Web-Based Digital Daily Report to Optimize Employee Performance Case Study on CV. XYZ Semarang

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ABSTRACT

This research aims to design a web-based digital daily report application as a solution for optimizing employee performance. The method used is the Waterfall method which consists of requirements analysis and definition, system and software design, implementation and unit testing, integration and system testing, and operation and maintenance. The design tool used is Unified Modeling Language (UML). The main problems found were that forms were not always available and difficult to duplicate themselves because they required permission from the supervisor; and poor archiving. The added value offered by this application is security, ease of access, and increased archiving quality. With these advantages, it is hoped that the quality of employee reporting will be better so that employee performance will be more optimal, which will have an impact on company performance.

Keywords*: Daily reports, digital, performance optimization.*

1. INTRODUCTION

The development of information and communication technology now allows the Internet to be implemented in increasingly wider coverage and areas. Apart from that, the internet can provide a lot of information and can facilitate communication from very long distances without having to meet face to face (Akbar, 2017). Internet can be used by organizations and companies to review their operational activities and obtain important information from all parts of the company, including recording employee activities in company operations to evaluate and plan future work. Recording employee activities is usually carried out using daily reports which have several benefits, namely as a report on all forms of work that has been carried out, a basis for assessing employee performance, a description of the progress of a project, as a means of conveying damage that must be repaired in the company area and as a reminder of responsibility. responsibilities that must be carried out regularly (Awalludin, 2017). This is by the results of previous research which explains that daily reports have benefits as a tool of accountability, as a medium for conveying information, as a support for decision-making, as a tool for fostering cooperation, and as an insight enhancer. By exchanging information through reports, the insight and knowledge of each employee will increase and can provide newer and more efficient ideas (Priansa, 2017).

CV. XYZ consists of several divisions located in several different locations in the city of Semarang and its surroundings, where each division has unique characteristics and different responsibilities. In this company, every employee is directed to help each other to speed up and make the work easier. This kind of work system has a weakness resulting from a lack of communication between employees so that work that has been done by one person is still being done again by someone else and ultimately disrupts effectiveness and efficiency. In this research, a web-based daily report will be designed as a form of utilizing communication and information technology to further optimize employee performance and company performance.

2. RESEARCH METHODS

In this research, the Waterfall method was used (see Figure 1). The waterfall method is a systematic and sequential information system development model (Pressman, 2018). The Waterfall method has the following stages (Sasmito, 2017): 1) Requirements analysis and definition. System services, constraints, and objectives are determined by the results of consultations with users which are then defined in detail and function as system specifications. 2) System and software design. The system design stage allocates system requirements for both hardware and software by forming the overall system architecture. Software design involves identifying and describing the software's basic system abstractions

and their relationships. 3) Implementation and unit testing. At this stage, software design is realized as a series of programs or program units. Testing involves verifying that each unit meets its specifications. 4) Integration and system testing. The individual units of a program or program are combined and tested as a complete system to ascertain whether they meet the software requirements or not. After testing, the software can be sent to the customer 5) Operation and maintenance. Usually (although not always), this stage is the longest stage. The system is installed and used in real life. Maintenance involves correcting errors not found in previous stages, improving the implementation of system units, and improving system services as new requirements arise.
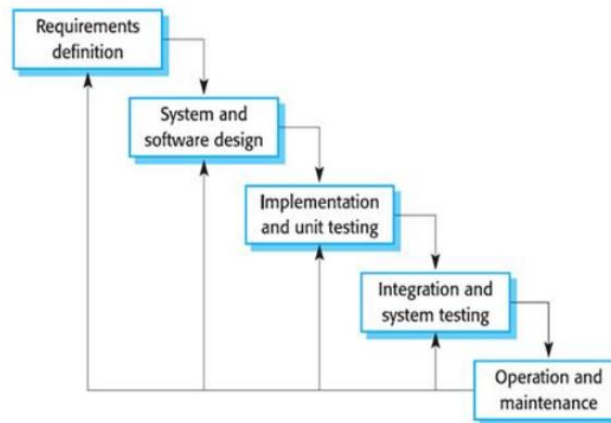

Figure 1 Waterfall Method (Sasmito, 2017)

3. RESULTS AND DISCUSSIONS

After analyzing the problem, two main problems were found in the running system, namely the daily report which should be made every day could not always be made on time because the forms were not always available and were difficult to duplicate themselves because they had to always go through the supervisor, and the reports that had been made were not organized and stored well so that it is difficult to find again when needed. Based on the results of the analysis, it was determined that the functional requirements of the new system were as follows. System users are Admin and User.

