

UI/UX Design Using the Design Thinking Approach for a Location-Based Attendance System at PT Agung Sumatera Development

Ayu Elisya Natama Sianturi^{1*}, Septia Angelika Gettin Daely², Sri Andayani³

^{1,2,3} Department of Information Systems, Katolik Musi Charitas University, Palembang, Indonesia

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ABSTRACT

Digital transformation has accelerated the adoption of technology-based attendance systems; however, manual attendance methods continue to exhibit limitations, including data manipulation and operational inefficiency. This study aims to design an optimal User Interface (UI) and User Experience (UX) for a location-based employee attendance system at PT Agung Sumatera Development using the Design Thinking approach up to the prototyping stage. The design process consisted of the empathize, define, ideate, and prototype phases, incorporating the MoSCoW prioritization framework Must-have, Should-have, Could-have, and Won't-have as well as the How Might We (HMW) technique to identify user needs and generate design solutions. Figma was employed as the primary design tool for developing the prototype. The proposed system integrates GPS-based location verification, real-time selfie authentication, and automatic watermark generation to enhance attendance accuracy and reliability. The resulting prototype features a simple workflow and intuitive navigation. A usability walkthrough involving five employees indicated that the design effectively met usability criteria in terms of ease

of understanding and navigation clarity, achieving an average Task Completion Rate of 90%. Feedback regarding the readability of the location radius instruction was incorporated into the final design, resulting in improved user experience.

1. INTRODUCTION

Digital transformation has encouraged organizations to adopt technology-based systems across various operational aspects, including human resource management (Huang, 2024; Yogatura et al., 2024). One area significantly affected is employee attendance recording and monitoring, which plays a crucial role in performance evaluation and managerial decision-making. As workplace activities become increasingly complex, particularly in organizations with high employee mobility, the need for an attendance system that ensures data accuracy while providing operational efficiency has become increasingly critical. Nevertheless, conventional attendance systems remain widely used and are unable to fully address these requirements.

This issue is also evident at PT Agung Sumatera Development, a property development company operating in South Sumatra with project-based activities across multiple locations. Based on preliminary observations and interviews with company staff, the existing manual attendance system, which relies on daily attendance logs and reporting through group chat applications, frequently causes delays in monthly attendance recapitulation. Furthermore, the system is vulnerable to fraudulent practices, such as proxy attendance, because it cannot verify employees' actual locations during field operations. These administrative issues compromise the validity of attendance records, which are essential for managerial decision-making (Gautama et al., 2023; Amanda et al., 2026; Djanti et al., 2025). Unless these challenges are addressed through an appropriate system design, the company will continue to face risks associated with inaccurate payroll calculations and reduced efficiency in monitoring ongoing field project activities.

To address these challenges, a digital attendance system can be developed by integrating technologies such as the Global Positioning System (GPS) for location verification and camera-based identity authentication. Previous studies have demonstrated that digital attendance systems can significantly improve the accuracy and transparency of attendance records (Sipayung et al., 2025; Sufah et al., 2025; Asmara, 2025). In addition, features such as real-time selfie capture and automatic watermark generation containing timestamp and location information further strengthen attendance data validity. Beyond technological capabilities, however, the success of such a system largely depends on its ability to provide a convenient and efficient user experience.

In this context, User Interface (UI) and User Experience (UX) design play a fundamental role in determining the effectiveness of a digital system. The UI provides a clear and understandable visual structure, while the UX ensures that user interactions are intuitive, efficient, and seamless (Santoso, 2022; Tazkiyah et al., 2022). Poor interface design may increase operational errors, reduce ease of use, and discourage user adoption (A. Nugroho et al., 2025; Salvatore et al., 2025). Conversely, well-designed UI/UX can improve usability, streamline user interactions, and enhance overall user satisfaction (Sufah et al., 2025; Thoyyib et al., 2023). These findings highlight the importance of UI/UX design in the development of digital attendance systems.

Developing a user-centered interface requires a systematic design approach. Design Thinking offers a structured methodology through the stages of empathize, define, ideate, prototype, and test. This approach was selected because its human-centered design principles are particularly suitable for identifying the needs of field employees with varying levels of technological literacy, thereby producing solutions that are more relevant to end users (A. Nugroho et al., 2025; Salvatore et al., 2025; Ristias et al., 2023). Through this approach, technically complex features, such as GPS-based location verification and camera authentication, can be translated into a simple and intuitive interface, reducing user resistance and facilitating system adoption. In this study, the design process was limited to the prototyping stage to produce an interactive interface that visually represents the proposed system.

