



Location-Based Application for Reporting Sexual Violence

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Abstract: Sexual violence is a significant and increasing issue in Indonesia, with severe impacts on the physical health, psychological well-being, and overall welfare of victims. On campuses, these incidents often remain unreported due to factors such as shame, fear, and the absence of secure reporting mechanisms. Universitas Islam Indonesia (UII) has established a Task Force for the Prevention and Handling of Sexual Violence (PPKS) and implemented specific regulations to address these issues. This research aims to develop a location-based reporting application for sexual violence incidents within the UII campus. The Android application utilizes technologies such as Global Positioning System (GPS), Google Maps API, Geolocation API, and Firebase to enable real-time incident reporting. Users can report incidents by providing identification, location data, and video evidence, which supports investigations by the PPKS Task Force at UII. The results demonstrate that the application is effective as a reporting medium for sexual violence on campus. The integration of GPS, Google Maps API, and Geolocation API facilitates efficient geographic positioning, while Firebase is employed as a backend solution for secure and organized data storage and management, allowing rapid access by the PPKS Task Force. This application enables the PPKS Task Force to monitor and respond to reports promptly, enhancing the safety and confidence of victims. Therefore, the application is anticipated to become an essential tool in the prevention and management of sexual violence at UII.

Keywords: Sexual Violence; Location-Based Reporting; Android Application; GPS; Universitas Islam Indonesia.

1. Introduction

Sexual violence remains a critical issue in Indonesia, characterized by actions that degrade, humiliate, harass, or assault an individual's body and reproductive functions, often stemming from power imbalances or sexual orientation biases. Such acts have severe implications, including psychological and physical harm, as well as disruptions to reproductive health and educational opportunities. These impacts are particularly concerning in academic environments, which are intended to be safe spaces for learning and personal development. According to data from Simfoni PPA (Sistem Informasi Online Perlindungan Perempuan dan Anak), in 2022, there were 3,131 reported cases of violence against women, involving 3,228 victims, of which 16% were instances of sexual violence affecting 542 women. Additionally, there were 4,148 cases of violence against children, with 4,526 victims, where 53% of these cases involved sexual violence, impacting 2,436 children. In response to these alarming statistics, the President of Indonesia has directed the Ministry of Women's Empowerment and Child Protection (Kemen PPPA) to implement measures aimed at reducing the incidence of violence against women and children. This directive is encapsulated in Presidential Regulation No. 65 of 2020, which mandates the provision of referral services for women victims of violence and special protection services for children at both national and international levels (Kemen PPPA, 2022) [1].

Within the academic context, the prevalence of sexual violence poses a significant threat to the integrity and safety of the learning environment. Despite the expectation that universities serve as safe havens for students, reports of sexual harassment and assault remain common, undermining the reputation of these institutions and affecting the well-being of their students. Victims of sexual violence in academic settings often experience feelings of shame, depression, and fear, which can discourage them from reporting incidents. This reticence is exacerbated by a lack of awareness about reporting procedures and the absence of secure and reliable reporting channels. Notably, while sexual violence affects both female and male students, the incidence is higher among females, highlighting the need for targeted interventions to address this gendered disparity. To effectively combat this issue, universities must provide accessible, safe, and trusted avenues for victims to report incidents of sexual violence, thereby encouraging them to come forward and seek assistance [2].

In response to the need for effective mechanisms to address sexual violence on campus, Universitas Islam Indonesia (UII) has taken proactive steps by establishing the Task Force for the Prevention and Handling of Sexual Violence (PPKS) for the 2023-2025 period. The UII Rector, Prof. Fathul Wahid, has reiterated the institution's commitment to reducing the occurrence of sexual violence on campus, stating that reported cases will be addressed comprehensively from the faculty level to the university level, reflecting UII's zero-tolerance stance on this issue (UII, 2023) [3]. Further, UII has solidified its commitment through the issuance of University Regulation No. 1 of 2020, which outlines measures for the prevention and management of sexual misconduct and violence. This regulatory framework is intended to bolster the efforts of the PPKS Task Force and ensure a cohesive response to incidents of sexual violence within the academic community [3].

