

Complaint information system and legal education related to violence againsts children and women

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ABSTRACT

Violence against children and women remains a significant societal issue in Indonesia, impacting victims physically, mentally, and economically. Challenges in addressing this include low legal awareness, limited access to reporting mechanisms, and insufficient information about victims' rights. This research aimed to develop an information system to mitigate these challenges by providing a platform for easy complaint filing and accessible legal education. The system, developed using the Waterfall Method and tested with Blackbox testing, incorporates key features such as login, account registration, a homepage, legal education modules, complaint filing, complaint status tracking, and user account management. The successful testing of these features demonstrates the system's potential to improve access to justice, enhance public understanding of legal rights, and ultimately contribute to more effective handling of violence against children and women in Fakfak.

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1. INTRODUCTION

Violence against children and women is a serious problem that continues to threaten the welfare of society in various countries, including Indonesia (Ira Aini Dania, 2020). This violence not only impacts the victims' physical and mental health, but also affects their social and economic development (Elindawati, 2021). Children and women are often groups that are vulnerable to various forms of violence, such as physical, psychological, sexual violence and neglect. In 2023, National Commission on Women reported that violence had occurred (Hidayat, 2021). A total of 339,782 of the total complaints were gender-based violence (GBV), of which 3442 were reported to National Commission on Women. Violence in the personal realm still dominates reporting of GBV cases, namely 99% or 336,804 cases. In complaints to the National Commission on Violence Against Women, cases in the personal realm reached 61% or 2,098 cases. For cases in the public domain, a total of 2978 cases were recorded, of which 1,276 were reported to the National Commission on Violence Against Women. Meanwhile, cases of violence in the state domain were only found in the National Commission on Violence Against Women, with an increase of almost 2 times, from 38 cases in 2021 to 68 cases in 2022 (Pellupesi1 et al., 2023).

In this case, the state has an obligation to guarantee security for its citizens, including Indonesia as a legal state (Raisah & D armawati, 2022). The Indonesian state, like other countries, cannot be free from various legal problems, including problems of violence, which is why the state, through its government, must be able to guarantee the safety and security of its citizens. In accordance with the opening mandate of the 1945 Constitution of the Republic of Indonesia and the articles in the Constitution, it is stated that every citizen has the right to receive protection in carrying out his rights and obligations (Anisa & Mustofa, 2021). Likewise with the right to feel safe

and free from all forms of violence (Fitriani et al., 2020). Even though there have been several regulations made to protect citizens, especially women and girls and children, who are individuals who are more vulnerable and easily become victims, the number of violence that occurs in various regions in Indonesia, including West Papua, Fakfak Regency, is still very high and tends to increase every year. However, there are still many challenges in handling cases of violence, such as low legal awareness among the community, difficult access to reporting, and a lack of information regarding legal rights that victims can take advantage of. An adequate information system that can provide easy access to complaints, as well as education regarding legal rights for victims, is very necessary to speed up case handling and reduce the number of violence (Lailisna, 2020).

Cases of violence against women and children in Fakfak Regency, West Papua have continued to increase over the last five years (2018-2022). Based on data from the Women's Empowerment, Child Protection, Population Control and Family Planning Service (*DP3AP2KB*) of Fakfak Regency, a total of 173 cases occurred. The Fakfak Resort Police through the Criminal Investigation Unit succeeded in uncovering 20 prominent cases of violence against women and children, including 9 cases of violence against children and 11 cases of violence against women. Unfortunately, only a small percentage of cases are reported to the police. The reason is that violence against women and children is a disgrace in the family. Apart from that, one of the reasons is that it is difficult to report, the distance to the police station is far, or the nearest health service center is closed. Reluctance to report can result in more fatal things, for example the risk of death due to late treatment. Ease of reporting is key to reducing the risk of death and providing quick treatment for victims. Complaint information systems and legal education can be an important means to provide a better understanding of the law for the community and victims, as well as to increase the effectiveness of handling cases of violence against children and women. Therefore, this research aims to develop an information system that can support complaints and provide legal education to the public. The complaint information system application specifically designed for cases of violence against women and children has very high relevance to national policies and regulations related to the protection of women and children. Some of the main relevances are Law Number 23 of 2004 concerning the Elimination of Domestic Violence: regulates the prevention, protection, and handling of cases of domestic violence, Law Number 35 of 2014 concerning Child Protection: regulates children's rights, protection of children, and handling of cases of violence against children, Government Regulation Number 17 of 2019 concerning Complaint Management: regulates the procedures for managing complaints within the government.