The application of Design Thinking to UI/UX development for attendance systems has been shown to produce more user-oriented solutions. Previous studies have reported that attendance system prototypes become easier to operate when designed according to user requirements (Gautama et al., 2023). Similar findings have demonstrated significant improvements in user comfort and operational efficiency through the application of this methodology (Sipayung et al., 2025; Amanda et al., 2026; M. J. Nugroho et al., 2023). The design process is further supported by design tools such as Figma, which facilitate the development of high-fidelity and interactive prototypes (Santoso, 2022; Tazkiyah et al., 2022; Thoyyib et al., 2023).

Although numerous studies have investigated the UI/UX design of digital attendance systems, the integration of GPS-based location verification, real-time facial authentication, and automatic watermark generation within a single practical workflow remains relatively underexplored. Moreover, studies specifically addressing attendance systems for the property development sector, where project-based field mobility is particularly high, are still limited. To address this research gap, the present study focuses on designing the UI/UX of a location-based attendance application for PT Agung Sumatera Development using the Design Thinking approach. Figma was employed to develop an interactive prototype that integrates GPS technology with photo verification features. The proposed design is expected to provide a functional interface while delivering an effective and user-centered experience that supports accurate and efficient employee attendance management.

2. LITERATURE REVIEW

In the development of human-centered digital systems, User Interface (UI) and User Experience (UX) are fundamental components that determine the overall quality of user interaction. UI focuses on visual aspects such as layout, color selection, and typography,

whereas UX emphasizes functionality, effectiveness, and user comfort throughout system interaction (Santoso, 2022; Tazkiyah et al., 2022). Effective UI/UX implementation has been shown to improve usability and reduce operational errors, while interfaces that fail to address user needs often hinder interaction quality and system adoption (A. Nugroho et al., 2025; Salvatore et al., 2025). Furthermore, interface quality is strongly influenced by the application of sound design principles, including visual consistency, alignment, and well-organized layouts (Huang, 2024; Thoyyib et al., 2023).

Within the context of digital attendance systems, UI/UX plays a critical role in ensuring effective system utilization. Digital attendance systems have been developed to replace conventional attendance methods that suffer from limitations in accuracy and operational efficiency (Gautama et al., 2023; Amanda et al., 2026). The integration of technologies such as the Global Positioning System (GPS) for location verification and camera-based identity authentication has been demonstrated to improve the reliability of attendance systems (Sipayung et al., 2025; Sufah et al., 2025; Asmara, 2025). In addition, features such as real-time selfie capture and integrated attendance records contribute to greater transparency and more effective attendance monitoring (Djanti et al., 2025; M. J. Nugroho et al., 2023).

Design Thinking is one of the most widely adopted methodologies for UI/UX development because of its user-centered design philosophy. Through five iterative stages empathize, define, ideate, prototype, and test the framework facilitates the development of solutions that effectively address real user needs (A. Nugroho et al., 2025; Salvatore et al., 2025; Ristias et al., 2023). This methodology has proven effective in producing designs that are relevant, intuitive, and capable of enhancing the quality of interaction between users and digital systems.

During the design process, tools such as Figma play a significant role in producing consistent and interactive interfaces. Figma enables efficient prototype development while supporting real-time collaboration among designers and stakeholders (Santoso, 2022; Tazkiyah et al., 2022). The use of this platform has also been shown to improve interface quality and facilitate user-centered system development (Thoyyib et al., 2023).

Several studies have reported that the application of Design Thinking in attendance system UI/UX design positively influences usability, operational efficiency, and user satisfaction (Gautama et al., 2023; Sipayung et al., 2025; Sufah et al., 2025; Amanda et al., 2026; M. J. Nugroho et al., 2023). These findings suggest that the combination of an appropriate design methodology, digital attendance technologies, and effective UI/UX design constitutes a key factor in developing efficient and user-friendly attendance systems (Effendy et al., 2025).

Based on the reviewed literature, although numerous studies have investigated UI/UX design and digital attendance systems, the integration of GPS-based location verification, real-time selfie authentication, and automatic watermark generation within a single, well-structured UI/UX design remains limited. The primary research gap addressed in this study lies in both the application domain and the integration of system features. Previous studies have predominantly focused on location-based attendance systems for government institutions, educational organizations, or healthcare facilities. In contrast, this study targets the property development industry, where employees operate across highly mobile project sites, and integrates three security validation features GPS-based location verification, real-time selfie authentication, and automatic watermark generation into a unified interface to streamline field attendance procedures. Accordingly, this research focuses on designing the UI/UX of a location-based attendance system using the Design Thinking approach through the prototyping stage.

