are a very influential component for the company. Conducting fair and accurate evaluation of capabilities is a management system that organizes employees effectively, to get employees who have high ability. To detect and evaluate whether employees have carried out their own work in totality, the ability evaluation mechanism is used. The application of work according to totality is not only seen or evaluated its physical results should vary in various cases like the expertise of the device, order, bonding devices, ideas, leadership and certain factors in the direction of the level of work they hold. Many companies or organizations apply very global and very simple methods through rating scales. The advantages of Rating Scale are that the budget is not high for usage and improvement leaders who evaluate require minimal training and duration to complete forms, and are able to be used for many employees. The effect of subjectivity on evaluators in the case of irregularities is found to be a lack of this mechanism.

2. Research Methods

In this research method, I use one of the capability evaluation mechanisms, namely the Rating Scale method. Many companies or organizations apply very global and very simple methods through rating scales.



The advantages of Rating Scale are that the budget is not high for usage and improvement, the evaluating leader requires minimal training and duration to complete the form, and is able to be used for many employees. The effect of subjectivity on evaluators in the case of irregularities is found to be a lack of this mechanism. To evaluate the ability of this employee to use the rating scale method, if starting from the scale of "Very Good" to "Not Good". The following scales are mostly modified to form numbers 80-100 (Very Good), 60-70 (Good),

Characteristics of employee appraisals that are assessed usually are such as discipline, friendliness, responsibility, communication, empathy and sympathy, service to customers, technical knowledge and abilities, cooperation in working, speed at work, achievement, and usually at the end of the assessment there is a column of notes which is useful for giving notes to employees both warning and motivation from superiors.

The development of practice can occur repetition and run at the same time, and before doing repetition modifying in the system it is necessary to analyze the system to improve the application system.

3. Results and Discussion

The results of the assessment are the design of an Android-based monitoring system. This system has the function of replacing the old technique, because the old technique is less efficient and often loses employee performance appraisal data because it still uses manuals. With this system, it is expected to solve existing problems.

A. System planning

This system requires software and hardware in its manufacture.

1. Software

Table 1
Software

Sublime
Xampp

2. Hardware

Table 2
Hardware

Processor	Intel Core i7 8th Gen
Graphic Card	NVIDIA Geforce GTX 1050 Ti
Hard drive	Internal 1 TB
RAM	8 GB

B. Use Case Diagrams

Serves to be able to explain some functions contained in the logistics information system. Use case diagrams can be seen in Figure

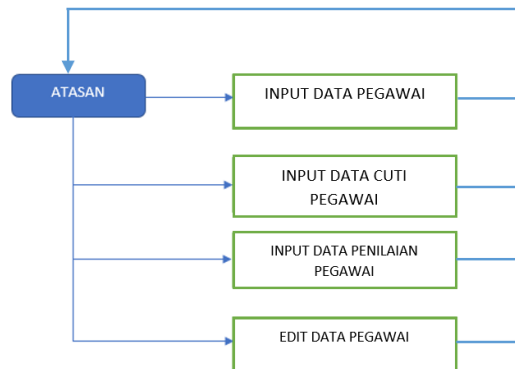


Fig 1. Use Case diagram

From the picture above can be seen what are the functions that can be run on the system. Such as inputting employee data, leave data, and employee assessment data.

