

Building Design Mlatiharjo Urban Village PKK Administration Governance System East Semarang Sub-District

Listiarini Edy Sudiati^{1*}, Gilang Pandu Susandi², Ninik Haryani³, Daniel Alfa Puryono⁴

College of Informatics and Computer Management AKI Pati

Corresponding Author: Listiarini Edy Sudiati listiarini@gmail.com

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ABSTRACT

PKK as a partner of the lurah government is the closest community organization to the family and plays an important role in empowering and improving family welfare. PKK is divided into 4 working groups: Working Group (POKJA) 1 manages the Pancasila and Gotong Royong Program, Working Group 2 manages the Education and Skills Program and the Development of Cooperative Life, Working Group 3 manages food, clothing, housing and household management programs, Working Group 4 manages health programs, environmental sustainability and healthy planning. In order to support the duties of the TP PKK secretary to manage PKK administration and report and evaluate PKK work programs, according to Shinta Esabella et al (Esabella et al., 2022) in their research, it is necessary to design and build a Web-based Administrative Governance Information System. The governance of the PKK administration in Mlatiharjo Village, East Semarang District is still done manually, both for work programs, financial reports, annual reports and correspondence management. With this manual system, it will make it difficult for the PKK secretary to distribute work programs, collect data, manage documents, correspondence and make reports.

INTRODUCTION

Administration is a series of activities carried out together in a group of people to achieve goals. In order for these goals to be achieved, it is necessary to arrange planning and implementation of activities to regulate how to work and direct the people who carry out. Family Empowerment and Welfare (PKK) is a national movement to build communities with the aim of creating healthy and prosperous families, faith in God, virtuous noble character, advanced and independent, gender equality and justice, and aware of law and environment, such as the results of Rakernas VII PKK in 2010 (Shalfiah, 2017; Suherman, 2017). PKK administration governance system is a system built to manage PKK administration. From the research (Handoyo, 2021), it was concluded that the construction of the PKK Work Program Information System made it easier for the secretary and the PKK Movement Team to manage and make reports and evaluations of the PKK work program. The administrative governance of the PKK of Mlatiharjo Village is still using manual methods, so the level of efficiency and effectiveness of the PKK Movement Team in carrying out its community duties is still quite low. For example, the distribution of information from the Kelurahan PKK Movement Team to the Dawis level takes a relatively long time, recording and documenting activities is still done by writing in a ledger.

THEORETICAL REVIEW

With the rapid development of information and communication technology, it can be used to minimize the problems faced by the PKK Movement Team of Mlatiharjo Village, namely by building a mobile-based PKK administrative governance system of Mlatiharjo Village, East Semarang District. The system development technique used is RAD. From previous research that built a system with the RAD method conducted by Meidyan Permata Putri and Hendra Effendi (Puteri & Effendi, 2018) shows, the test results recommend the RAD method. The results of research from Puspa Arundini and friends (Arundini et al., 2021) who built a Village Information System using the RAD method showed that the system built was in accordance with the wishes of the user. From the research of Nurman Hidayat and Kusuma Hati (Hidayat & Hati, 2021) it can be concluded that with the RAD method in building a system, the time required is shorter because the development cycle is shorter, increases user involvement and suppresses errors.

METHODOLOGY

This research uses a qualitative description method, because researchers want to describe the situation to be studied more specifically and systematically, based on the reality and facts obtained during field observations (Muhammad, 2005; Zellatifanny & Mudjiyanto, 2018). The development technique used is SDLC with the Rapid Application Development / RAD approach. Researchers chose the RAD method in system development, because the scope of work is quite large and this RAD method is the most appropriate. In addition, the RAD method uses an iterative model so that it saves time and costs (Murdiani & Hermawan, 2022; Zellatifanny & Mudjiyanto, 2018) Analysis

and design of the system using an object-oriented approach, the design tool uses UML. The system blueprint includes describing functional and non-functional system requirements (business processes and system functions) through Use Case Diagrams, Sequence Diagrams and Activity Diagrams (Arianti et al., 2022; Fu'adi & Prianggono, 2022; Sukamto & Shalahuddin, 2018). The research framework can be seen from the following figure :