3. METHOD

This study employed a descriptive qualitative approach to develop the User Interface (UI) and User Experience (UX) design of a location-based employee attendance system. The Design Thinking methodology was adopted as the primary design framework, encompassing

the empathize, define, ideate, prototype, and test stages. The process began with the empathize stage, during which observations and semi-structured interviews were conducted to gain a comprehensive understanding of the challenges associated with the existing attendance system. Subsequently, the define stage was carried out to identify the core problems, followed by the ideate stage to generate potential design solutions. During the prototype stage, the proposed user interface was developed using Figma. Finally, the test stage was conducted to evaluate the effectiveness of the proposed design through usability testing. The overall research procedure based on the Design Thinking framework is illustrated in the flowchart presented in the following figure.

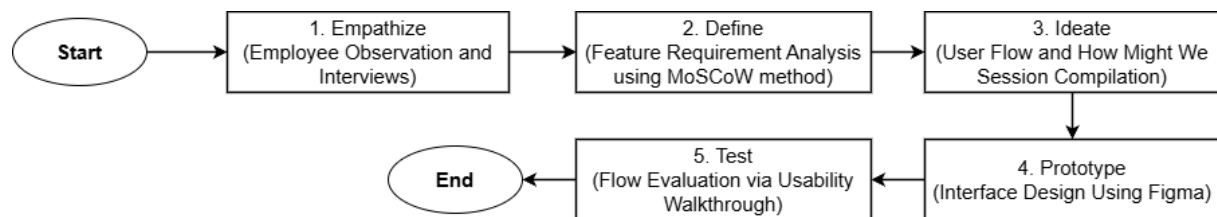


Figure 1. Design Thinking Methodology Flowchart

Empathize

The empathize stage was conducted using two data collection techniques: field observation and structured interviews. Field observations were carried out over a two-day period to directly examine employees' working conditions and the existing attendance recording process, including environmental factors such as network signal availability and lighting conditions. Structured interviews were conducted with five employees selected through purposive sampling based on their direct involvement in the attendance process. The participants consisted of one business manager, one warehouse supervisor, and three staff members who simultaneously served as administrative and marketing personnel.

The interview protocol included questions regarding the current attendance workflow, the most common challenges encountered during attendance recording, employees' experiences while working in field environments with operational constraints, and their expectations for the proposed digital attendance system. The findings from this stage provided the foundation for developing a system design that aligns with employees' actual work conditions and user requirements.

Define

The objective of the define stage was to formulate the core problem statements based on the identified user needs. During this phase, the MoSCoW prioritization framework was applied to classify the system requirements into four categories: Must-have, Should-have, Could-have, and Won't-have. The Must-have category included essential features such as user authentication, GPS-based attendance recording, real-time selfie verification, and a monitoring dashboard. The Should-have category comprised employee and office location management features, while the Could-have category included user profile customization. This prioritization strategy effectively supports the development of user-centered design solutions by ensuring that the most critical user requirements are addressed first (Zuhairunisa et al., 2025; Putri et al., 2025).

Ideation

The ideation stage aimed to generate design solutions based on the outcomes of the define phase. This process involved brainstorming sessions to determine the system workflow (user flow) and the application's navigation structure. During this stage, the How Might We (HMW) approach was employed to transform identified challenges into design opportunities by formulating strategic design questions (Ramadhan et al., 2024; Effendy et al., 2025). This

approach guided the design process toward enhancing usability, improving efficiency, and establishing a clear and intuitive user interaction flow.

UI Design

During the UI Design stage, the user interface was developed using Figma as the primary design tool. The design process encompassed the login page, the main dashboard, the attendance feature, and the data management modules. Each interface element was designed in accordance with established UI design principles, emphasizing visual consistency, information hierarchy, and intuitive navigation to ensure that users could operate the system efficiently and with minimal learning effort.

UX Writing

The UX Writing stage focused on developing interface text, including button labels, user instructions, notifications, and error messages. The content was written using clear, concise, and user-friendly language to facilitate users' understanding of the system, improve interaction quality, and minimize the likelihood of user errors during system operation.