Admin is an application user who can process data in the application such as deleting, adding, and changing data. Admins have access to view user data, change user data, and delete users who are no longer active in company activities. Admins can also process reports such as changing those that has been uploaded, adding reports, and deleting reports if there are errors in writing the report. The User is an application user who can add data and view data that has been input but cannot change or delete data that has been input. The use case diagram of the system being designed can be seen in Figure 2.
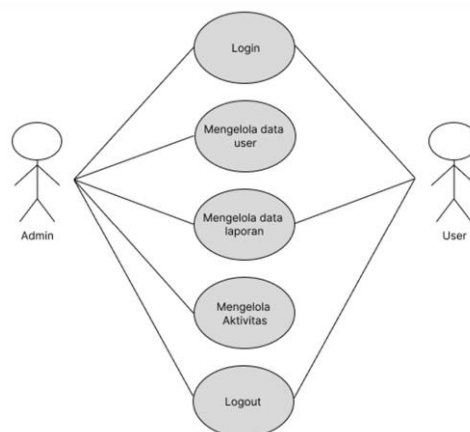
Figure 2 Use Case Diagram

So that the collected data can be managed well, good data storage media is needed, which can meet data and information needs. Therefore, it is necessary to design appropriate classes, which will later be implemented in the form of a database. The relationships between classes can be seen in the class diagram in Figure 3
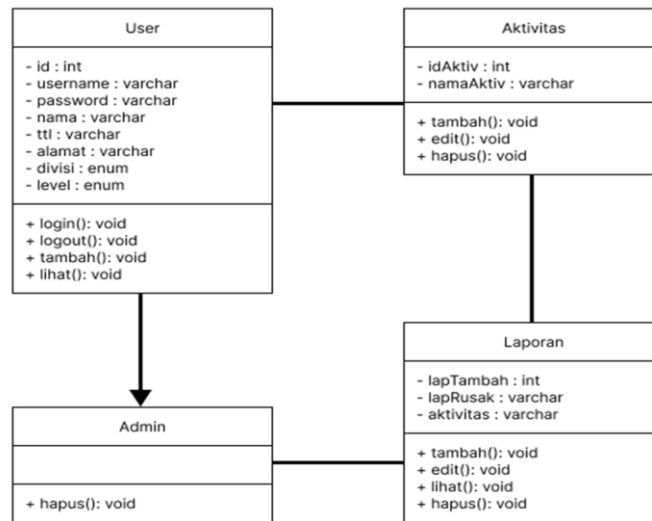
Figure 3 Class Diagram

From Figure 3 it can be seen that the User class is used to manage user data and has the attributes user identity, username, password, user name, place and date of birth, address, division, and user level in the company. The User class has login, logout, add, and view menus. This shows that the user data can be logged in to enter the system, added to data and viewed data, and logged out to exit the system. With the login and logout menu, all user activities in the system including the time they start accessing the system, what they do in the system, and the time they exit the system can be recorded. The Activity Class is used to store activity data carried out by users including activity identity and activity name. The processes that can be carried out are add, edit, and delete. Activity identification needs to be created with the aim that all activities that need to be reported by employees have been identified in advance so that when the employee wants to make a report there is a choice of what activity to report. In addition, with the activity identity code, the same activity reports can be grouped based on the identity code. Report Class is used to manage report data created by employees. The Report Class has a lapAdd attribute to store data on non-routine activity reports, lapRusak to store report data on damaged goods that need to be repaired or replaced, and an activity attribute used to store activity options.

This digital daily report is designed to have more value compared to the manual daily reports that have been used, namely in terms of system security, ease of access and quality of archiving. From a security perspective, this system is equipped with a login and logout feature which will record detailed and structured user activities. Login and logout data are recorded clearly so the Admin can monitor who is accessing the system at any time. This system is also designed to be web-based, making it easier to access. Access to the system can be done simultaneously at the same time from different places and using different devices. With this convenience, employee can make reports at any time immediately after the activity is carried out so that the reports made are relatively real-time. From an archiving perspective, with the availability of a database in this system, it is possible to record, store, and manage data better. Having an identity code for employees as system users and also an activity identity code will make it easier to trace reports. With these advantages, it is hoped that daily reports made by employees will be better, more complete, and easier to read so that employee performance will be more easily measured and observed.

4. CONCLUSION

This digital daily report is designed to be web-based to eliminate the weaknesses found in the old system, namely manual daily reports. The added value offered by this application is security, ease of access, and increased archiving quality. With these advantages, it is hoped that the quality of employee reporting will be better so that employee performance will be more optimal, which will have an impact on company performance.

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