One of the innovative approaches adopted by UII to address this challenge involves the use of location-based technologies, specifically through the integration of GPS within an emergency button system in an Android application. This application is designed to provide real-time notifications to the PPKS Task Force, including video, audio, and location data, thereby facilitating immediate response and intervention. By leveraging these technological tools, the application aims to enhance the responsiveness and efficiency of the task force, ultimately contributing to a reduction in the incidence of sexual violence on campus [4]. This approach aligns with similar efforts in other contexts, where digital solutions have been implemented to address sexual violence and other forms of harassment. For instance, Agustini *et al.* (2019) developed a reporting application for violence against women and children in West Kalimantan, which emphasized the importance of rapid and accessible reporting mechanisms for victims [2]. Similarly, Hotifah (2021) introduced "Redayaku," a cyber counseling and reporting application designed to assist child victims of sexual violence in remote areas, demonstrating the utility of digital platforms in expanding access to critical support services [4].

The integration of GPS, Google Maps API, Geolocation API, and Firebase in the context of sexual violence reporting represents a relatively new and innovative application of these technologies. These tools not only enable more accurate and timely reporting but also ensure that data is stored and managed securely and efficiently. Sugiarto (2021) highlighted the importance of such technologies in his development of "Edukasi Dirimu," a system designed to report and protect against bullying and sexual violence. This application incorporated educational elements to empower users, illustrating how technological solutions can serve multiple roles in addressing social issues [5]. The present study builds on these foundations by developing an application that provides a real-time reporting platform with detailed data inputs, including video, audio, and geolocation, thus enhancing the operational capacity of the PPKS Task Force at UII [5][15].

By improving the accessibility and effectiveness of reporting mechanisms, this application aims to foster a safer academic environment and encourage more students to report incidents of sexual violence. The expected outcome is a significant reduction in underreporting, allowing for more accurate data collection and more effective interventions by the task force. The success of this application could serve as a model for other academic institutions seeking to enhance their strategies for addressing sexual violence on campus. Ultimately, the implementation of this technology-driven approach underscores the critical role of innovation in safeguarding student welfare and upholding the integrity of academic environments [6][7][8]. This research, therefore, aims not only to address the immediate need for improved reporting mechanisms but also to contribute to the broader discourse on the role of technology in preventing and managing sexual violence in educational settings. The findings from this study are expected to inform future developments in this field, with potential applications extending beyond UII to other universities and contexts where the safety and well-being of students are paramount.

2. Research Method

This study employs a prototype approach in developing a location-based sexual violence reporting application within the Universitas Islam Indonesia (UII) campus environment. The prototype method was chosen as it allows iterative development of the application, where user feedback is incorporated to refine and adjust the application to meet end-user needs [2]. According to Eka Wulansari Fridayanthie, Haryanto, and Tsamarah Tsabitah (2019), the prototype method is a development process aimed at creating effective software through repeated evaluations based on user input [2]. Figure 1 illustrates the prototype methodology flowchart used in this study.

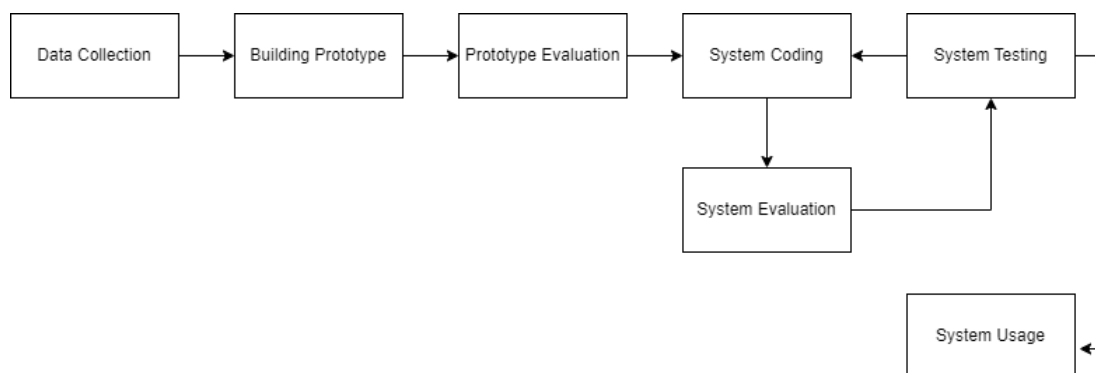


Figure 1. Prototype Methodology Flowchart

The prototype development process involves several stages: data collection, prototype creation, prototype evaluation, system coding, system testing, system evaluation, and system usage. The detailed explanations of each stage are as follows:

1) Data Collection Stage

In this stage, relevant data, information, and references are gathered to support the application development. This process includes researching articles related to sexual violence and conducting interviews with the Task Force for the Prevention and Handling of Sexual Violence (PPKS) at UII and academic supervisors. Comprehensive data collection is essential to ensure that the developed application meets user needs and effectively addresses existing issues.