Usability Testing

The testing stage employed the Usability Walkthrough approach as a qualitative evaluation method appropriate for the prototyping phase. The evaluation involved the same five participants who took part in the empathize stage. Each participant was asked to interact with the Figma prototype by completing a series of predefined task scenarios.

The usability scenarios consisted of four primary tasks. Participants first logged into the system, then reviewed the information presented on the attendance dashboard. Next, they completed the attendance process, which included GPS-based location verification and real-time selfie authentication. Finally, they navigated to the user profile menu. The qualitative evaluation focused on three usability dimensions: learnability (ease of understanding), navigation clarity, and participants' spontaneous feedback regarding their interaction with the prototype.

In addition, the Task Completion Rate (TCR) was calculated as a simple quantitative usability metric, representing the percentage of task scenarios that participants successfully completed independently without assistance from the moderator.

4. RESULT AND DISCUSSION

Empathize

During the empathize stage, field observations were conducted over a two-day period, followed by structured interviews with five employees of PT Agung Sumatera Development. The participants consisted of one business manager, one warehouse supervisor, and three staff members who also performed administrative and marketing responsibilities. The data collection process identified several major issues associated with the existing manual attendance system, including inefficient attendance recording, delays in monthly attendance recapitulation, and the potential for attendance fraud, such as proxy attendance, due to the absence of location verification. In addition, participants reported the lack of a real-time attendance monitoring system, which limited management's ability to supervise employees working across multiple project sites.

The observations and interviews also revealed several field-specific operational challenges. First, unstable internet connectivity at certain project locations frequently delayed attendance submission or caused the reporting process to fail. Second, varying outdoor lighting conditions, particularly when employees worked under direct sunlight, reduced the readability of on-screen instructions during the attendance process. These findings indicate that the interface design should account for practical constraints encountered in field

environments, including network instability and fluctuating lighting conditions, to ensure that the system remains effective and usable under actual working conditions.

Define

Based on the findings of the empathize stage, the system requirements were formulated and prioritized using the MoSCoW framework. This approach was employed to classify the identified requirements according to their level of importance and implementation priority. The resulting prioritization of the system requirements is presented in the following table.

Table 1. MoSCoW Prioritization of System Requirements

Category	Features / Requirements
Must Have	• User login • GPS-based attendance • Real-time selfie verification (anti-fraud) • Attendance monitoring dashboard
Should Have	• Employee data management • Office location management (geofencing/location settings)
Could Have	• User profile management (editing profile photo and personal information) • Offline mode (excluded because GPS and selfie verification require real-time validation to prevent fraudulent attendance)
Won't Have	• Fingerprint hardware integration (excluded because the system already relies on GPS and smartphone-based selfie verification)

Based on the prioritization results, it can be concluded that the system should primarily emphasize attendance data security while maintaining ease of use. The field challenges identified during the empathize stage also influenced the design decisions made in this phase. Unstable network connectivity led to the prioritization of a lightweight interface accompanied by informative connection status messages, enabling users to clearly understand the system status while GPS-based location validation is in progress. Meanwhile, the varying outdoor lighting conditions informed design decisions regarding text size, font weight, and color contrast for critical interface elements, particularly the GPS radius instructions, to ensure readability under different lighting environments encountered during field operations.

Ideation

During the ideation stage, brainstorming sessions were conducted to generate design solutions based on the problems identified in the previous phase. The How Might We (HMW) approach was employed to transform these challenges into design opportunities by formulating strategic design questions.

The key HMW questions included the following:

- How might the system ensure accurate employee attendance records?
- How might the attendance process be simplified to make it faster and more efficient?
- How might the system ensure effective verification of both users' locations and identities?

Based on these questions, a design concept was developed for a digital attendance system integrating GPS-based location verification, real-time selfie authentication, and automatic watermark generation. In addition, a streamlined user flow was designed to minimize the number of steps required to complete the attendance process, beginning with user login and continuing through location verification and real-time selfie capture.