C. Activity Diagram

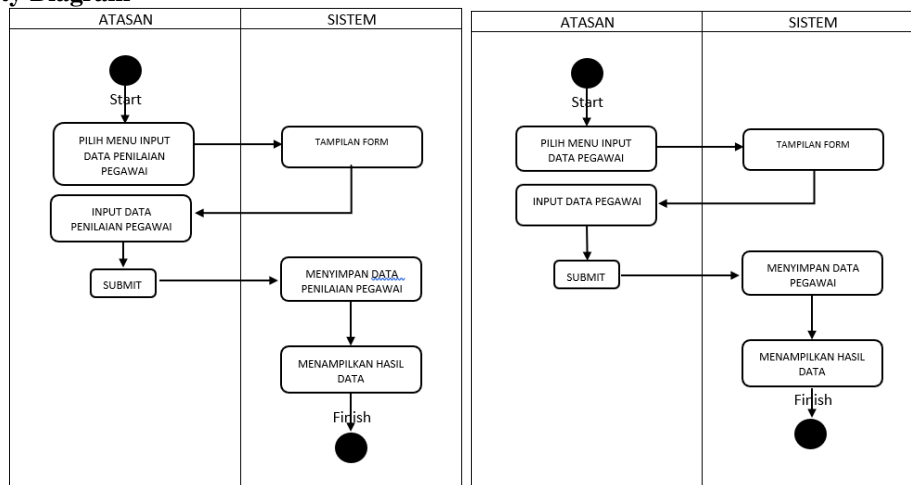

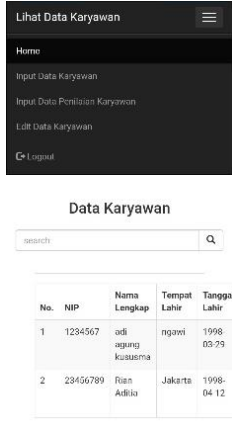



Fig 2. Activity Diagram


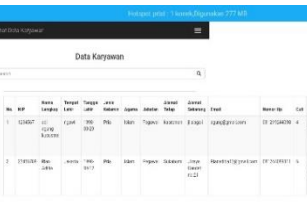
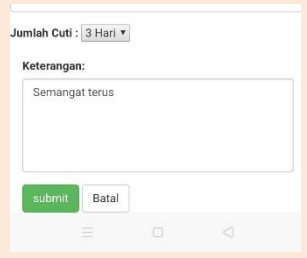

D. Story Board

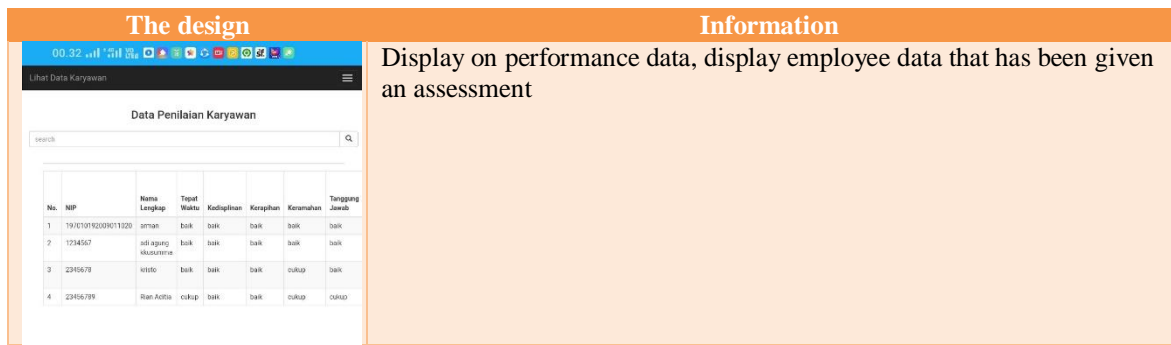
The author's application designs the application interface shown in the user design table as follows:

Table 3
Story Board Application

The design	Information
	<p>The initial display is the login menu which contains a username and password.</p>
	<p>In the main view or home there is employee data that has been inputted and there are also a number of buttons such as, employee data input, employee performance input and edit employee data.</p>
	<p>The employee data input menu display has a column to fill the employee's biodata and there are add, clean and cancel buttons.</p>



The design	Information
	
	<p>Display the employee data edit menu, there is an employee data table that has been inputted and next to the employee data there is an employee data edit button, leave data input, and performance data input</p>
	<p>Display edit leave data, displays the existing employee biodata and there is a column to input the amount of employee leave</p>
	<p>The appearance of employee performance data input, there are several aspects that must be assessed</p>



E. Application Operation Procedure

Before starting or operating the system, it must go through several stages, the following are the stages and explanation from the beginning of running the application to finish running the application. To run the application, the user needs to install the application on an Android smartphone.

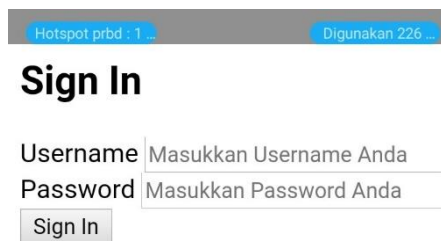


Fig 2. Display Login

Initial display of the login menu which contains a username and password. Users must first enter a username and password that has been registered.

