

Design of a Village Newspaper Application (Kordes) in Realizing a Digital Village in the Village of Dusun Baru V koto, Mukomuko Regency, Based on Android

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Abstract

KorDes is a village newspaper application that contains the latest information that occurs in the village, information on village developments and information on village data as a form of realizing a digital village. This KorDes application was formed as a solution for the people of Dusun Baru V Koto Village, Mukomuko Regency who have difficulty in accessing valid and growing information in the village. In designing the KorDes application, it will be implemented based on Android. Android-based will make it easier for people to access via their smartphones which can be accessed at any time. The design of the application uses the technique of developing UML (unified modeling language) diagrams which makes it easier to document and define applications.

Keywords: Android, Village, Digital, Kordes, Smart.

Introduction

News and information at the village level are generally still very minimal. Access to information from outside and from the rural environment is generally only word of mouth or often the information received is invalid and the information obtained is no longer relevant as information about events that have occurred for a long time. Information about village developments, announcements in the village, information about the latest events in the village is usually only obtained by the village community through information from conversations or in the form of information from the bulletin board at the village office.



In realizing a digital village and a smart village, a container or media is needed that can package the information that develops in the village to be more interactive, actual and up-to-date. Realizing information in the village with the KorDes application or Village Newspaper will be very effective, where village communities can access the latest and latest information needed, can be accessed anywhere and anytime, and can access information presented interactively.

Literature review

Application

In terms of the understanding of the application is a program that is ready to use which is made to carry out a function for users of application services and the use of other applications that can be used by a target to be addressed. According to the executive computer dictionary, application has the meaning of problem solving that uses one of the application data processing techniques which usually races on a desired or expected computing or expected data processing (Andi, 2015).

Application is a computer program that can be used on various electronic devices, especially on computers/laptops or mobile phones based on Android (Rudi Haryadi, 2021).

With an application made from the development of a system, it will make it easier for users to do various things, especially in accessing information and the needs of each field in achieving the desired goals.

Android

Android is a Linux-based operating system designed for touch screen mobile devices that allows software to be freely modified and distributed by device makers, wireless operators and application developers (Hasan et al., 2017).



Android is one of the most widely used mobile-based operating systems or operating systems today. Mainly on smart phones (smartphones) or tablets. Since its introduction in 2007, Android has several variants or versions (Putra, 2019). Android is a new generation of mobile platform that provides development to carry out development as expected (Nurhidayati, 2021).

Smart Village

Smart Village is the development of village or sub-district communities in a community to carry out activities intelligently or intelligently in overcoming various problems with the ability of available resources efficiently and effectively in a village/kelurahan by utilizing information and communication technology as well as innovations aimed at improving performance. and involve community participation (Nurfarida, 2019).

And it can be said that the digital village is one of the new urban development and management strategies, villages today still rarely use online media to distribute information, when people need information in advance quickly and well (Putri et al., 2020).

The Smart village concept is an alternative solution that is used to solve classic problems that have existed in the village so far in order to realize village progress and independence. Classical problems that have occurred in the village are increasingly complex and protracted so that alternative solutions are needed, especially now that science and technology are increasingly advanced and even in the world there have been many upgrades to traditional ways and processes in thinking,



interacting, in solving problems. problems in the village (Huda et al., 2020).

UML (Unified modeling Language)

UML stands for Unified Modeling Language which is called a system development technique that uses a graphical language as a tool for documenting and performing specifications on the system (Sri Mulyani NS, 2017).

UML is a model that is common and most widely used in assisting the system design process so it is necessary to apply UML modeling correctly both in theory and in case study design, both the structure of the actors involved, the activities of each actor, the processes and mechanisms of the system (Voutama, 2022). When designing a system, the author uses the Unified Modeling Language (UML) It contains a use case diagram that describes how actors interact with the system.

According to Rosa A.S and M. Salahuddin (2015: 155) states that use cases describe an interaction between one or more actors and the information system to be created. Roughly speaking, use cases are used to find out what functions exist in an information system and who entitled to use those functions.



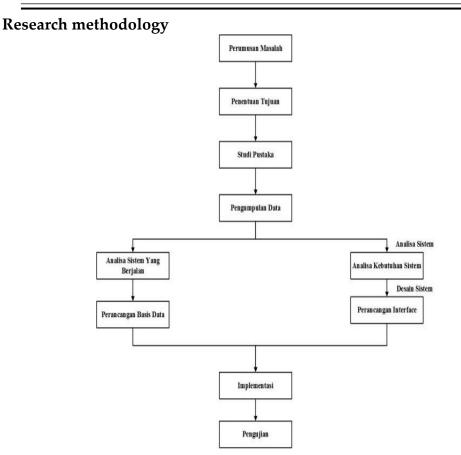


Figure 1. Research stages

Description of Research Stages:

1. Problem Formulation

At this stage a review is carried out on the system to be studied to understand and recognize the problems that exist in the current system.

2. Goal Setting

At this goal-setting stage, it is carried out to determine the research objectives of designing and implementing an android-based application system.

3. Literature Study

Literature study was conducted to find out what method would be used to solve the problems to be studied and to get a strong reference



for researchers to apply the method.

4. Data Collection

At this stage, data collection is carried out to determine the system under study and the system that is currently running. Data can be obtained by directly interviewing the HR department employee who manages the system.

5. Analysis of the Running System

This analysis aims to determine the current system in the Information and HR Bureau. This analysis is needed before analyzing the problems and systems needed.