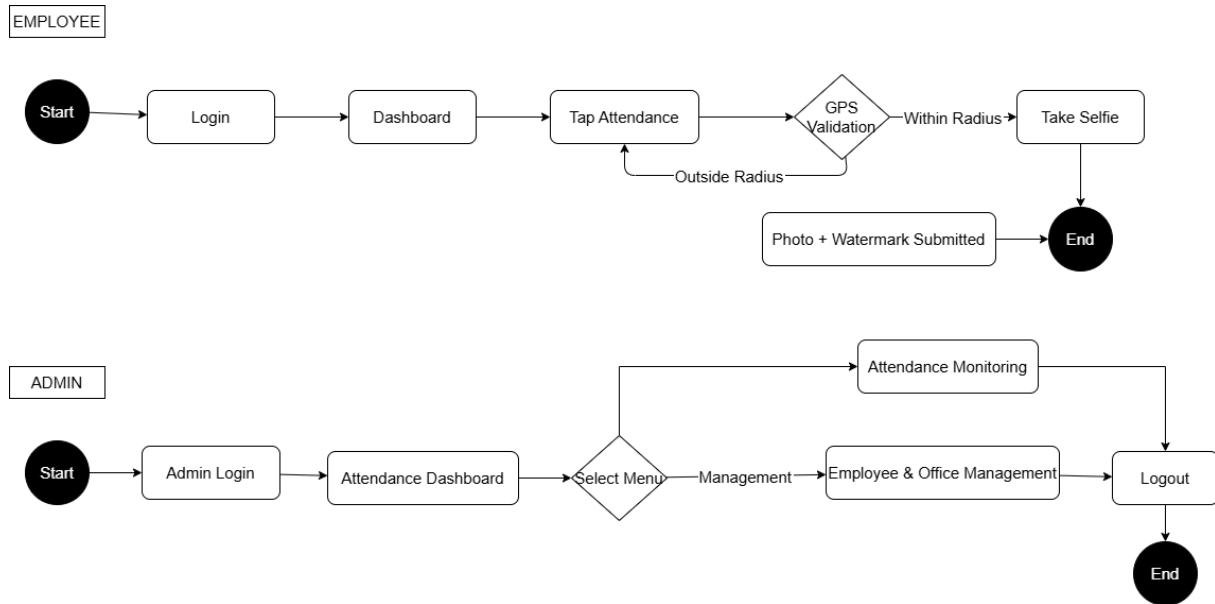


Figure 2. User Flow

UI Design

During the prototype stage, a user interface prototype for the location-based employee attendance system was developed using Figma. The prototype incorporated several core features, including user login, the attendance dashboard, GPS-based attendance recording, real-time selfie verification, and employee and office data management modules.