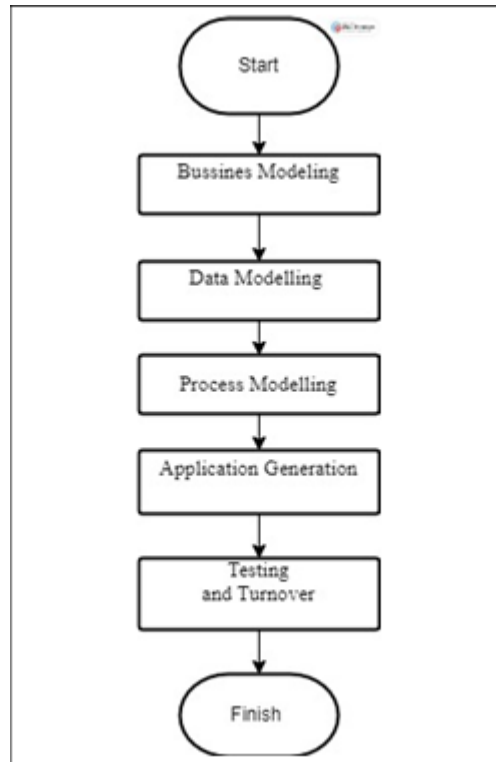


Figure 1. The research framework

The Business Modeling stage aims to identify problems, determine business processes, identify who is the information user, determine who is the information processor and determine the output.

At this stage, both primary and secondary data collection is carried out through observation of business processes in the PKK Mlatiharjo Village, interviews with the PKK chairman, PKK secretary and each POKJA and examining documents. The next step is to analyze the data, analyze whether or not there are development opportunities, organize work plans and determine system development methods.

At the Data Modeling stage, object identification will be carried out along with the attributes or characteristics of each object and describe the relationship between objects.

The Process Modeling stage is the stage to determine the processes that will involve the flow of information generated from the second stage. These processes include: adding, deleting, modifying, retrieving data objects.

At the Application Generation stage, software construction is carried out or the daily language is programming.

The testing and turnover stage is the last stage, namely thorough program testing until the software is ready to be implemented and used.

RESULTS AND DISCUSSION

Identification of Problems

From the results of observations and interviews and examination of documents, several problems can be found, which can be seen in table 1. As follows :

Table 1. Identification of Problems

Problems	<ol style="list-style-type: none"> 1. Writing the work program for each NWG is still done manually in the ledger and activity book. 2. Data collection, recording and recapitulation of data on pregnant women, mothers giving birth, postpartum women, mothers dying, babies born, babies dying, deaths of children under five are all still manual. 3. Recording and Recapitulation of Posyandu data is still manual. 4. Recording and reporting PKK activities are still manual. 5. Bookkeeping and financial reporting are still manual. 6. Correspondence management is still manual, not yet digitally archived
Effect	<ol style="list-style-type: none"> 1. The distribution of work programs to the RW and RT levels is slow, as the PKK meets once a month. 2. The implementation of the work program was hampered. 3. If there are changes to the work program, information to RW and RT is slow. 4. Dynamic changes in data on pregnant women, mothers giving birth, postpartum women, mothers dying, babies born, babies dying, deaths of children under five are not matched by the speed of data processing, because reporting is done once every 6 months & is still in the form of notes in a ledger. 5. High risk of financial reporting errors, inaccurate data. 6. Manual correspondence archives, affecting storage space, high damage and loss factors. 7. Searching for archives takes relatively longer.
Impact	<ol style="list-style-type: none"> 1. It is difficult to access work programs, work program implementation reports. 2. The implementation of monitoring and evaluation of work programs is difficult to carry out due to the lack of orderly archiving of documents. 3. There are inconsistencies in data on pregnant women, mothers giving birth, postpartum women, mothers dying, babies born, babies dying, under-five deaths, at the RT, RW and kelurahan levels. 4. Financial information is not shared transparently. 5. Slow process of financial reporting and work program implementation.

