Managing and Analyzing Employee Daily Performance Achievement Reports

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Abstract

Employees at the South Sumatra Education Office, which still operates on a manual system based on Microsoft Excel, frequently become lost in piles of daily performance report sheets and data storage. In order to help employees create daily employee performance reports, this study set out to create an intuitive web-based application called the Employee Daily Performance Report Application. To make monthly employee performance reports easier to read and use, they are condensed. Use interviews and observation to compile information. The South Sumatra Education Office's monthly recapitulation of staff daily activity data is expected to be expedited by the proposed application. SUS methods were used to conduct the user acceptance of the web application, and the performance result indicates that the application may be accepted rather well.

Keywords

Management, Analysis, Daily Performance Achievement Report, UML, SUS

Introduction

The employee's daily performance report is a breakdown and reporting of the employee's daily performance. Employees here become subjects directly involved in employee performance reporting activities and can more fully describe the activities carried out when reporting performance using the employee daily report format (Christian & Alfath, 2021) (Wiratama et al., 2019). It aims to achieve employees' performance or work results, both in quality and quantity (Firmansyah, 2018).

The South Sumatra Provincial Education Office uses a manual system to produce daily performance reports using media reports in Microsoft Excel format (Departemen Pendidikan Nasional, 2008). This report must be printed in sheet form, reproduced daily, and filed monthly. Of course, there are indirect adverse effects such as employee daily performance reports piling up in the office, resulting in wasted paper and having to scan and archive report sheets, which results in a waste of time because you have to re-scan each sheet of report paper to make it into one file.

The web application was designed to use several rules and conditions for using programming languages, such as Structured Query Language (MySQL), Hypertext Preprocessor (PHP), and others (Hafiz Satrio & Fadillah Harahap, 2022) (Halim & Novrianda, 2017). Its

application manipulates data into a more useful form, meaning data management analyzes data into information (Mastan & Tyo, 2020).

Many programming languages have different functions, including programming languages for building desktop applications, games, web applications, and mobile applications (Larassati et al., 2019). Its application uses PHP programming language.

Methodology

Analysis

The system implemented in the Employee Daily Performance Report at the Education Office of South Sumatra Province is still manual; that is, it still uses the help of Microsoft Excel, not in the form of an application or website where employees are required to input data periodically and then print it out every day. Activities carried out by employees daily are considered inefficient and take a lot of time to do because, in terms of data storage, they still must prepare several folders so that the performance report paper is not scattered, and data storage in Microsoft Excel can be damaged or in error. Therefore, in connection with the existing problems, the author created a web-based application for daily employee performance reports at the South Sumatra Province Education Office.

Data Analysis Techniques

In this study, the data analysis that the authors used was a qualitative analysis method in designing an electronic filing system in the bridge sector (Andrian & Rahayu, 2021). This qualitative data will produce and process descriptive data using interviews, and the observed data will then be included in the design of the Google Form-based electronic filing system.

Design
Use Case Diagrams
The use case diagram has two actors; the first is the admin, who can add, update, or delete data in Data Management, Work Management, and Reports. The second actor is a Guest or Employee who can take action to view and add activities to Work Management.
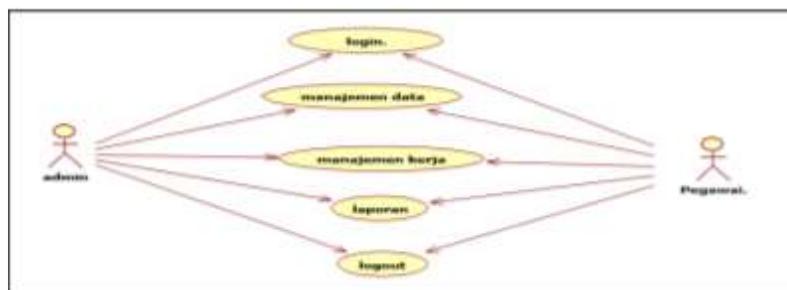