Figure 3. Login Page



Figure 4. Home Dashboard

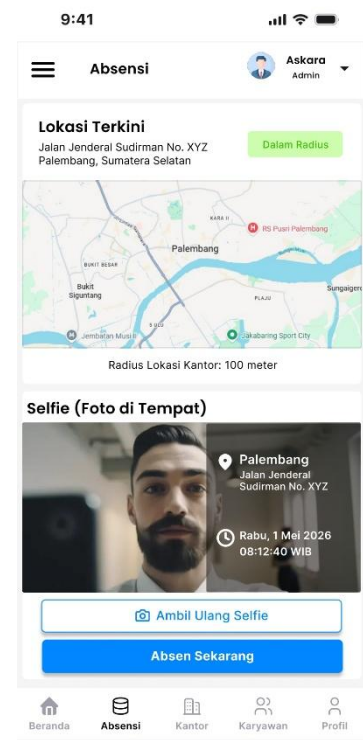


Figure 5. Attendance Page



Figure 6. Office Management Page

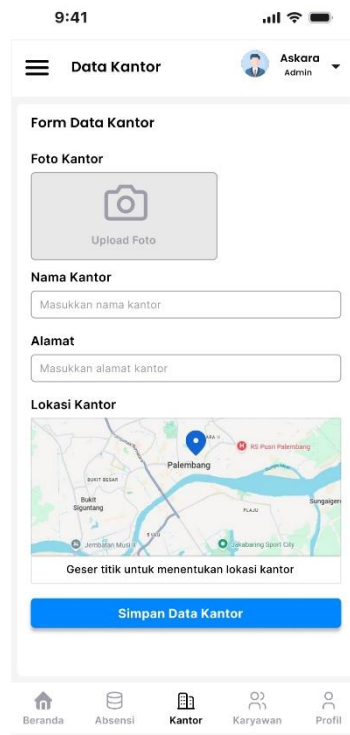


Figure 7. Office Data Form

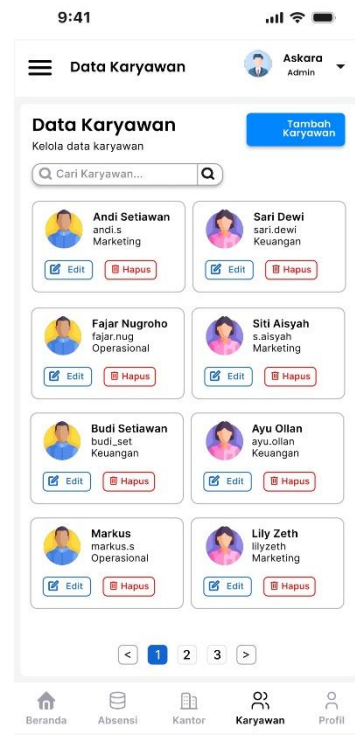


Figure 8. Employee Management Page

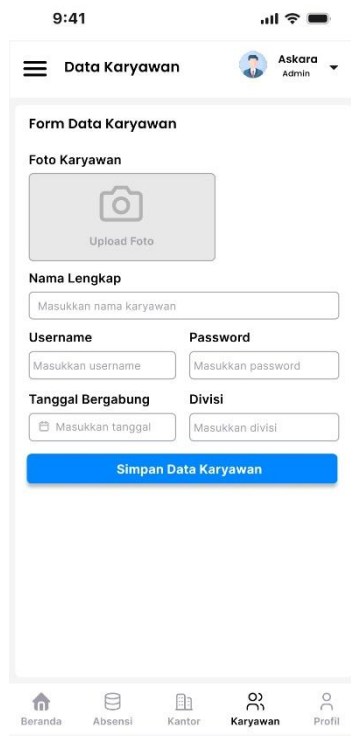


Figure 9. Employee Data Form

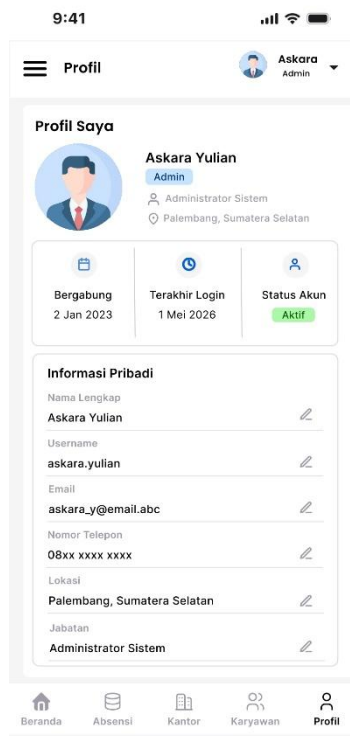


Figure 10. Profile Page

The login page was designed with a simple layout featuring clearly defined input fields and action buttons, while the dashboard presents attendance information through graphical visualizations to facilitate rapid interpretation of key data. As the core functionality of the system, the attendance page integrates GPS-based mapping for location radius verification, real-time selfie capture for identity authentication, and automatic watermark generation

containing timestamp and location information to reduce the risk of attendance fraud. In addition, the system includes dedicated employee and office management pages for administrators, maintaining a simple and intuitive interface that supports efficient system administration.

UX Writing

The UX Writing of the proposed system was designed to provide interface text that is simple, clear, and easily understood by users. As the prototype was limited to the visual design stage, UX writing primarily focused on fundamental interface elements, including menu labels, action buttons, and concise instructional text displayed on each page. The interface language was intentionally written in a clear and conversational style while avoiding technical jargon to ensure accessibility for all users. For example, labels such as "Login," "Attendance," and "Dashboard" were used as primary navigation elements to help users quickly recognize the purpose of each page. Likewise, action buttons such as "Retake Selfie" and "Check In Now" were formulated using concise and action-oriented wording that clearly communicates the intended user action.

The wording was also designed with consistent terminology across all system pages to minimize user confusion and provide a coherent interaction experience throughout the application. Although the prototype does not yet include a comprehensive set of notification and error messages, the existing interface text effectively supports the clarity of the user interaction flow. Consequently, the UX writing contributes to improving users' understanding of the system's functionality and enhances the overall user experience.

Usability Testing

The usability testing stage was conducted using the Usability Walkthrough approach. The evaluation involved five employees who represented the system's intended end users. Participants were guided through a series of predefined tasks using the Figma visual prototype, including launching the application, reviewing the attendance dashboard, completing GPS-based location verification, and capturing a real-time selfie.