Solution	Designing a PKK administration governance system using the RAD method to make accessing information faster, more efficient and effective.
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Identification of Users

The following table shows who the users are and their access rights:

Table 2. Identification of Users

Users	Access rights
Admin	<ol style="list-style-type: none"> 1. Manage user access rights 2. Input, edit, add, delete management data 3. Input, edit, add, delete financial data 4. Inputting, editing, adding, deleting news/gallery data 5. Inputting, editing, adding, deleting correspondence data 6. Input, edit, add, delete gallery data
Chairpers on of PKK	<ol style="list-style-type: none"> 1. Reading work program reports 2. Read financial reports 3. Reading correspondence reports 4. Reading the annual report
Pokja 1-4	<ol style="list-style-type: none"> 1. Inputting, editing, adding, deleting program_work data 2. Input, edit, add, delete data on pregnant women, mothers giving birth, postpartum women, mothers dying, babies born, babies dying, deaths of children under five. 3. Input, edit, add, delete posyandu data. 4. Input, edit, add, delete kegiatan_pokja data.
Visitor	<ol style="list-style-type: none"> 1. Read the board information. 2. Reading the news 3. Reading the gallery 4. Give feedback or suggestions

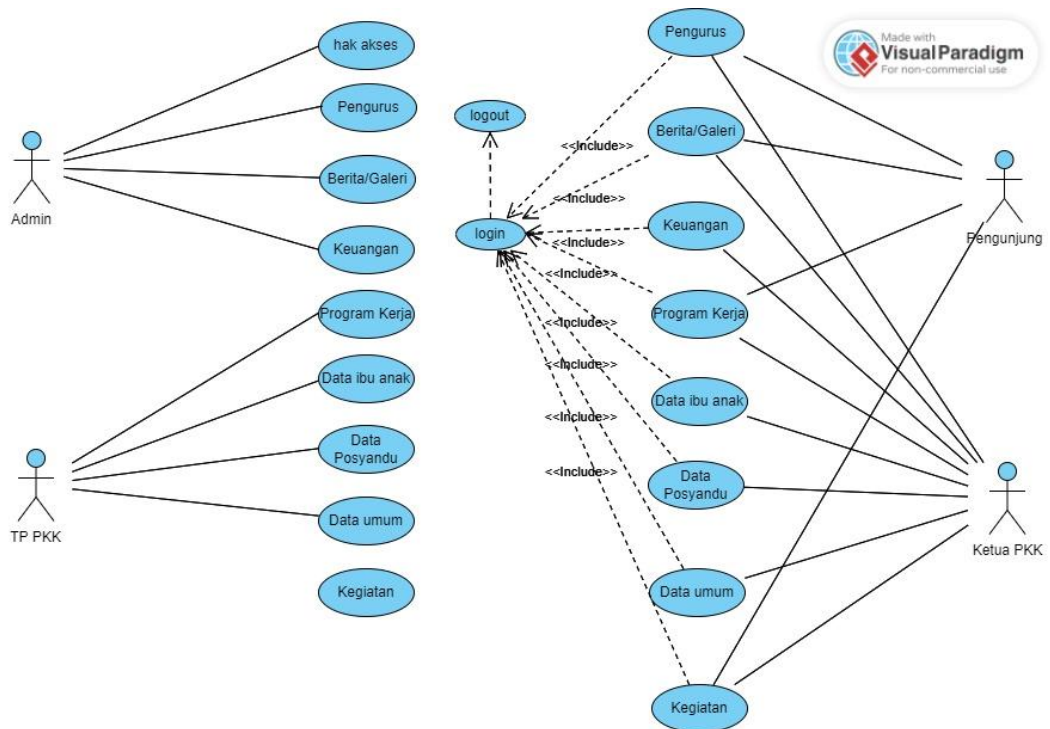


Figure 2. Proposed Use Case Diagram

In the Use Case Diagram above there are 4 actors, namely admin, TP PKK (Pokja 1-4), PKK Chairperson and visitors. Admin manages the access rights of each user, manages (input, add, edit, delete) management data, manages news and galleries, manages financial data. TP PKK manages work program data, manages child mother data, manages posyandu data, manages general data and manages activity data. The PKK Chairperson can login and view management data, news/galleries, financial reports, work programs, posyandu reports, mother child reports, general (annual) reports and activities. While visitors can only see management data, news/galleries, work programs and activities.

