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Development of Application Employee Absence Based on Mobile Web

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A R T I C L E I N F O

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A B S T R A C T

The attendance rate is one of the parameters for measuring the performance of employees in an agency. Manual attendance or using a fingerprint reader is considered inefficient because it will take a lot of time to stand in line. Therefore, the author intends to create a mobile web-based attendance system where employees can take attendance in real time and without having to queue in advance so that they can streamline their time or working hours. Mobile web is an internet website page that can be used or accessed on mobile devices. In general, research methods consist of: initial study; design development; and testing. Mobile Web-Based Employee Attendance Application Development can overcome problems that often occur in manual attendance, which can take up a lot of time or working hours so that the company's performance becomes unproductive. With this application, it is hoped that it can help companies in the attendance record section in real time and can be done flexibly and is easy to access

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INTRODUCTION

The use of information technology has become a necessity for companies to develop their institutions and today mobile smart devices (mobile/smartphone) are one of the things that support (Sunarya, Febriyanto, & Januarini, 2019). The important role of information technology affects all aspects of life, including in measuring the performance of human resources in companies.

The attendance rate is one of the parameters for measuring the performance of employees in an agency (Usman, Islamiah, & Amrullah, 2020). Manual attendance or using a fingerprint reader is considered inefficient because it will take a lot of time to stand in line (Pribadi & Setiyawati, 2021). Accurately managing employee attendance data is a difficult task, especially in collecting and compiling employee attendance data which is not small in number (Muhammad Himyar, 2021). In addition, manual attendance is also difficult to analyze. Another thing that needs to be considered is the many risks and fraud that employees can do, using the manual method on the attendance system also spends a lot of time because you have to record each employee's attendance one by one, of course this is not effective (Febriandirza, 2020).

LITERATURE REVIEW

Therefore, to minimize the possibility of obstacles in the employee attendance input process, an employee attendance information system application is developed on the Android platform (N. F. Putri & Soeliman, 2017). Utilization of this application is expected to increase employee knowledge and insight in the development of science and the use of information systems (Sikumbang, Habibi, & Pane, 2020).

Therefore, the author intends to create a mobile web-based attendance system where employees can take attendance in real time and without having to queue in advance so that time or working hours can be streamlined. Mobile web is an internet website page that can be used or accessed on mobile devices. The mobile web is also the easiest platform to learn, cheapest to produce, standardize, and easiest to distribute (H, 2018).

METHODOLOGY

In general, this research consists of 3 stages, namely: initial study; design development; and testing (Wulandari, 2020). This research includes experimental research (Wulandari, 2021). Figure 1 shows the use case diagram of the system created in the study.