Figure 1. Use Case Diagram

Activity Diagram
The activity diagram, as seen in Figure 2, when an admin enters the system, will begin by entering the login screen. If login fails, please try again and enter the correct username and password. If the

login is successful, it will go to the homepage view. From the appearance of the home menu, the admin can choose actions to be performed on the system, such as managing data management, work management, and reports. Finally, if the data that has been collected is successful or has been completed, the admin can log out.
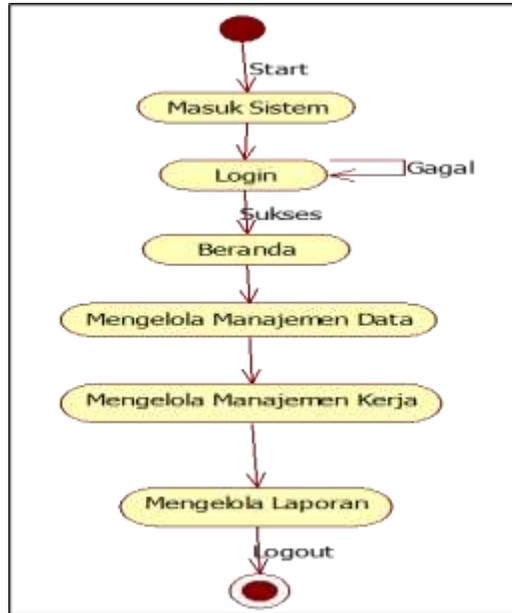

Figure 2. Activity Diagram

Design the Database
In this application, the MySQL database was used. In the database design, six (6) tables will accommodate data in this daily performance report application. The following tables are used, which are found in the inventory database.

Superior Data Table
The data table is used to store data on the superior information at the South Sumatra Provincial Education Office.

Table 1. Boss Data Table

Field name	Type	Size	Key
id	int	11	Id (auto increment) Primary Key
Head name	varchar	100	Head Name

Field Data Table
This table stores field data for South Sumatra Provincial Education Office superiors.

Table 2. Field Data Table

Field name	Type	Size	Key
id	int	11	Id (auto increment) Primary Key
Dept_name	varchar	100	Dept Name

Position Data Table
This table stores data on the positions' fields at the South Sumatra Provincial Education Office.

Table 3. Position Data Table

Field name	Type	Size	Key
id	int	11	Id (auto increment) Primary Key
Dept_name	varchar	100	Dept Name

Results and Discussion

Login Display
Displaying the login page helps admins and users log in first with their username and password.
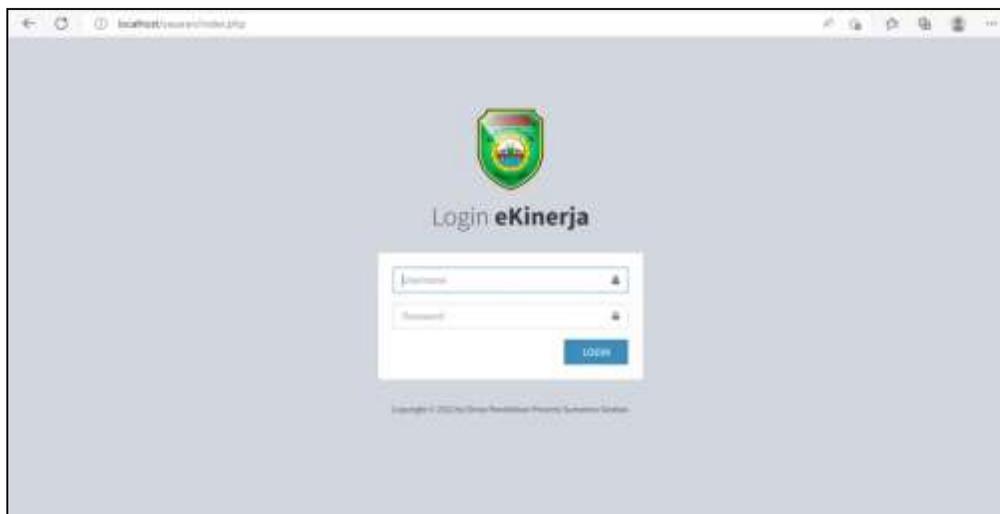
Figure 3. Login Display

Dashboard Page Display
The home page will appear after correctly entering the username and password, indicating that the login has succeeded.