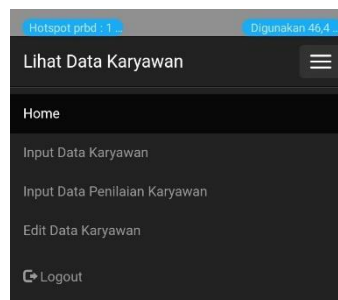


Fig 3. Main page

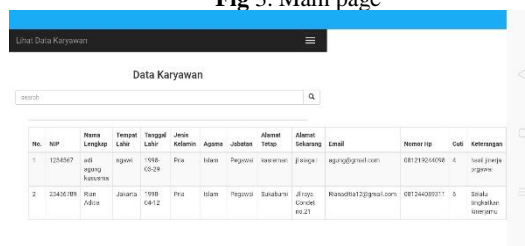


Fig 4. Display Home

The main display in this application there is a table of employee data that has been inputted, and also has several buttons, each of which has different functions. The buttons on the main menu are, see employee data, employee data input, employee performance data input and edit employee data.

The screenshot shows a mobile application interface with a title bar 'Lihat Data Karyawan'. Below the title bar, there are several input fields and radio button options:

- NIP :** A text input field.
- Nama Lengkap :** A text input field.
- Tempat Lahir :** A text input field.
- YYYY/MM/DD :** A date input field.
- Agama :** Radio button options for Islam, Kristen, Budha, Hindu, and KongHuCu.
- Jabatan :** Radio button options for Pegawai and Dosen.
- Jenis Kelamin :** Radio button options for Pria and Wanita.
- Alamat Tetap :** A text input field.
- Alamat Sekarang :** A text input field.

Fig 5. Display the Employee data input form

Display employee data input form, has columns that must be filled by the admin. Starting from the NIP, FullName, Place of Birth, Date of Birth, Religion, Position, Gender, Current Address, Permanent Address, Email and Mobile Number in accordance with employee biodata.

The top part of the screenshot shows the 'Edit employee data' form, which includes:

- Agama :** Radio button options for Islam, Kristen, Budha, Hindu, and KongHuCu.
- Jabatan :** Radio button options for Pegawai and Dosen.
- Jenis Kelamin :** Radio button options for Pria and Wanita.
- Alamat Tetap :** A text input field.
- Alamat Sekarang :** A text input field.
- Email :** A text input field.
- Nomor HP :** A text input field.
- Keterangan :** A text area for additional notes.
- Buttons:** 'Tambah' (Add), 'Bersihkan' (Clear), and 'Batal' (Cancel).

The bottom part of the screenshot shows a table view of employee data with the following columns: No, NIP, Nama, Tempat Lahir, Tanggal Lahir, Jenis Kelamin, Agama, Jabatan, Alamat Tetap, Alamat Sekarang, Email, and Nomor HP. The table contains two rows of data.

No	NIP	Nama	Tempat Lahir	Tanggal Lahir	Jenis Kelamin	Agama	Jabatan	Alamat Tetap	Alamat Sekarang	Email	Nomor HP
1	12345678901234567890	Adi Agungkusuma Wardana	Surabaya	15/08/1990	Pria	Islam	Pegawai	Jl. Merdeka No. 100	Jl. Merdeka No. 100	adi@unpas.ac.id	081234567890
2	12345678901234567890	Budi Santiaji	Bandung	20/03/1985	Pria	Kristen	Dosen	Jl. Pahlawan No. 50	Jl. Pahlawan No. 50	budi@unpas.ac.id	089876543210

Fig 6. Display Edit employee data

Display Edit employee data there is also an employee data table that has been inputted. Next to the table there are buttons that function to edit employee biodata, employee leave data input, input employee performance and delete employee data

Fig 7. Display of leave data input

The leave data input display shows employee biodata for input on leave that has been used. Employee data in this view cannot be edited and deleted.