2) Prototype Stage

This stage involves creating an initial design of the application interface using design software such as Figma. The initial design is then reviewed by potential users, including Task Force members and academic supervisors, to ensure that the design meets the operational needs of the Task Force. The outcome of this stage is a prototype that serves as the foundational framework for further development.

3) Prototype Evaluation Stage

During the evaluation stage, users test the prototype to determine if it meets their needs and expectations. If any shortcomings are identified, the prototype is evaluated and refined to improve the interface and add necessary features, such as additional notes that allow the Task Force to provide conclusions and recommendations on reports submitted.

- 4) **System Coding Stage**
Once the prototype is approved, the system coding process begins. The application is developed using Android-based programming languages (Kotlin) and web programming languages (HTML and CSS). The system utilizes Firebase as the database to securely and structurally store and manage report data.
- 5) **System Testing Stage**
The prototype, now developed into software, is tested using Black Box Testing to evaluate the application's functionality based on the input and output generated without examining the internal code structure. This testing is conducted in the presence of the Task Force and academic supervisors, often through online sessions using Zoom, to ensure the application operates according to specifications.
- 6) **System Evaluation Stage**
Further evaluation is conducted after the testing stage to identify areas that require improvement. The Task Force and end-users are involved in this evaluation process to provide relevant feedback. The proposed improvements are then implemented to refine the system.
- 7) **System Usage**
In the final stage, the application is re-tested after system evaluation. This trial involves end-users, including students and the Task Force, who will use the application in real-life scenarios. Continuous evaluation is performed to ensure the application can function optimally in daily operations.

2.2. Functional System Requirements Analysis

The functional system requirements analysis is conducted to define the roles of users within the system and their associated tasks and responsibilities. Table 1 below outlines the various roles within the system and the functional requirements of each role.

Table 1. Functional System Requirements

User Role	Functional Requirements
Admin	- Receive and respond to reports submitted by users
	- Full access to view and modify details of violence reports
	- Full access to view all detailed reports on sexual violence incidents
User	- Submit reports of sexual violence through the panic button
	- View detailed information on sexual violence reports
	- View detailed reports of completed sexual violence cases

2.3. Use Case Diagram Design

The Use Case Diagram serves as a representation of interactions within the information system to be developed, involving one or more actors. This diagram illustrates the various functions within the application and who can access them, providing an understanding of the application's operations and the interaction between actors and the system.

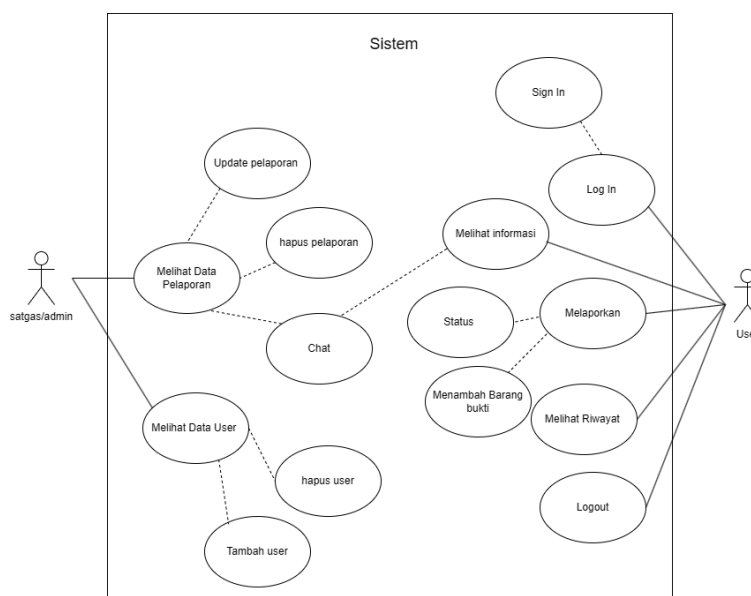


Figure 2. Use Case Diagram Design

2.4. Database Design

The application includes a system that records reports of sexual violence incidents from registered users. These reports are then forwarded and received by the admin or Task Force. Based on the described system, a relational table is created to facilitate the development of the program and database, illustrated by the ERD or Database design shown below.