Figure 4. Dashboard Page Display

Display of Data Management Pages
This page handles the process when inputting data such as employee, field, position, supervisor, activity, and user management data so that it can be known which part of the data will be inputted by the admin.


Figure 5. Data Management Page Display

Work Management Page Display
The Work Management page is a page that presents a table of information regarding performance data management at the South Sumatra Provincial Education Office, which contains Employee Name, Activity Description, Start Time, and End Time.
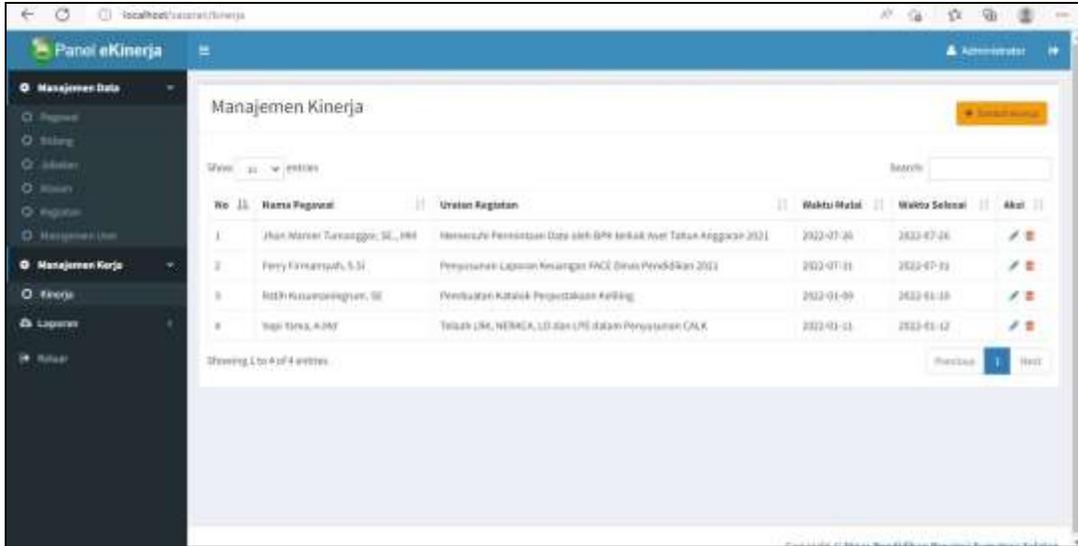
Figure 6. Display of the Performance Management Page

View Report Page
Reports page is a page that contains information about daily performance reports that can be printed or downloaded.
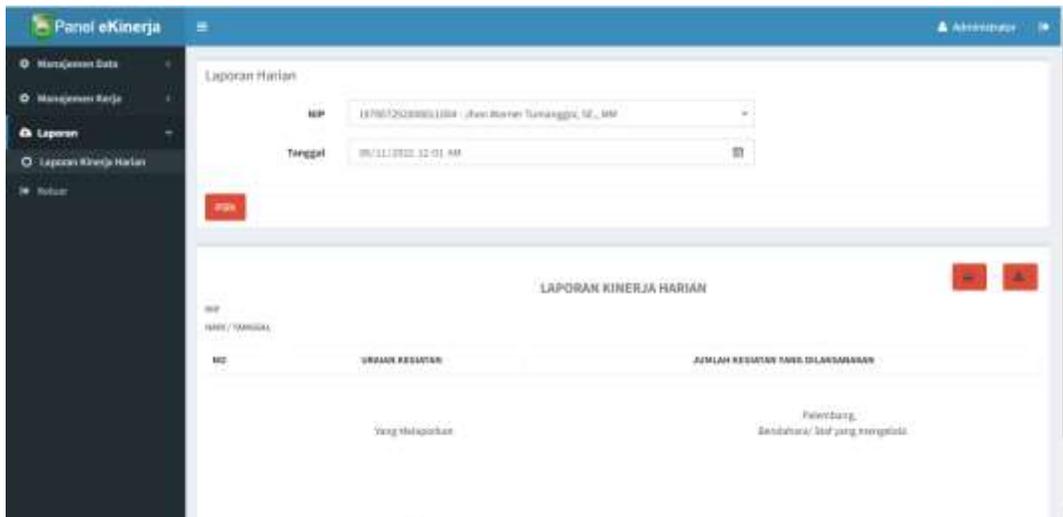
Figure 7. Display of the Report Page