2. RESEARCH METHOD

In this research, the system development method used is the System Development Life Cycle (SDLC) with the waterfall model (Kurniawan &, 2023)(Saravanos & Curinga, 2023). SDLC (Software Development Life Cycle) is a methodology or systematic series of processes used in software development. Simply put, SDLC is a "recipe" that developers follow to create an application or software from start to finish (Nugraha et al., 2018). The waterfall model is a traditional software development process that is commonly used in traditional software development projects (Mallisza et al., 2022). It is a sequential model, so that completion of one set of activities causes the start of the next activity (Aceng Abdul Wahid, 2020)(Andi Roy et al., 2021)

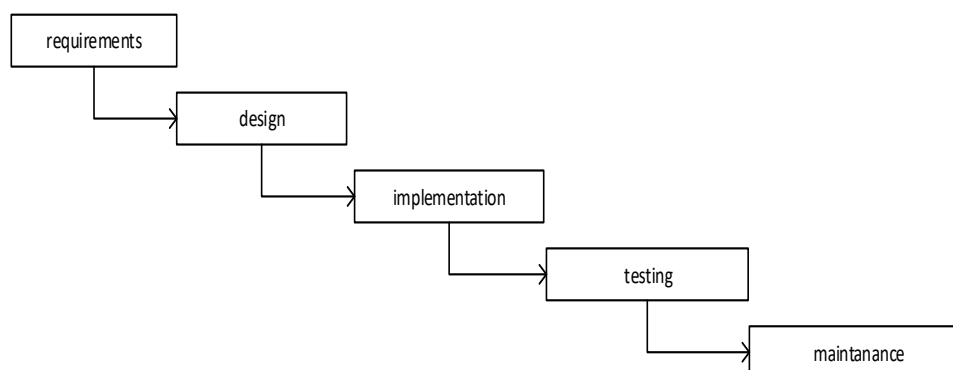


Figure 1. Waterfall method

The steps using the waterfall method as seen in the picture above are (Anggraini et al., 2023): a) Requirements, at this stage the author conducts a survey or conducts an interview with one of the office staff from whom we will collect data at the *DP3AP2KB* Fakfak office regarding what is needed to create an application; b) Design, the aim of this stage is to have a clear picture of the appearance of the design which will then be designed and built by the author. The author used Viduo to design the flow diagram and Figma to design the appearance of the application (Adi Kurniyanti & Murdiani, 2022).

This process is used to design applications that include system workflows, application displays and database plans used (Putra & Andriani, 2019).

1. System Flow Diagram, the system flow is depicted using a use case diagram to show the interaction or dialogue between the system and the user (Bergström et al., 2022; Odeh & Al-Saiyd, 2023).

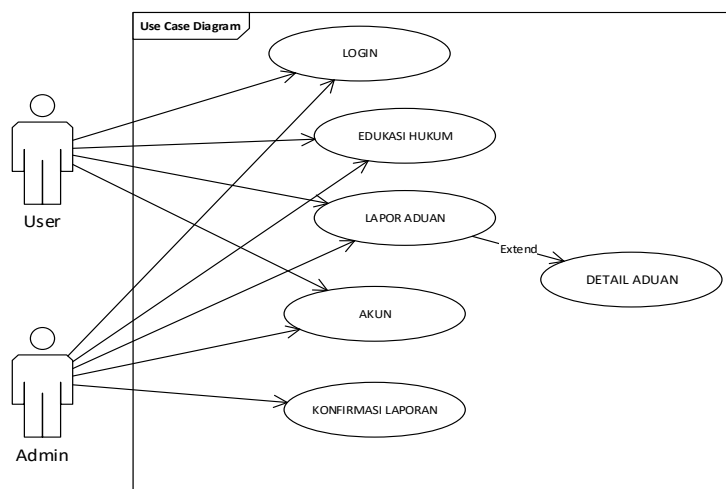


Figure 2. Use case diagram

2. Activity Diagram, activity diagrams are used to model workflow and process activities between users and systems or applications (Abdillah, 2021).