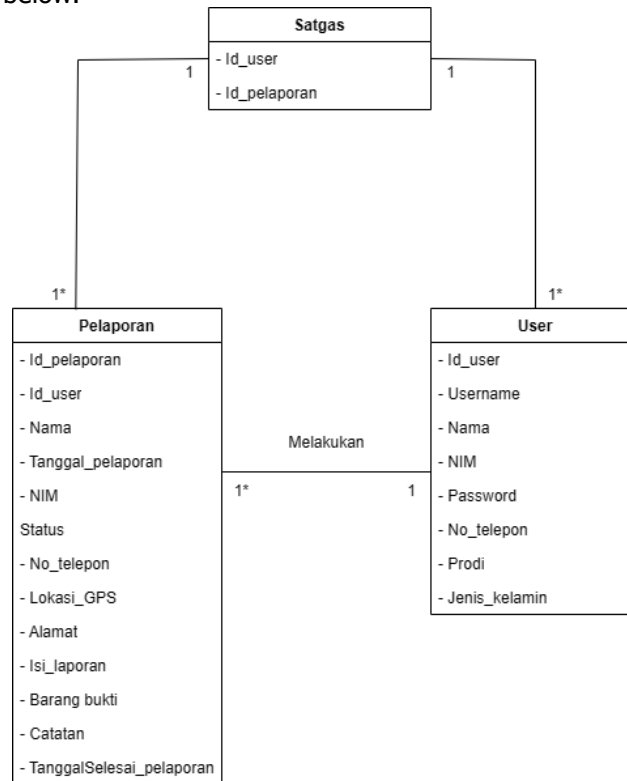


Figure 3. Database Design

2.5. Initial Interface Design

The initial interface prototype is designed to ensure the application's layout is intuitive and easy for users to navigate. This design includes key elements required for the application's operation, such as the main menu, report form, and other navigational features.



Figure 4. Initial Interface Prototype

3. Result and Discussion

3.1 Results

3.1.1 Application Implementation Results

The development of a location-based mobile application for reporting sexual violence using the prototype methodology was successfully completed, integrating Kotlin programming language for Android and HTML for the web interface, along with Firebase Database for secure and structured data management. This section elaborates on the implementation results, providing a functional perspective from the user's viewpoint.