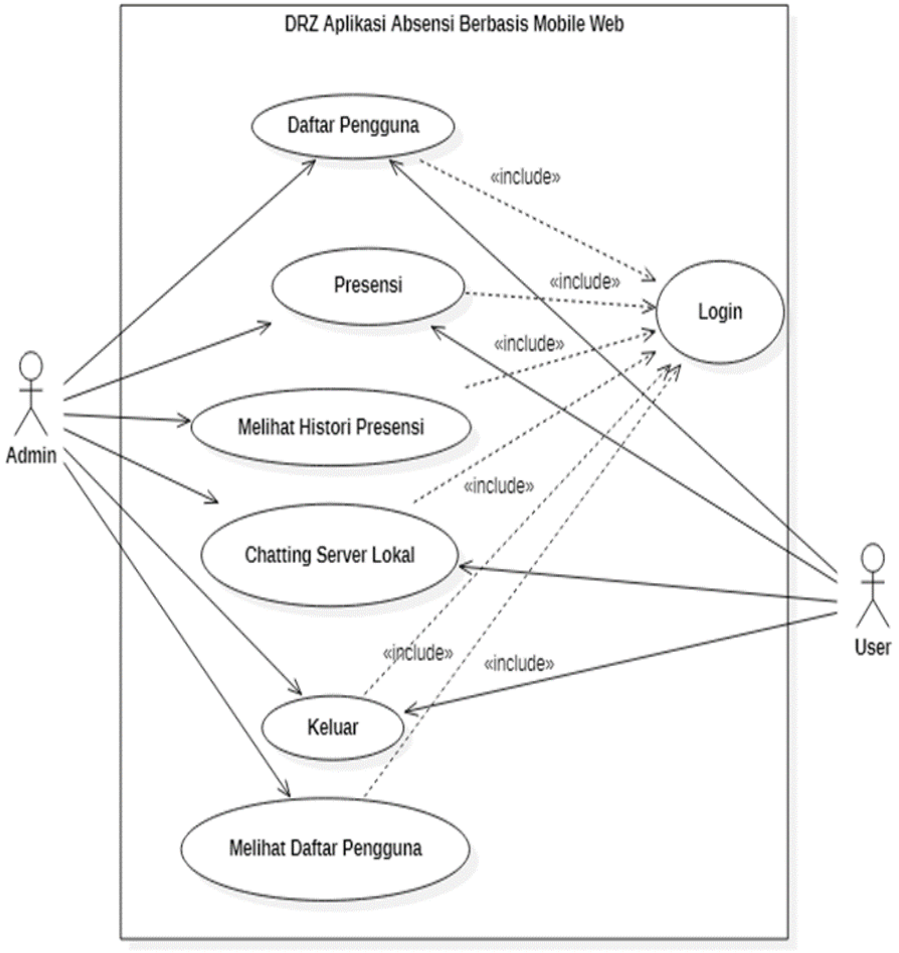