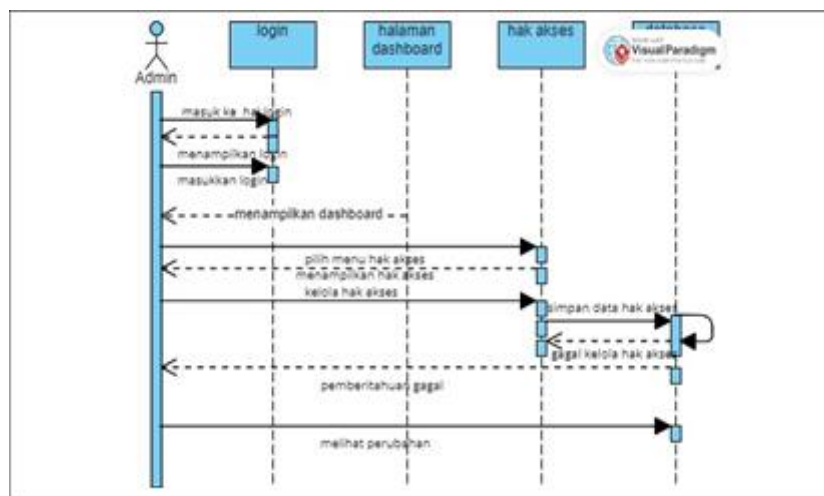


Figure 3. Sequence Diagram Admin Manage Access Rights

The picture above shows the admin process of managing user access rights. Admin login to the system, on the dashboard page select the access rights menu, set access rights for TP PKK, PKK Chairperson and Visitors, and save in the access rights database. If there are changes, login, from the dashboard select the access rights menu, edit access and save changes.

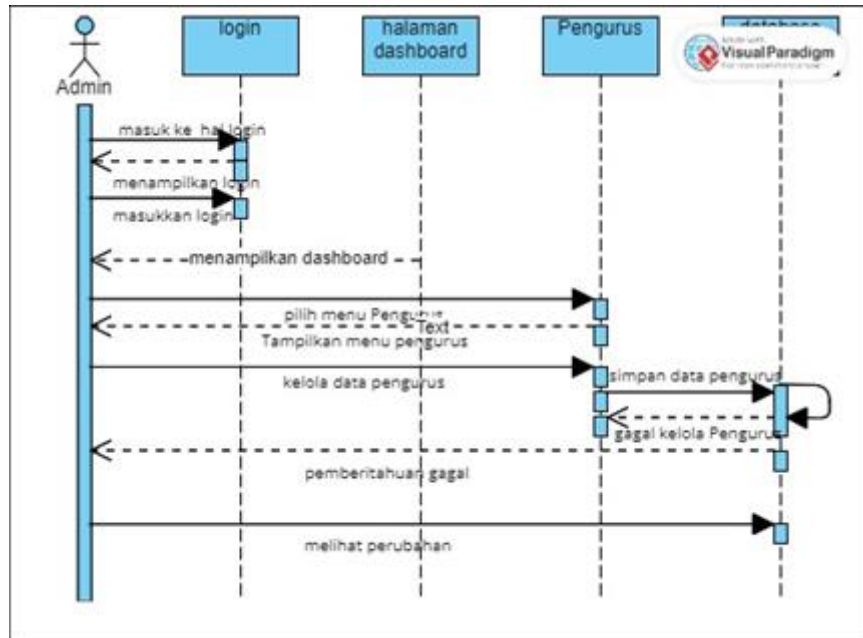


Figure 4. Sequence Diagram Admin Manage Board Data

The picture above shows how the admin manages the administrator data. Admin from the dashboard select the administrator menu, first enter the administrator data and save it. If there are changes, then select the administrator menu and edit the administrator data, save the changes. If there is an addition to the board, then the admin enters additional board data and saves the changes.