Evaluation matrix
The UI review was performed to assess the tool's user usability. The System Usability Scale (SUS) is employed in this study. John Brooke, who worked at DEC then, created the System Usability Scale (SUS) in 1986 (Brooke, 1996). The typical SUS consists of the ten (10) items listed below (odd-numbered things are worded positively, while even-numbered items are worded negatively).

We construct a collection of questionnaires for the end-user to evaluate based on ten (10) elements from the SUS standard. The questionnaire from Brooke (1996) was used. As illustrated in Figure 8, a matrix was created to analyze the outcome of the end-user reaction. The adjective

rating, the grading scale, and the acceptability ranges will all be evaluated. Each element is considered differently.
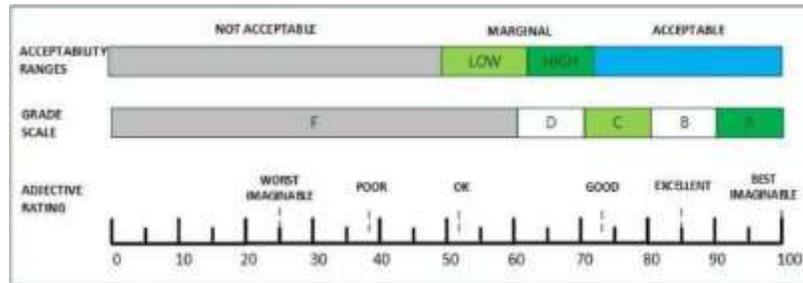

Figure 8. The evaluation matrix for SUS evaluation

There are 25 end-users surveyed, and the response results were analyzed and evaluated. Table 4 shows the final results of end-user responses.

Table 4. Final value evaluation results.

	$\sum$/evaluator x 2.5	Total
Q1	35 x 2.5	87.5
Q2	37 x 2.5	92.5
Q3	34 x 2.5	85
Q4	37 x 2.5	92.5
Q5	35 x 2.5	87.5
Q6	35 x 2.5	87.5
Q7	34 x 2.5	85
Q8	35 x 2.5	87.5
Q9	37 x 2.5	92.5
Q10	36 x 2.5	90
Q11	36 x 2.5	90
Q12	38 x 2.5	95
Q13	34 x 2.5	85
Q14	35 x 2.5	87.5
Q15	34 x 2.5	85
Q16	34 x 2.5	85
Q17	30 x 2.5	75
Q18	33 x 2.5	82.5
Q19	32 x 2.5	80
Q20	35 x 2.5	87.5
Q21	35 x 2.5	87.5
Q22	35 x 2.5	87.5
Q23	36 x 2.5	90
Q24	36 x 2.5	90
Q25	34 x 2.5	85
Average	21805 = **87.2**	

According to the results in Table 4, the average value is 87.2. From the standpoint of user evaluation, the instrument is appropriate for SUS evaluation, as seen in Figure 8:
1. The excellent category from the adjective rating aspect displays the outcome value.
2. The grade scale aspect result value is presented in group B.
3. the result value is displayed in an acceptable group regarding acceptability.
The evaluation results suggest that the proposed tool was accepted and appropriate by the end-user and may be utilized without modification, redesign, or re-implementation.

Conclusion

This research resulted in applying the Daily Performance Report of the South Sumatra Province Education Office Employees. This report is generated using the PHP programming language and stored in a MySQL database. The resulting application consists of a home page, data management page, work management page, and report page. Create a web-based employee daily performance report management application that can be accessed online. The application for managing daily employee performance reports can assist employees in handling and storing activity data that they carry out daily so that activity data can be searched quickly and does not take a long time. The SUS analysis performance was applied, and the result shows the version can be accepted and reasonable enough.

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