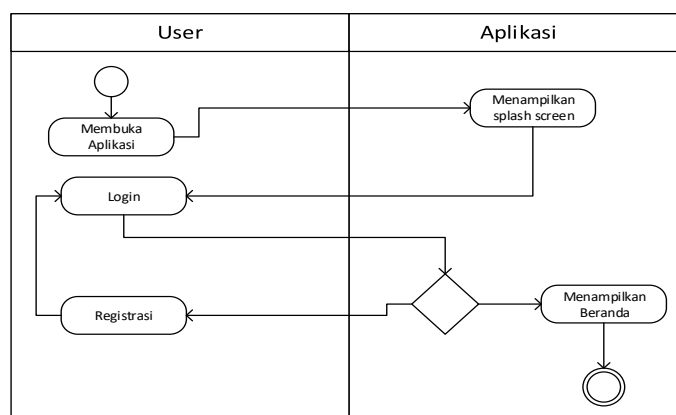


Figure 3. Application login diagram activity

3. Implementation, at this step, more emphasis is placed on implementing program code using a programming language according to the author's needs.
4. Testing, at this stage, testing is carried out on the application that has been created. To ensure the reliability of the application, testing is carried out by combining several testing methods. For example, after conducting black-box testing to verify basic functionality, white-box testing can be carried out to analyze program code, integration testing to ensure

interaction between modules, and acceptance testing to obtain feedback from users (Voutama, 2022).

- Maintenance, at this stage more emphasis is placed on system maintenance. The maintenance in question is repairing errors that occurred in the previous stage (Irnawati & Darwati, 2020).

3. RESULTS AND DISCUSSIONS

Application View

The application interface is the part of an application that interacts directly with the user. This is the "face" of the application, which users see and use to interact with its features (Mantik et al., 2022)(Arridha et al., 2022). In this research, we produced a Report application that can be used to make complaints to victims of violence against women and children. This application can also provide legal education against violence so that victims can know the legal basis for making a complaint. The steps for using the application can be seen in the image below.

The user opens the application and accesses the Register page. After that, create an account, the user fills in the registration form with data such as: name, e-mail, telephone number, password and password confirmation. Click create account until registration is successful



Figure 4. Signing up process

After successful registration, the user is redirected to the login page, Login user using email and password

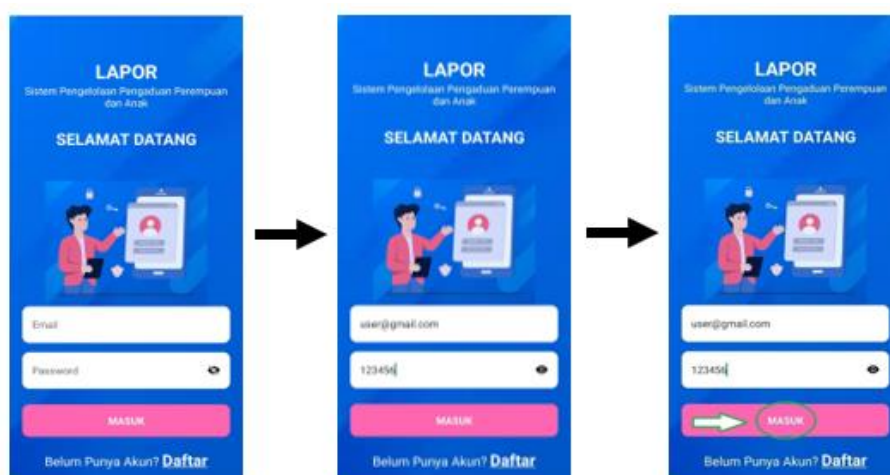


Figure 5. Login form

If valid, the user is directed to the home page, then switches to the complaint page