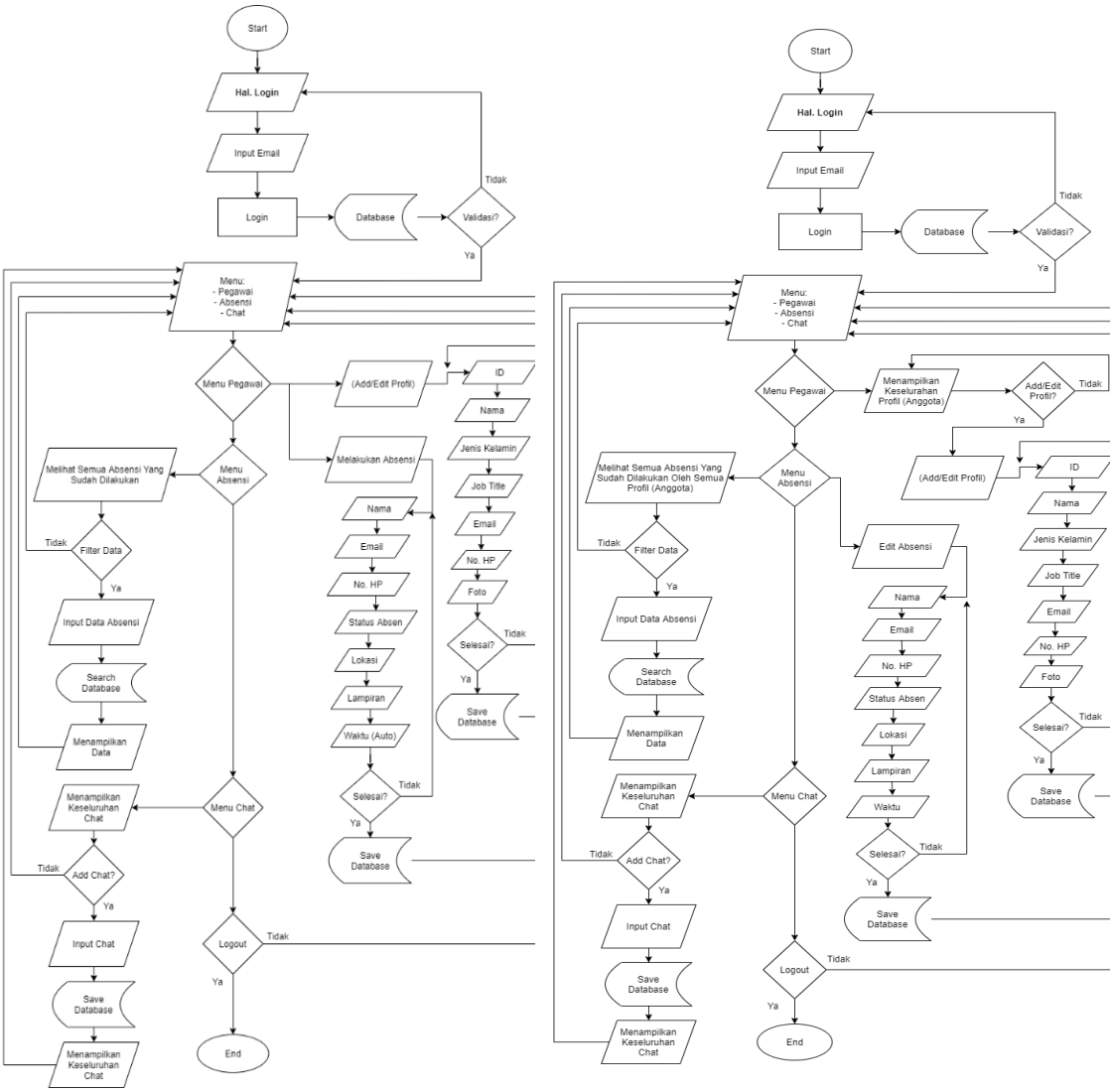