The qualitative evaluation primarily focused on learnability and navigation clarity. The results of the usability walkthrough indicated that participants perceived the attendance process as more streamlined because GPS-based location verification, selfie authentication, and automatic watermark generation were integrated into a single interface. Furthermore, the bottom navigation bar was easily recognized and navigated, even by users with limited technical experience.

The only usability issue identified during the evaluation concerned the readability of the GPS location radius instruction (100 meters), which was insufficiently prominent and difficult to read under direct sunlight. In response to this feedback, the prototype was immediately refined in Figma by increasing the font size, using a heavier font weight, and improving color contrast to ensure better readability under varying outdoor lighting conditions.

In addition to the qualitative evaluation, the Task Completion Rate (TCR) was calculated as a simple quantitative indicator of users' ability to complete the assigned task scenarios independently. The measurement results are presented in Table 2.

Table 2. Task Completion Rate (TCR) Results

Test Scenario	Successfully Completed Independently	Total Partisipan	TCR
Login to the system	5	5	100%
View the attendance dashboard	4	5	80%
Complete GPS-based attendance and Real-time selfie verification	4	5	80%
Navigate to the profile menu	5	5	100%
Average TCR			90%

One participant required brief guidance to interpret the attendance dashboard visualization during the dashboard task scenario. Another participant initially hesitated at the GPS radius confirmation step during the attendance task but was subsequently able to complete the remaining process independently. The average Task Completion Rate (TCR) of 90% indicates that the proposed prototype is sufficiently intuitive for use by employees with limited technical expertise.

Based on the findings of the usability walkthrough, it can be concluded that the proposed UI/UX design successfully met users' expectations, provided the required functionality, and was easy for employees to operate. These results suggest that the Design Thinking approach effectively facilitated the development of a user-centered attendance system that supports both usability and operational efficiency.

5. CONCLUSION

Based on the findings of this study, it can be concluded that the UI/UX design of the location-based digital employee attendance system for PT Agung Sumatera Development, developed using the Design Thinking approach, successfully produced a prototype that meets user requirements. The implementation of the empathize, define, ideate, and prototype stages resulted in a user-centered design that emphasizes ease of use, process efficiency, and a clear interaction flow.

The integration of key features, including GPS-based location verification, real-time selfie authentication, and automatic watermark generation for attendance records, provides added value by improving the accuracy and reliability of attendance data. Furthermore, the use of Figma as the primary design tool supported the development of a structured and consistent prototype. The usability walkthrough demonstrated that the proposed design satisfies fundamental usability principles, particularly in terms of learnability and navigation clarity. Nevertheless, this study is limited to the prototyping stage. Therefore, future research should focus on implementing the proposed system in a real-world environment and conducting comprehensive user testing to further evaluate its effectiveness, usability, and overall user experience.

6. REFERENCES

- Amanda, P. P., Aulia, R., & Nasution, A. B. (2026). Perancangan UI/UX Sistem Absensi Mahasiswa Magang Berbasis Web Dengan Metode Design Thinking Pada PT. Bank Sumut. *Jurnal Informatika Dan Teknik Elektro Terapan*, 14(1), 1026–1036. <https://doi.org/10.23960/jitet.v14i1.8920>
- Asmara, R. A. (2025). Digital Presence System UI/UX Optimization Using User Design Thinking. *International Journal of Frontier Technology and Engineering (IJFTE)*, 04(01), 12–24. <http://jurnal.polinema.ac.id/index.php/IJFTE/index>
- Djanti, N. A., & Wijayanto, D. (2025). PERANCANGAN UI/UX SISTEM PRESENSI MOBILE DENGAN PENDEKATAN DESIGN THINKING: STUDI KASUS RS. AMC MUHAMMADIYAH YOGYAKARTA. *Jurnal Informatika Dan Teknik Elektro Terapan*, 13(3), 2286–2294. <https://doi.org/10.23960/jitet.v13i3.6594>
- Effendy, E., & Andayani, S. (2025). Implementasi Metode Design Thinking Pada Perancangan Dashboard Tes Bahasa Inggris Di Lembaga Bahasa UKMC. *Jurnal Elektro Dan Informatika Swadharma (JESI S)*, 5(2), 140–150.
- Gautama, S. P., Fajarwati, S., & Hamdi, A. (2023). UI/UX Design on Prototype Attendance Using the Design Thinking Method. *Journal of Multimedia Trend and Technology-JMTT*, 2(1), 10–18. <https://journal.educollabs.org/index.php/jmtt/>
- Huang, T. (2024). FEAD: Figma-Enhanced App Design Framework for Improving UI/UX in Educational App Development. In *arXiv preprint (ArXiv:2412.06793)*. <http://arxiv.org/abs/2412.06793>
- Nugroho, A., Purwanto, J., Muin, M. A., & Mahardika, F. (2025). UI/UX Design of a Web-Based Student Organizations System Using the Design Thinking Method Approach. *Journal of Technology and Informatics (JoTI)*, 7(1), 24–38. <https://doi.org/10.37802/joti.v7i1.983>
- Nugroho, M. J., & Zulfikar, D. H. (2023). Analisa Perancangan UI/UX Aplikasi Absensi dengan Metode