6. System Requirements Analysis

At this stage, a system requirements analysis will be carried out, which aims to define what is needed to create a system that will be made.

7. Database Design

Database design carried out in the form of UML creation which has been refined after analyzing system requirements.

8. Interface Design

At this stage, the program interface is designed to make it easy to understand (user friendly). The design of this interface includes the design of the desired reports and the menus contained in the program.

9. Implementation

At this stage the implementation of the system that has been made by researchers to the user or users is carried out.

10. Testing

The results of the implementation of the program that has been created and tested to display the results of the program.



Results and Discussion

In the research process so that the formation of a Village Newspaper application (KorDes) in realizing a digital village in the Android-based Dusun Baru V Koto Village. The following will describe the form of system modeling with UML and the results of the implementation of the system that has been built.

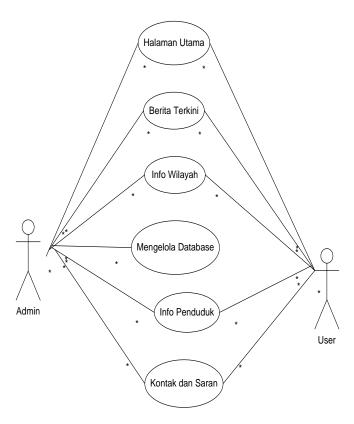


Figure 2. Use Case Diagram

In Figure 2. The above describes the flow of the application of the system that has been made so that it can be implemented. And the flow describes admin and user access rights in accessing the KorDes application so that it can be used by the community making it easier to get the latest information quickly and interactively.





Figure 3. The Main Page Interface of the KorDes application

In Figure 3. Above is the display of the main page or main menu of the Kordes application after being selected by the user. The main page will contain the latest news about what is happening and about developments in the village so as to provide straightforward and fast information to people inside and outside the village.



Figure 4. Village Area Info Menu Interface KorDes application

In Figure 4. Above is the view of the village area info menu from the Kordes application after being selected by the user. The village area info page will contain information about the village map and village



boundaries according to the coordinates and scale of the village area and the area within the village.



Figure 5. Villager Data Interface KorDes application

In Figure 5. Above is a menu display for population data in the village. This menu will describe information regarding the number of female residents, the number of female residents and the total population in the village.

Conclusion

Based on the results of research in the implementation of the KorDes application in realizing a digital village in Dussun Baru V Koto Village, Mukomuko Regency based on Android, it can be concluded that the existence of this application will greatly help the community access the latest information happening in the village as well as the latest information about village developments that can be accessed anywhere. and anytime and presented interactively using an Android-based smartphone device.

The suggestions that the author can propose in this study are that it is better to add notifications to the community's smartphone devices with



the KorDes application, so that the community does not miss out on the latest information updates regarding village developments and information within the village.

Refrence

 Andi, J. (2015). Pembangunan Aplikasi Child Tracker Berbasis Assisted –
 Global Positioning System (A-GPS) Dengan Platform Android. *Jurnal Ilmiah Komputer Dan Informatika (KOMPUTA)*, 1(1), 1–8.

Hasan, M. A., Nasution, N., & Setiawan, D. (2017). Game Bola Tangkis
Berbasis Android Menggunakan App Inventor. *Digital Zone: Jurnal Teknologi Informasi Dan Komunikasi*, 8(2).
https://doi.org/10.31849/digitalzone.v8i2.641

Huda, H. A., Suwaryo, U., & Sagita, N. I. (2020). Pengembangan Desa
Berbasis Smart Village (Studi Smart Governance pada Pelayanan
Prima Desa Talagasari Kabupaten Karawang). *Jurnal MODERAT*, 6(3), 539–556.

- Nurfarida, D. (2019). Penerapan Smart Village Pada Pengembangan
 Bumdes Di Desa Selokarto Kecamatan Pecalungan Kabupaten Batang.
 RISTEK : Jurnal Riset, Inovasi Dan Teknologi Kabupaten Batang, 4(1).
 https://doi.org/10.55686/ristek.v4i1.70
- Nurhidayati. (2021). Pemanfaatan Aplikasi Android Dalam Rancang Bangun Sistem Informasi Persebaran Indekos di Wilayah Pancor Kabupaten Lombok Timur. *Infotek : Jurnal Informatika Dan Teknologi,* 4(1), 51–62. https://doi.org/10.29408/jit.v4i1.2989
- Putra. (2019). Pengertian Android: Sejarah, Kelebihan & Versi Sistem Operasi Android OS. *Salamadian.Com*.
- Putri, N. R., Wikusna, W., & ... (2020). Desagi (desa Digital)-Aplikasi
 Berbasis Web Desa Digital Bandung Juara Pada Modul Informasi
 Publik. *EProceedings ..., 6*(2).



Rudi Haryadi, S. B. (2021). Pengembangan Media Pembelajaran Berbasis Aplikasi Moodle. *Jurnal Emasains: Jurnal Edukasi Matematika Dan Sains*, X.

Sri Mulyani NS. (2017). Analisis dan Perancangan Sistem Informasi Manajemen Keuangan Daerah: Notasi Pemodelan. In *Abdi Sistematika*.

Voutama, A. (2022). Sistem Antrian Cucian Mobil Berbasis Website

Menggunakan Konsep CRM dan Penerapan UML. *Komputika : Jurnal Sistem Komputer*, 11(1). https://doi.org/10.34010/komputika.v11i1.4677