Figure 1. Use Case Diagram of Attendance Application System Based on Mobile Web

In the system created, there are two global systems, namely a system for users and a system for managers or admins. Figures 2a and 2b show the work flowcharts of the two systems.



(a) (b)

Figure 2. Flowchart Systems For (a) User (b) Admin

RESULT AND DISCUSSION

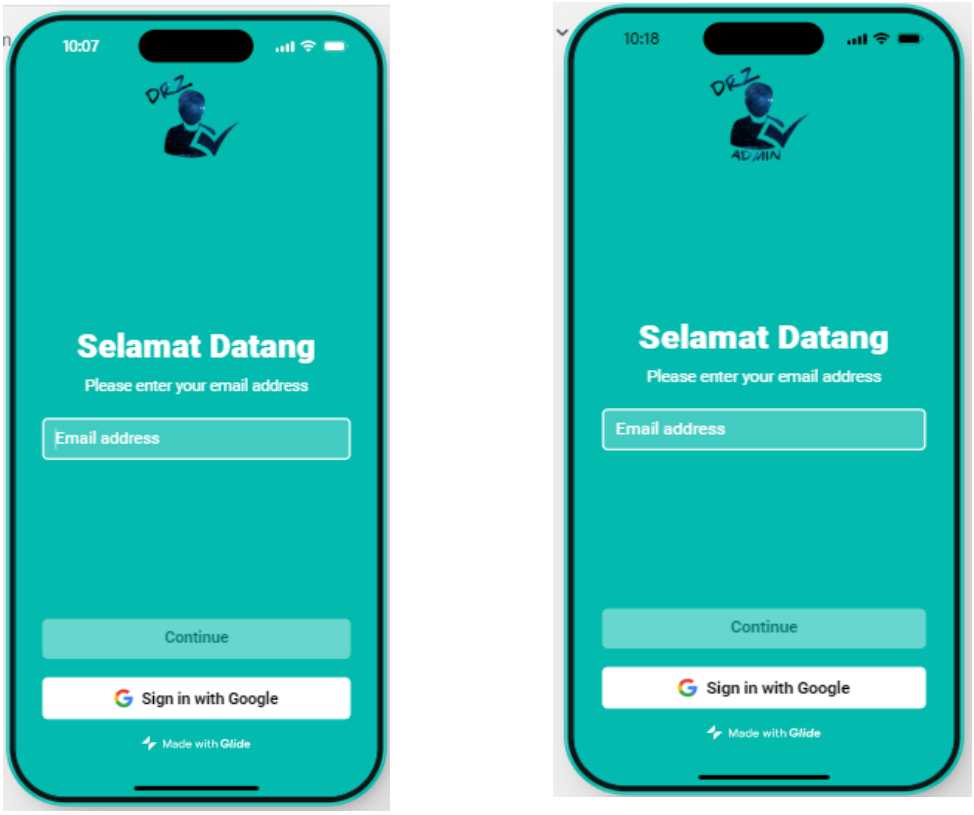


Figure 3. Initial View for Users and Admins

Figure 3 shows the initial appearance of the user and Admin versions which contain a logo for the application, then there is a greeting and an input field to enter an email that can later be used for this application. In Figure 4, is the employee menu display that can be accessed by users after adding a personal profile. To edit the profile of this application by pressing the "Edit Profile" button, while to make attendance by pressing the "Absent Now" button.

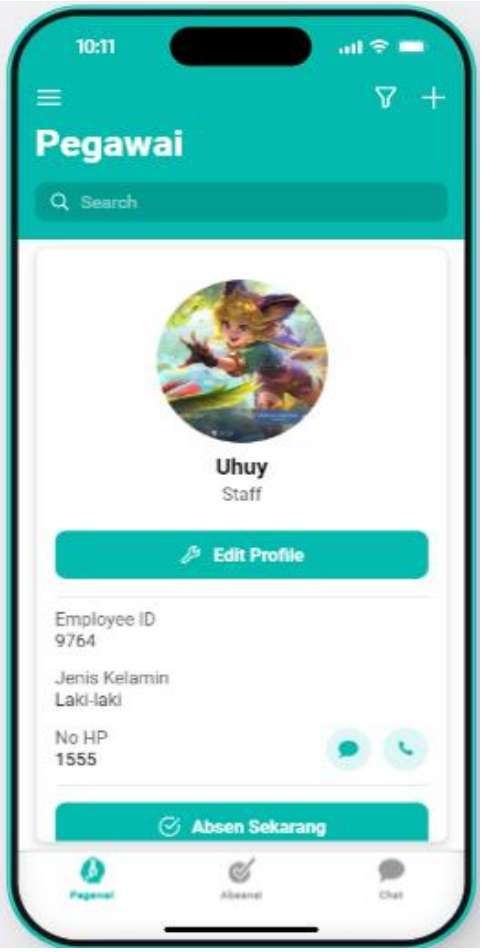


Figure 4. Display Menu for User

Figure 5 displays the display of the user version of the Attendance Menu display to see if the user has made an attendance today so that it can minimize errors in making repeated attendance (double) when forgetting occurs.