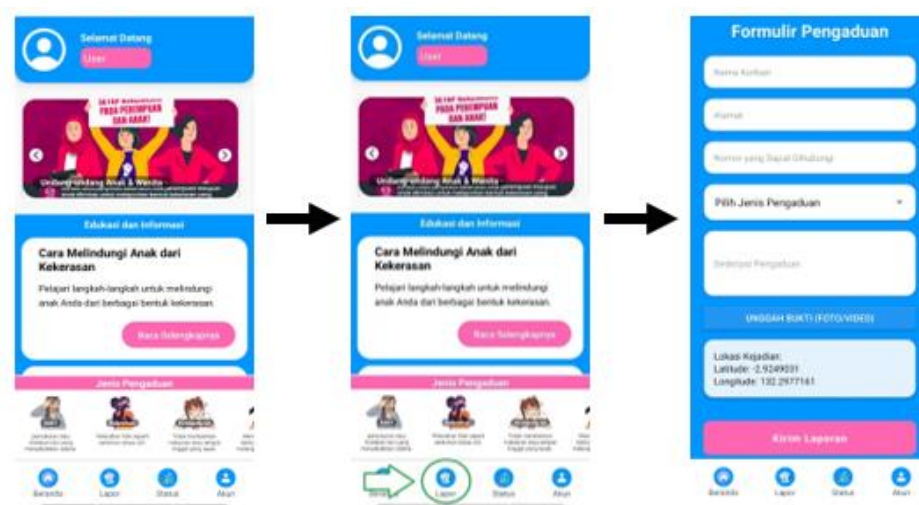


Figure 6. The complaints page

Users fill out a report form with data such as: Type of complaint (for example: physical violence, detention, domestic violence, etc.), Name of victim (if not the reporter), Location of incident, Chronological description, Evidence (photos, documents). And the location of the incident will be sent automatically based on the user's location. After that, click send.



Figure 7. Users fill out a report form

Once successfully sent, the user is directed to the Complaint status with the new report status. Then the report will be sent to the admin/staff for processing or the admin will provide confirmation back to the victim so that the application status will change once it has been responded to.

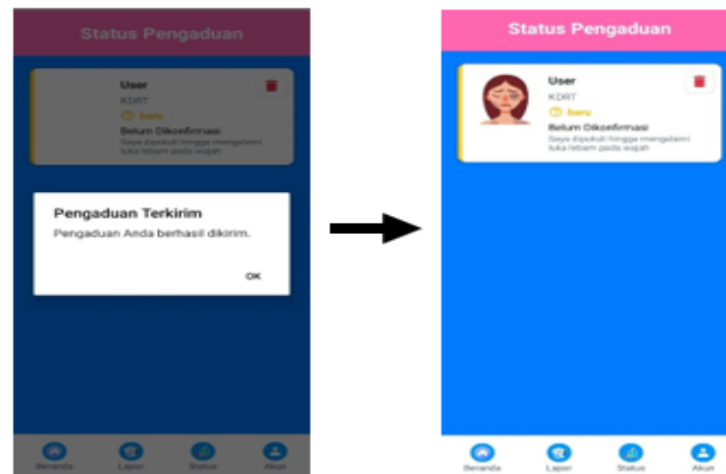


Figure 8. The complaint status

Application Test Results

In the application testing process using the Blackbox method (Syarif & Pratama, 2021), there are several cases tested such as the user login page, registration page if the user does not have an account, home page, complaints page and account page to display user information and make changes to the username and password. The test results can be seen in Table 4.

Table 1. Testing proses

No	Tested Cases	Test Scenarios	Expected Results	Test Results
1	Login Page	User Login Test	User successfully logs in and goes to the home page.	Succeed
2	Registration Page	User Registration Test	The user has successfully registered and can log in with the account that has been created	Succeed
3	Home Page	Displays information related to legal education	User successfully displays legal education information	Succeed
4	Complaints Page	User makes reports or complaints	Users can successfully make reports or complaints	Succeed
5	Status Page	User displays the status page	User successfully displays the status page	Succeed
6	Account Page	User changes login account by changing password	User has successfully changed the password.	Succeed

The testing process is carried out by testing all existing buttons starting from User Level (Magfirah et al., 2022). The cases tested include the login page by entering an existing username and password, the registration page is tested by filling in the registration form on the registration page for users who do not have an account, after successfully logging in they will go to the splash screen then redirect to the home page. The homepage displays information about laws related to women and children, such as information about how to protect children from violence. After that, switch to the complaint page, the user fills in the report form with data such as the type of complaint (for example: physical violence, detention, domestic violence, etc.), name of the victim (if not the complainant), location of the incident, chronological description, evidence (photos, documents). And the location of the incident will be sent automatically based on the user's location. After that, test it to Complaint status with a new report status.

4. CONCLUSION

The application test results show that all tested features or cases were successful in accordance with the expected results, meaning that all feature functions function and run well. Based on the results of the research that has been conducted, an application for a complaint information system

for acts of violence against women and children has been produced. This application was created using the Android Studio application with the Java programming language. The existing features include legal information related to acts of violence against women and children and a complaint feature. This information system for reporting acts of violence against women and children can make a significant contribution to the development of similar applications globally. Its main contributions include standardization of features and functions, refinement of reporting models, and strict evaluation of its effectiveness and efficiency.

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