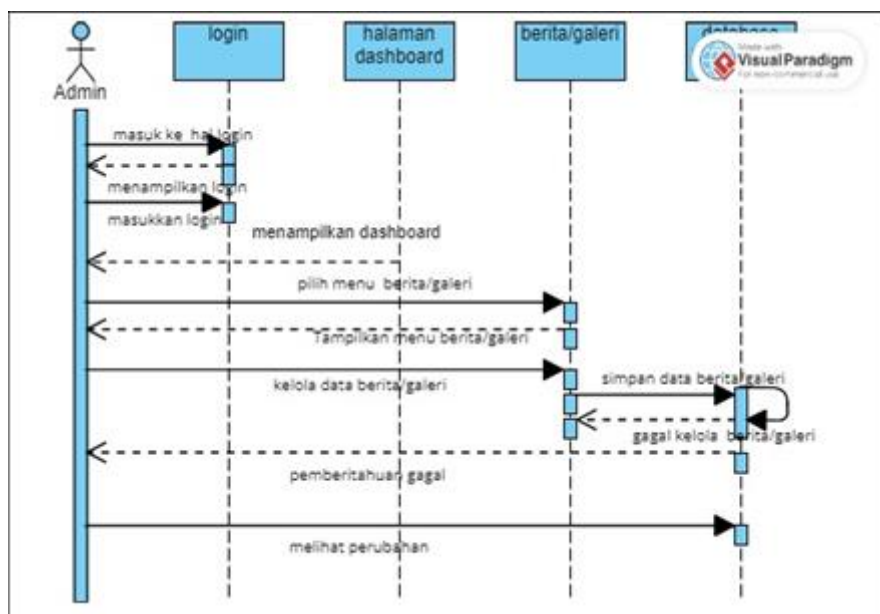


Figure 5. Gallery Admin Sequence Diagram

The image above shows how admins manage news or galleries. From the dashboard, select the news/gallery menu and input news in the form of text and images.

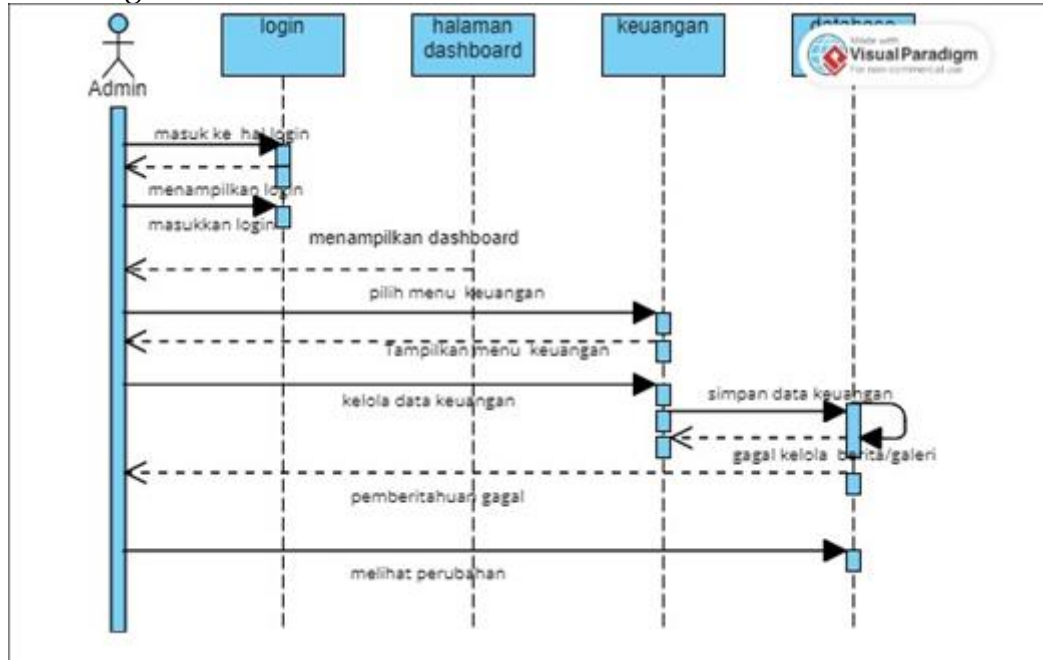


Figure 6. Admin Sequence Diagram Manage financial data

The figure above shows the process of how the admin manages financial data.