Fig 8. Display edit employee data

Display Edit employee data, in this view admin can update employee data, there are some employee data that can be updated and there are some data that cannot be updated such as NIP, FullName, and gender

Fig 9. Display form input performance data

Display on employee performance data input, there are several aspects that must be assessed by the admin to provide assessors for employees

No	NIP	Nama Lengkap	Tempat Lahir	Tanggal Lahir	Jenis Kelamin	Agama	Alamat	Alamat Tambahan	Email	Nomor Hp	Gol	Kategori
1	1234567	Adi Agungkusuma	Jakarta	1990-05-15	Pria	Islam	Pondok	Sekeloa	adi@ftki.unas.ac.id	08123456789	4	100-75 (jerman)
2	0987654	Budi Santia	Jakarta	1988-04-10	Pria	Islam	Pondok	Sekeloa	budi@ftki.unas.ac.id	08987654321	5	75-50 (jerman)

Fig 10. Display the employee performance data menu

Display on the employee performance data menu displays an employee rating table that has been rated by the admin.

F. Application Testing

In testing this application requires employee data to be input to the application, this test includes 20 employee data. Employee biographies as in the following table are input back to the application, enter the data correctly.

After the employee data has been input into the application and successfully saved (image). On the left biodata there are buttons to edit data, input leave and input employee performance.

In the picture is a menu to input or assess employee performance. Employee assessment scores ranging from 100 - 75 are categorized as good, 75 - 50 are categorized as good and a score of 50 - 0 means having poor performance. After evaluating the employee's score, the data will be saved and displayed again on the employee performance data menu (figure)

No.	NIK	Nama Lengkap	Tipek Mutasi	Kedisiplinan	Kemampuan	Kemamahan	Tanggung Jawab	Komunikasi	Rasa Simpati dan Empati	Pelayanan Kepada Konsumen	Penggunaan Kemampuan Teknis	Efisiensi dan Efektivitas Kerja	Kerja Sama Dalam Berkerja	Kecamatan Dalam Berkerja	Kreatifitas Dalam Berkerja	Ketena
1	197910192009011020	Arman	baik	baik	baik	baik	baik	cukup	cukup	baik	baik	cukup	cukup	baik	baik	baik
2	1234567	Adi Nugroho Kusumadewi	baik	baik	baik	baik	baik	baik	baik	baik	cukup	cukup	baik	cukup	cukup	baik
3	2345678	Andi	baik	baik	baik	baik	baik	baik	baik	baik	cukup	baik	cukup	cukup	cukup	baik
4	23456789	Raden Andri	cukup	baik	baik	cukup	cukup	baik	baik	baik	baik	baik	cukup	baik	baik	baik
5	001	Yani	cukup	baik	baik	cukup	cukup	cukup	cukup	cukup	cukup	cukup	baik	baik	baik	baik
6	002	Joni	baik	baik	baik	baik	baik	cukup	baik	baik	baik	baik	baik	baik	baik	baik
7	003	Irma	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
8	004	Sena	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
9	005	Dharmas	baik	baik	baik	baik	baik	baik	baik	cukup	baik	baik	cukup	baik	baik	baik
10	006	Andi	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	cukup	baik	baik
11	007	Toni	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
12	008	Lita	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
13	009	Joni	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
14	010	Taufik	cukup	baik	cukup	baik	baik	baik	baik	cukup	cukup	cukup	cukup	baik	baik	baik
15	011	Wandi	baik	cukup	cukup	baik	baik	cukup	baik	baik	cukup	cukup	cukup	cukup	cukup	baik
16	012	Pita	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
17	013	Joni	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik
18	014	Suzani	baik	cukup	cukup	cukup	cukup	cukup	baik	cukup	cukup	cukup	cukup	cukup	cukup	baik
19	015	Blas	baik	baik	cukup	cukup	baik	baik	baik	cukup	cukup	baik	cukup	baik	baik	baik
20	016	Wati	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik	baik

Fig 11. Test results of employee performance appraisal with 20 employee data

4. Conclusion

According to the results of this study it can be concluded that:

- The application can run well on Android
- Employee performance monitoring system application can save the use of paper as the main ingredient for evaluating employee performance, is more effective and reduces the loss of employee performance data
- This application can store data of more than 20 employees.
- Each button, scene, sound, and 3D object can function properly on every device that has been tested.

Thank-you note

Thank you to God Almighty, and all those who have a role in the implementation of the monitoring system of the performance of FTKE National University employees in DKI Jakarta. Hopefully this monitoring system can be useful to help assess the performance of FTKE National University employees.

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