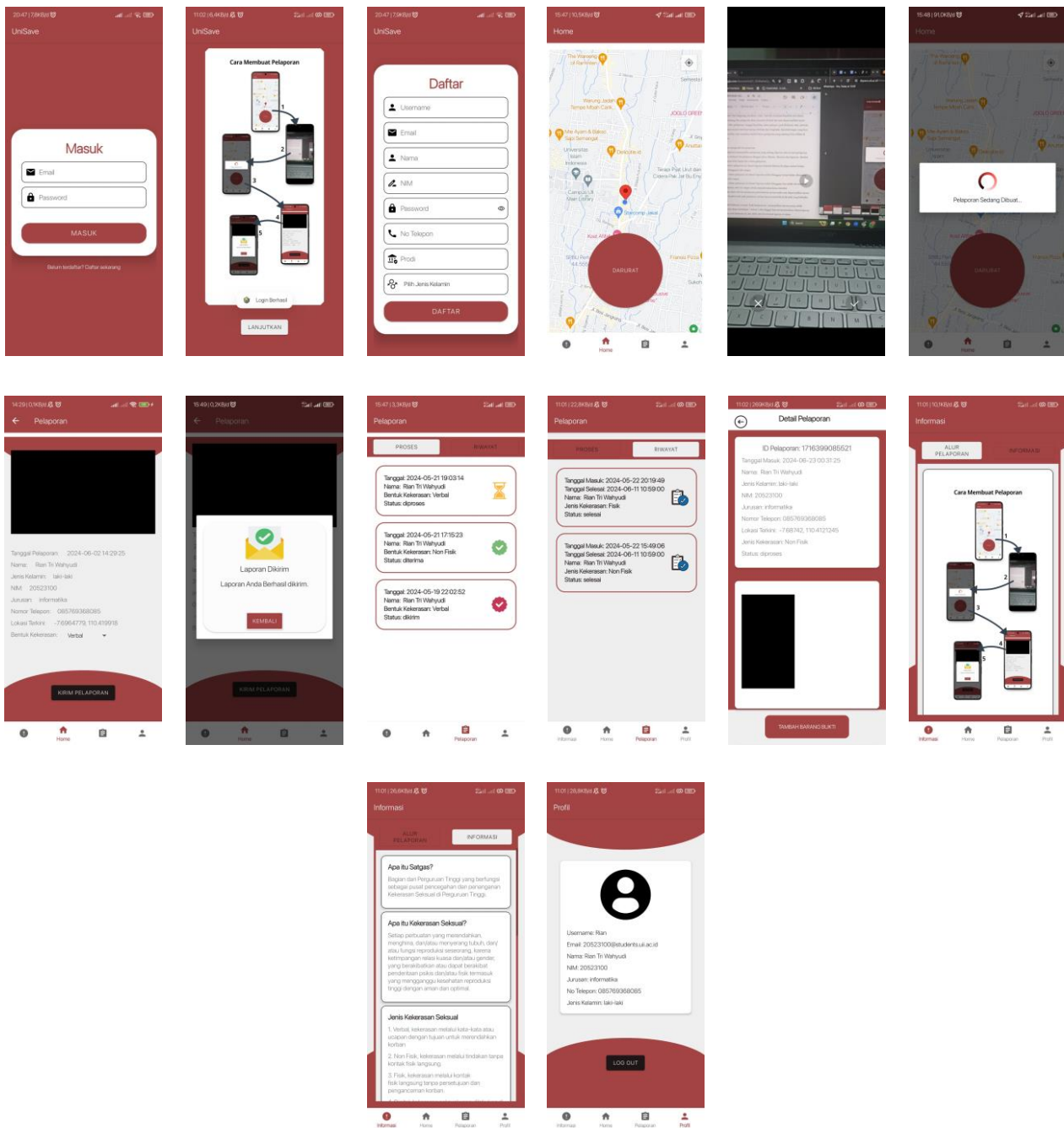


Figure 5. Application Interface Visualization

Figure 5 illustrates the user interface of the application, showing various screens that guide the user through the process of reporting an incident. This visualization includes key elements such as the login page, registration process, home page, and the emergency reporting button, which are crucial for ensuring an

intuitive user experience. When the application is launched, the first screen displayed is the login page. Users are prompted to enter their email and password. For those without an account, the system requires them to register by clicking the "Register Now" button located at the bottom of the login screen. The registration process involves filling in personal details, such as name, student identification number (NIM), and other relevant information. After submitting the registration form, users are redirected back to the login page, where they can use their credentials to access the application. Upon successful login, users are directed to a usage guide page that provides detailed instructions on how to navigate and utilize the app's features. Once users are familiar with the functionalities, they can click the "Continue" button, which leads them to the main or home page. This page features a real-time display of the user's location and includes a button for initiating a report on incidents of violence.

To submit a report, users click the emergency button on the home page. The application then automatically activates the camera, allowing users to record the incident. After recording, users click the checkmark button to finalize the report. The system then redirects the user to the report page, where they can review the submitted data and the recorded video. Users must specify the type of violence encountered, such as verbal, physical, non-physical, or digital. Once the type of violence is selected, users submit the report by clicking the "Submit Report" button, which triggers a pop-up confirming the successful submission of the report. Following the submission, users are navigated to a reporting page that displays both ongoing and historical reports. This page allows users to track the status of their reports, indicating whether they are being sent, received, processed, or completed. In cases where the initial evidence is deemed insufficient, users have the option to provide additional evidence while the report is still under review. The information section provides users with an overview of the reporting process and necessary details related to the incident report. The profile section enables users to manage and view their personal information. Each feature of the application was meticulously implemented according to the design specifications established during the development stages. Extensive efforts were made to ensure that all functionalities operate smoothly and meet user expectations. Thorough testing was conducted to validate the quality and stability of the application prior to its deployment to the end-users. Consequently, this location-based reporting application is well-prepared to offer substantial benefits, particularly to students, by providing a reliable tool for reporting sexual violence on campus.

3.1.2. Black Box Testing

Black Box Testing is a software testing approach that focuses on evaluating the software's functionality by examining the input and output without delving into the internal code structure. This method is typically utilized in the final stages of software development to ensure that the software performs effectively and meets the intended requirements.

Table 2. Black Box Testing of Login Functionality

No	Test Condition	Expected Result	Test Result
1	User navigates to the login page	Displays the login page	Success
2	User enters correct email and password	Redirects to the home menu	Success
3	User enters incorrect email and password	Displays "Authentication Failed" message	Success

Table 2 provides an overview of the login functionality testing, highlighting scenarios such as navigating to the login page, entering correct credentials, and handling incorrect login attempts. This testing ensures that the login system operates as expected, facilitating secure and reliable access to the application.