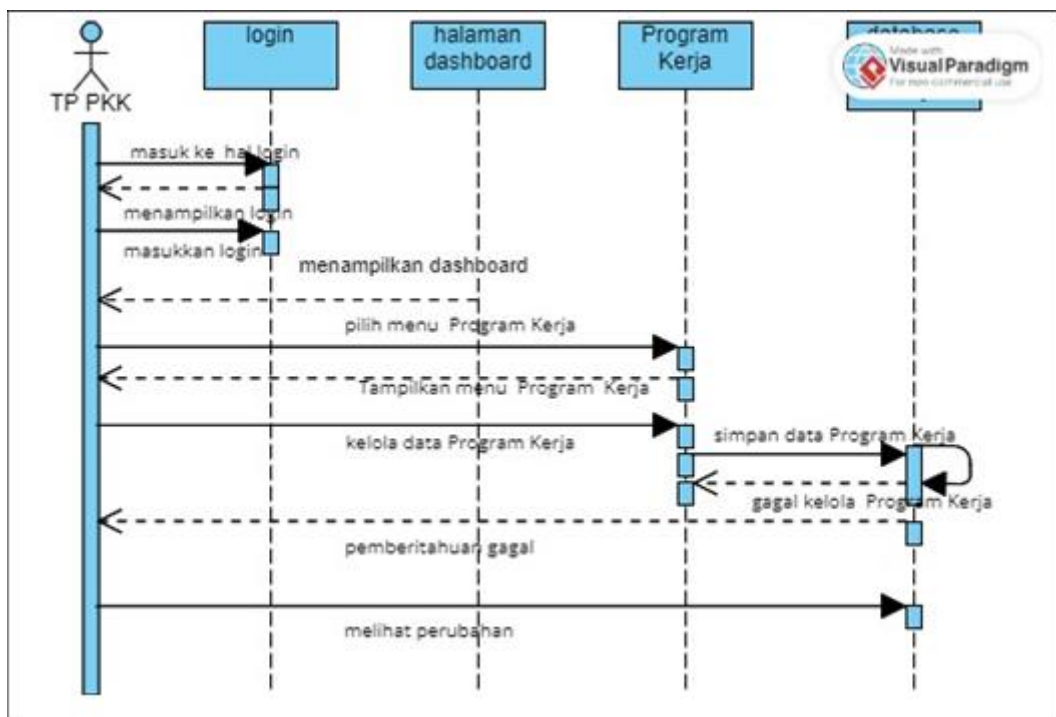


Figure 7. Sequence Diagram of TP PKK Manage Work Program

The figure above explains how TP PKK (which consists of Pokja 1-4), manages the PKK Work Program. TP PKK can input the Work Program of each Pokja between January - February.

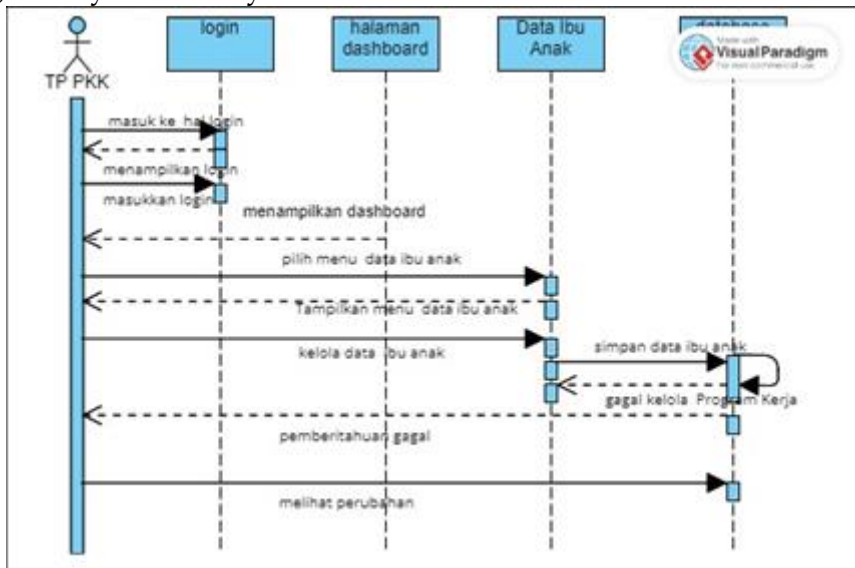


Figure 8. Sequence Diagram Of TP PKK Manage Child Mother Data

The figure above shows the process of TP PKK managing mother and child data. In January-February, TP PKK collected data on mothers & children in Mlatiharjo Village. This data includes data on pregnant women, data on mothers giving birth, data on postpartum mothers, data on maternal deaths, data on babies born, data on toddlers, data on deaths of babies born, and data on deaths of toddlers. In early December the TP PKK updated the data on mothers & children.