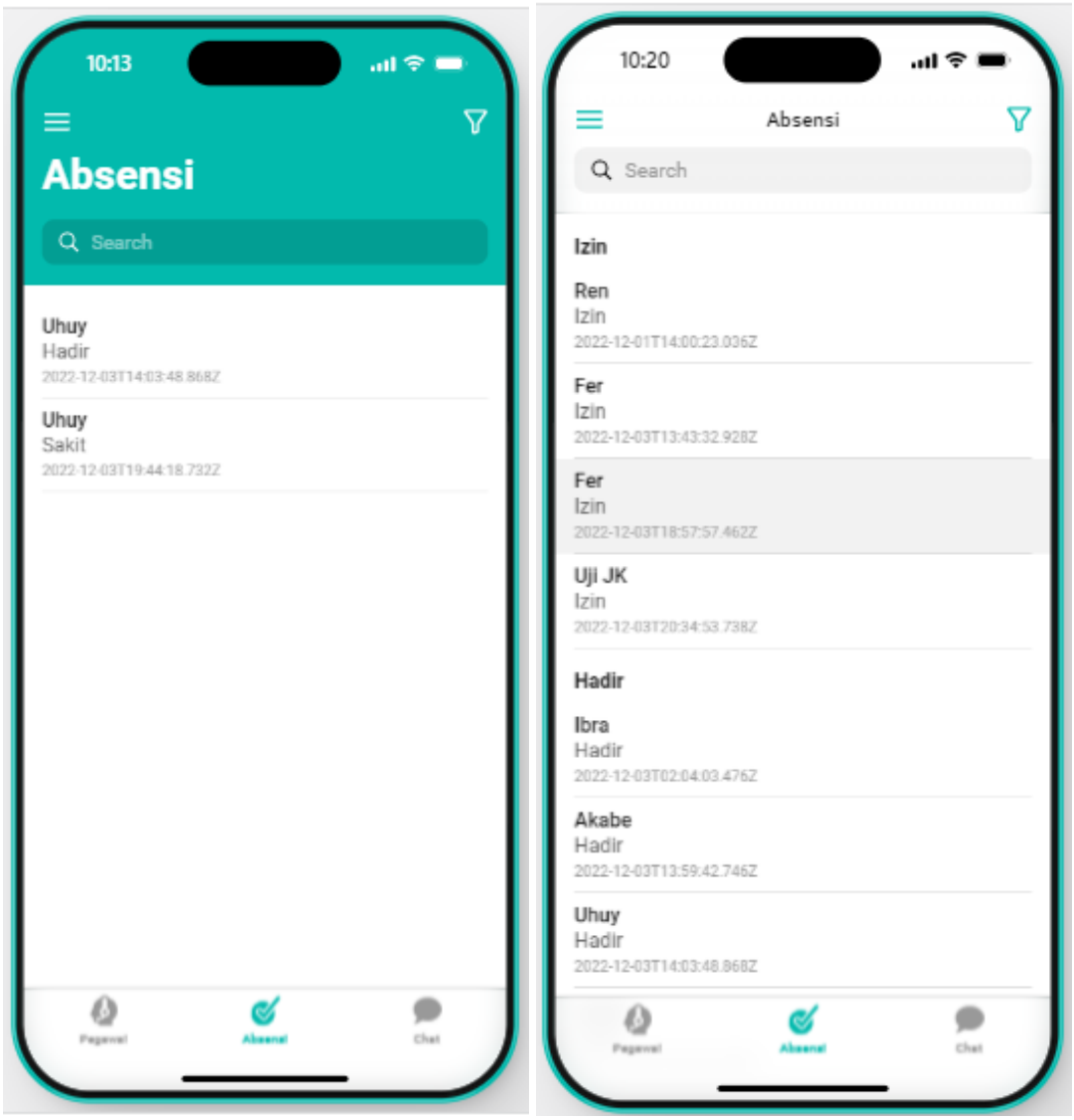


Figure 5. Display of the User and Admin Versions of the Attendance Feature

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Table 1. Problems With Online Attendance and The Solutions Offered

Problem	Solution
In a pre-existing application, it is only used to recap the results of employee attendance in real time.	In the application that we made besides being able to take attendance in real time. Employees will also attach a description of the place when they are absent.
The features in the previous application only displayed information on whether or not an employee was present.	Features in the application that are being made at this time, apart from providing information about attendance or absence, we provide an image upload feature to add information if permission or illness is present.
Previously existing applications were only intended for absences and the data would later be stored in the database.	The application that we make is not only intended for Users (employees), we also make applications for Admins where it is specifically for monitoring and recording the results of absences from Users.

Table 1, Shows the Existing Problems and Solutions That Are Presented Through Making the System

CONCLUSIONS

In this research, the development of Mobile Web-Based Employee Attendance Applications has been made. With this application, it can overcome problems that often occur in manual attendance, which can take up a lot of time or working hours so that the company's performance becomes unproductive. With this application, it is hoped that it can help companies in the attendance record section in real time and can be done flexibly and is easy to access. The application that we make is not only intended for Users (employees), we also make applications for Admins where it is specifically for monitoring and recording the results of absences from Users.

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