Table 3. Black Box Testing of Registration Functionality

No	Test Condition	Expected Result	Test Result
1	User accesses the registration page	Registration page is displayed	Success
2	User correctly fills in Username, Email, Name, NIM, Password, Phone Number, Department, and Gender, then clicks "Register"	User data is saved in the database	Success
3	User submits incomplete registration form	Displays message that all fields are required	Success

Table 3 outlines the testing of the registration process, including successful registration with complete information and handling of incomplete submissions. This testing is critical to ensure that the user registration process is robust, guiding users through proper data entry and account creation.

Table 4. Black Box Testing of Report Creation Functionality

No	Test Condition	Expected Result	Test Result
1	User presses the emergency button	System displays the recording page	Success
2	User records incident and selects the cross button	System returns to the home page	Success
3	User records incident and selects the checkmark button	System displays the recorded video	Success
4	System displays the created report	System shows the created report	Success
5	User selects the type of violence in the report form	System displays violence type options	Success
6	User clicks the submit button	System shows a pop-up confirming successful submission	Success

Table 4 details the testing scenarios related to creating and submitting a report. It covers the activation of the emergency button, recording the incident, reviewing the submission, and ensuring the correct categorization of the violence type. This step ensures that the report creation process is intuitive and functional.

Table 5. Black Box Testing of User Report List Functionality

No	Test Condition	Expected Result	Test Result
1	User accesses the report page	System displays the entire list of user reports	Success
2	User clicks the "Process" button	System shows the list of reports that are still pending	Success
3	User selects a report to view	System displays report details including ID, Date, Name, Gender, NIM, Department, Phone Number, Current Location, Type of Violence, Report Status, and Video	Success

Table 5 summarizes the testing of the report listing functionality, ensuring that users can view all their reports, filter by processing status, and access detailed information for each report. This feature is crucial for users to keep track of their submissions and monitor the progress of their cases.

Table 6. Black Box Testing of Report History Functionality

No	Test Condition	Expected Result	Test Result
1	User opens the report page	System displays the entire list of user reports	Success
2	User clicks the "History" button	System displays the list of completed reports	Success
3	User selects a report from history	System shows detailed report including ID, Date, Completion Date, Name, Gender, NIM, Department, Phone Number, Location, Gender, Report Status, and Video	Success

Table 6 illustrates the testing of the report history functionality, validating that users can view their report history and access detailed records of completed cases. This allows users to review past reports and the resolutions provided. The rigorous implementation and evaluation through Black Box Testing have ensured that the application meets the required functional specifications and operates reliably. Each functionality was thoroughly tested to identify and rectify any issues, thereby enhancing the overall quality and dependability of the application before its release to users. This testing approach has been instrumental in validating that the application serves as an effective tool for reporting sexual violence incidents on campus, providing a secure, user-friendly platform for students.

3.2 Discussion

The implementation of the location-based mobile application for reporting sexual violence represents a significant advancement in addressing the issue of underreporting and delayed responses to incidents on campus. By integrating real-time location tracking, video recording capabilities, and a user-friendly interface, the application empowers students to report incidents of sexual violence efficiently and securely. The following discussion explores the key aspects of the application's implementation, performance, and potential impact on the university environment, as well as the broader implications for similar initiatives. One of the primary considerations in developing the application was ensuring its ease of use, given the sensitive nature of its purpose. The application's interface, as shown in Figure 5, was designed to be intuitive, with straightforward navigation from the login and registration process to the reporting features. The step-by-step guide provided within the app helps users familiarize themselves with the reporting process, reducing barriers to usage and increasing the likelihood of user engagement. The login and registration testing, detailed in Tables 2 and 3, confirmed that the system effectively manages user credentials and provides secure access. The seamless transition from registration to usage demonstrates that the application can accommodate new users quickly, which is crucial in emergencies where time is of the essence. By ensuring that the registration process captures necessary personal details while being straightforward, the application balances security with usability.

The core functionality of the application lies in its ability to facilitate the reporting of incidents through a panic button, which is designed to be easily accessible on the main screen. Upon activation, users can record the incident using their device's camera, and the application automatically attaches the location data, which enhances the reliability of the report. As validated in Table 4, the report creation process is robust, with clear prompts and feedback mechanisms, ensuring that reports are submitted correctly and promptly. The incorporation of Firebase Database as the backend solution for data management was a strategic decision to maintain data integrity and security. The database structure was designed to handle sensitive information, such as personal details and video evidence, with strict access controls to prevent unauthorized access. The application's ability to store and retrieve data efficiently ensures that all reports are available for review by the Task Force for the Prevention and Handling of Sexual Violence (PPKS), which is essential for timely interventions.