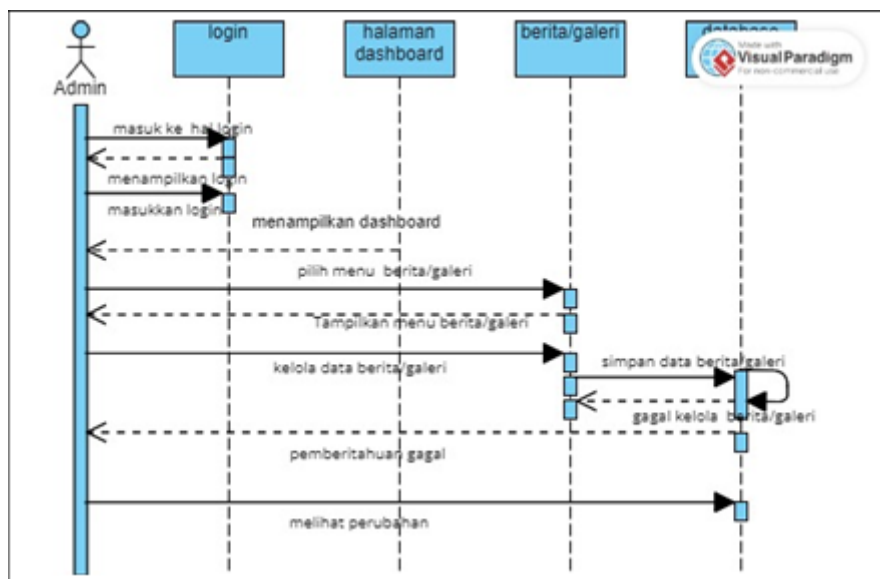


Figure 9. TP PKK Sequence Diagram Manage Posyandu data

The figure above shows the process of how TP PKK manages Posyandu data. Posyandu data includes: type of activity/service, frequency of service, number

of visitors, number of staff/paramedics and description. Posyandu reports are done every month.

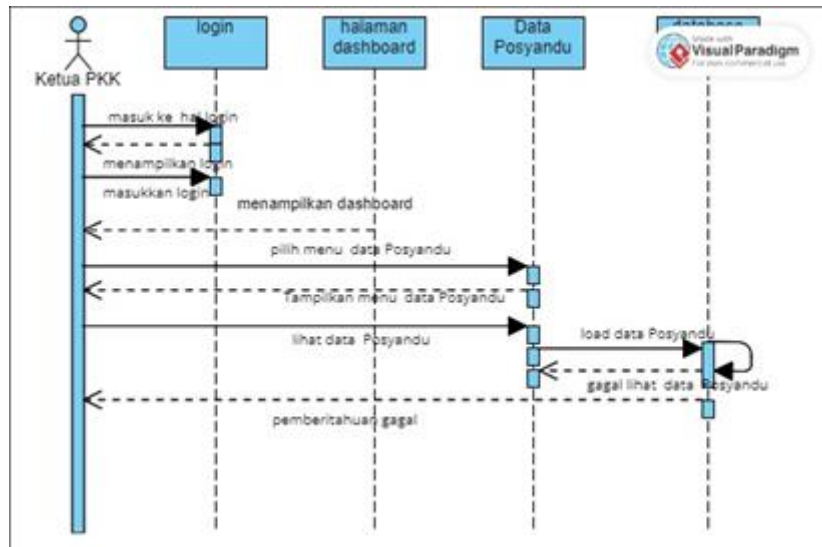


Figure 10. PKK Chairperson Sequence Diagram

CONCLUSIONS AND RECOMMENDATIONS

From the results of this study can be drawn conclusions: Governance of PKK administration in Mlatiharjo Village is still done manually, making it difficult for the PKK Movement Team (Pokja 1-4), PKK Chairperson and PKK Cadres to manage, report and access information. The PKK administrative governance system that has been designed by this researcher can be used as a blue print for the Mlatiharjo village PKK information system, which will be secretary, this makes it easier for the TP PKK, PKK Chairperson in carrying out their functions

FURTHER STUDY

Future research recommended the integration of information technology in the administrative governance of PKK. For example, implement a management information system to optimize administrative processes, reporting and monitoring of PKK activities.

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