- Design Thinking pada PT. Pertamina Patra Niaga Sumbagsel. *Seminar Nasional Amikom Surakarta (Semnasa)*, 226–239.
- Putri, D. A. S., & Nugroho, A. (2025). Sistemasi: Jurnal Sistem Informasi Implementasi Metode Design Thinking dalam Perancangan UI/UX Website Bellina Studio Implementation of the Design Thinking Method in the UI/UX Design of the Bellina Studio Website. *Sistemasi: Jurnal Sistem Informasi*, 14(4), 2540–9719. <http://sistemasi.ftik.unisi.ac.id>
- Ramadhan, G. B., & Firdausiah, R. A. (2024). Pendekatan Metode Design Thinking Dalam Perancangan Inovasi Produk. *Jurnal Kewirausahaan Dan Inovasi*, 3(3), 918–928. <https://doi.org/10.21776/jki.2024.03.3.25>
- Ristias, A. A., Amin, M. S., & Agussalim. (2023). UI/UX Design on Digilearn Application with the Iterative Design Thinking Methodology. *Information Technology International Journal*, 1(1), 1–11.
- Salvatore, M., & Pamuji, G. C. (2025). A Design Thinking Approach to Redesigning Application X Based on User Reviews. *Proceedings of the 8th International Conference on Informatics, Engineering, Science & Technology (INCITEST 2025)*, 96–109. https://doi.org/10.2991/978-94-6463-924-7_9
- Santoso, M. F. (2022). Implementasi Konsep dan Teknik UI/UX Dalam Rancang Bangun Layout Web dengan Figma. *Jurnal Infortech*, 4(2), 156–163. <http://ejournal.bsi.ac.id/ejournal/index.php/infortech156>
- Sipayung, M. R., Wahyuni, S., & Hermansyah, H. (2025). Desain UI/UX Dengan Metode Design Thinking Pada Aplikasi Absensi Dan Pengumpulan Tugas Mahasiswa MBKM di PT OYO Rooms Indonesia. *Jurnal Minfo Polgan*, 14(1), 832–839. <https://doi.org/10.33395/jmp.v14i1.14905>
- Sufah, F., Irawan, A. S. Y., Prihandani, K., Yusup, D., & Garno. (2025). Perancangan UI/UX Design Untuk Sistem Absensi Real-Time Asisten Laboratorium Dengan Optimalisasi Untuk Memperkuat Transparansi Dan Pengawasan Kehadiran. *Jurnal Mahasiswa Teknik Informatika (JATI)*, 9, 2592–2600.
- Tazkiyah, S., & Arifin, A. (2022). Perancangan UI/UX Pada Website Laboratorium Energy Menggunakan Aplikasi Figma. *Jurnal Teknologi Terpadu*, 8(2), 72–78.
- Thoyyib, M. B., & Zulfikar, D. H. (2023). Desain UI/UX Website Referral untuk Program Gerakan Funding Culture Menggunakan Figma. *Prosiding Seminar Nasional Teknologi Komputer Dan Sains*, 1(1), 1–9.
- Yogatura, M. A., & Voutama, A. (2024). Perancangan UI/UX Untuk Platform E-Learning Kelas Fotografi Dan Videografi Berbasis Web Menggunakan Figma. *Jurnal Mahasiswa Teknik Informatika (JATI)*, 8(3), 2735–2742.
- Zuhairunisa, A. R., Az-Zahra, H. M., & Syawli, A. (2025). Penerapan Metode Moscow dalam Menetapkan Prioritas Kebutuhan Sistem di SMPN 1 Kedawung. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, 9(4), 1–10. <http://j-ptiik.ub.ac.id>