The extensive Black Box Testing conducted across different functionalities of the application confirmed that the system performs reliably under various scenarios. From the initial login process to viewing report histories, each feature was rigorously tested to ensure it met the defined functional requirements. As highlighted in Tables 5 and 6, the application not only allows users to submit reports but also provides them with ongoing access to their report status and history, thereby enhancing transparency and trust in the reporting process. The success of the system testing phase demonstrates that the application is capable of handling real-world usage conditions without compromising on performance or security. The iterative feedback loop employed during the prototype phase proved effective in identifying and resolving potential issues early in the development process, leading to a more stable and reliable application.

The deployment of this application is expected to have a significant impact on campus safety by providing students with a reliable tool to report incidents of sexual violence promptly. The application's location-based features enable rapid response from the PPKS Task Force, who can access detailed reports including video evidence and exact locations, thereby facilitating a more effective and immediate intervention. This aligns with the university's broader goals of fostering a safe and supportive environment for all students. Furthermore, the application addresses a critical gap in the existing reporting mechanisms by reducing the stigma and fear often associated with reporting sexual violence. By providing a discreet and efficient method to report incidents, the application encourages more students to come forward, which in turn helps the university gather more accurate data on the prevalence of sexual violence and tailor their prevention efforts accordingly.

The successful implementation of this application at Universitas Islam Indonesia can serve as a model for other academic institutions looking to enhance their response to sexual violence. The use of mobile technology to streamline reporting processes and improve data accuracy represents a forward-thinking approach that aligns with contemporary digital transformation trends in higher education. Future developments could include expanding the application's functionality to cover other forms of campus-related incidents, such as bullying or other types of harassment. Additionally, integrating the application with broader university systems, such as student support services or campus security, could provide a more holistic approach to campus safety. Further research could explore the long-term impact of the application on reporting rates and the overall campus climate concerning sexual violence. Evaluating user feedback and ongoing system performance will be crucial in refining the application to better serve its intended purpose. Moreover, expanding the application to other platforms, such as iOS, would increase accessibility and ensure that a broader segment of the student population can benefit from its features. The implementation of the location-based reporting application

represents a significant step forward in the effort to address sexual violence on campus. By leveraging technology to provide a secure, user-friendly, and efficient reporting tool, the application not only empowers students but also strengthens the university's capacity to respond effectively to incidents. The ongoing evaluation and refinement of the application, coupled with its potential expansion, offer a pathway toward a safer and more supportive campus environment.

4. Related Work

Research on Android-based applications for reporting sexual violence has gained prominence in recent years, focusing on leveraging technology to enhance safety and reporting mechanisms. Various studies have explored different approaches to integrating emergency response features in public and private spaces. For example, previous research highlighted the use of emergency buttons in large gatherings such as festivals and concerts to address immediate safety concerns, emphasizing the importance of rapid technological responses in potentially dangerous situations in crowded areas [1][15]. Other studies have concentrated on the development of applications that provide quick and accessible reporting platforms for violence against women and children. These applications often integrate technologies such as QR codes and public management systems to improve accessibility and streamline the reporting process, thus making it easier for victims to access help and support services efficiently [2]. This approach underscores the importance of having user-friendly platforms that cater to urgent needs and facilitate swift responses from authorities. A common theme across many studies is the emphasis on expanding access to support services through digital platforms. For instance, some research initiatives have focused on using applications to provide not only reporting capabilities but also additional services like cyber counseling, especially in remote or underserved areas. This dual approach of reporting and counseling aims to extend educational and mental health resources, broadening the impact of these applications beyond mere incident reporting [4]. Several studies also introduced applications that use location-based services to enhance the accuracy and timeliness of reports. By utilizing geographic data, these applications can provide more precise interventions, allowing authorities to respond faster and more effectively to incidents. This real-time data integration is seen as a key advantage in improving the overall responsiveness of reporting systems [4][5]. In addition to location-based services, some studies have explored the use of advanced communication technologies, such as Long Range (LoRa), to facilitate better coordination between users, authorities, and support personnel. This integration allows for more effective management of emergency responses, particularly in high-density public transport environments, demonstrating the versatility of such technologies in various contexts [10].

Comparatively, other studies have focused on the broader application of these technologies in educational settings, where the emphasis is on creating safer environments for students through digital reporting systems. These initiatives are not limited to sexual violence but also cover other forms of harassment and bullying, highlighting the adaptability of these systems to different types of safety concerns [11]. A recurring distinction in these studies is the range of additional features offered beyond basic reporting. While some applications focus solely on the reporting mechanism, others incorporate educational components aimed at empowering users with knowledge about their rights and the steps they can take when faced with violence. This approach not only addresses immediate safety needs but also contributes to long-term prevention efforts by raising awareness and educating users [11].

Moreover, the integration with broader public safety initiatives has also been explored, where some applications are linked with governmental or institutional safety programs. This linkage enhances the overall efficacy of the applications, providing a seamless connection between user reports and official responses. This model ensures that reports are not only collected but also acted upon promptly, making the system more reliable and effective in protecting users [12][13]. While the focus of most research has been on enabling users to report incidents quickly and securely, there is also a growing emphasis on ensuring the privacy and security of the data collected [14]. The use of secure databases and strict access controls is a critical aspect of these applications, as it helps protect sensitive information and build trust among users. Ensuring data security is essential, especially when dealing with vulnerable populations such as victims of violence [15][16]. The current body of research on mobile applications for reporting sexual violence highlights the diverse approaches taken to address safety and accessibility issues. From the integration of location-based services and real-time data to the inclusion of counseling and educational components, these studies underscore the evolving nature of technological solutions in enhancing public safety. The key differentiators among these applications lie in their scope, technological integration, and the extent to which they link with broader safety initiatives, all of which contribute to their overall impact and effectiveness in addressing sexual violence.

5. Conclusion

Through a comprehensive process encompassing research, design, implementation, and testing, this study developed a location-based application designed to report incidents of sexual violence within campus environments. Utilizing Google Maps API and Firebase for data storage, the application is specifically tailored for Android smartphones, aiming to enhance the reporting and response systems for sexual violence at Universitas Islam Indonesia (UII). The application functions as an effective information system intended to streamline the process of reporting incidents of sexual violence. By simplifying and accelerating the reporting process, the application provides an accessible platform that reduces barriers commonly faced by victims, such as fear or lack of knowledge on how to report incidents. This accessibility facilitates a more responsive support system, encouraging victims to come forward and report incidents promptly and efficiently. Employing Location Based Service (LBS) and Global Positioning System (GPS) technologies, the application allows users to report the exact location of incidents in real-time. This integration of real-time location data significantly enhances the response and intervention capabilities of the UII Task Force for the Prevention and Handling of Sexual Violence (PPKS). By providing precise location information, the task force can mobilize resources quickly and respond more effectively to reported incidents, thus improving the overall response time and accuracy in addressing cases of sexual violence on campus.

The reporting mechanism within the application includes a comprehensive form that captures the victim's identity, the precise location of the incident, and video evidence. This detailed approach to data collection ensures that the PPKS Task Force receives clear and credible evidence, which is crucial for effective investigation and case management. The inclusion of video evidence, in particular, enhances the credibility of reports and provides a concrete basis for the task force to take appropriate actions, thereby strengthening the overall investigative process. The study not only successfully developed this crucial application but also provides significant practical implications for the prevention of sexual violence within the campus setting. By serving as an effective tool for raising awareness and enhancing the response to sexual violence, the application has the potential to reduce the frequency of such incidents through improved reporting mechanisms and faster intervention.

To expand the utility of the application, future research should explore the adaptation of the application for other platforms, such as iOS, to increase its accessibility and reach a broader user base. Additionally, addressing any potential technical and social limitations identified during further studies could enhance the overall effectiveness of the application. Given that the current design is optimized for Android, future efforts should also focus on enhancing data security and accessibility to better serve the needs of the community. Strengthening these aspects will ensure that the application remains a reliable and secure tool for users, thereby fostering trust and encouraging continued use. This research offers an innovative technological solution that makes a significant contribution to the safety and well-being of the campus community. By bridging the gap between victims and available support systems, the application promotes a safer campus environment, encouraging timely and efficient reporting, and providing robust support to those affected by sexual violence. This not only aids in immediate crisis management but also contributes to a longer-term cultural shift towards increased awareness and proactive prevention of sexual violence within academic settings.

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