

# SMART GOVERNMENT MONITORING POPULATION ADMINISTRATION IN GATTARENG TOA VILLAGE, MARIORIWAWO SUBDISTRICT, SOPPENG DISTRICT

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**Abstract**--This study aims to design and apply smart government monitoring of population administration applied by using Hypertext Preprocessor (PHP), MySql and C# with online server in Gattareng Toa Village, Marioriwawo Subdistrict, Soppeng District. This data is obtained through (1) Field Research, (2) Research Library, and (3) Interview. Data were analyzed by pieces analysis. The results of the study indicated that the Smart Government Monitoring Population Administration can help the system of population administration work in monitoring Population Administration in Gattareng Toa Village, Marioriwawo Subdistrict, Soppeng District.

**Keywords:** Administration Monitoring; Mobile android based; Smart Government; Website.

## I. INTRODUCTION

Technology development increasingly fast now demanding efficiency and effectiveness of work in improve service to the community. With a system then data processing will be more easy and efficient. Make things happen the government has issued Presidential Instruction no. 3 of 2003 in the framework of implementing e-government or Smart Government in the government environment. This innovation provides new values to the public (public), these values are created from the government through services, regulations, laws and others [1].

Population administration services are part of public services that must be organized by the state to meet the needs of the community in the administrative field. Population administration is an important need to be fulfilled because it involves determining the citizenship status of a resident as evidenced by the population documents they have [7]. Current condition, some services carried out by the government still use manual methods such as the process of making ID cards, birth certificates, family cards, and others. A citizen must face-to-face to the officer concerned at the government office. This is very ineffective and efficient because it costs more than the actual and perceived costs to be very troublesome because they have to go to the government office [2]. Likewise, some survey results from international survey institutions show that public services in Indonesia are still the worst in Asia in terms of public services. Likewise, various studies have been carried out by observers of public services, with all of them concluding that public services through direct contact with various administrative practices, namely a practice that deviates from administrative ethics [6].

Marioriwawo Subdistrict consists of 11 villages and 2 villages, while the object of the research is Gattareng toa Village, Gattareng Toa has a population of 2,540 people with a total of 702 households as of April 2017 each year not less than 50 reports of making good decrees birth, death, or transfer or mutation in these two villages. Archiving is the main thing if there is a report on the making of the decree, but there are still files that do not match what they should. The community must come to the village office by bringing the required documents such as family cards and KTP (identity card) of each citizen who entered the report as well as information from the doctor and midwife on the reporting of birth and information from village officials, health or police in case of death, this becomes complicated if people have to carry so many files.

The background of the problems described above, the researchers took the initiative to create a system that became a tool to facilitate data processing and assist in making reports that can be carried out effectively and efficiently in the process of making KTP in Gattareng Toa Village , Marioriwawo District, Soppeng Regency. Based on the explanation of the background of the problem, the formulation of the problem in this study is as follows How to make a smart government system in the process of monitoring population administration in Gattareng Toa Village and how is the implementation of the smart government system in the process of monitoring population administration in Gattareng Toa Village?

Limitation of problems contained in the population management information system in making birth certificates, deaths and transfers or mutations. The analysis focused on the process of making the Certificate and the design of the smart government system that was made leading to the process of reporting / making birth certificates, deaths and transfers or mutations. In terms of users, those who will use this application are the community as the reporter and the village apparatus and the subdistrict administrative apparatus. The object of the research is only in the scope of the Marioriwawo sub-district, namely the Gattareng Toa Village. The purpose of this research is as follows : Creating a smart government system based on mobile android in making birth, death and moving SK or mutase decrees. Implement smart government systems in monitoring population administration in Gattareng Toa. The benefits of this research are People will be easier to report the occurrence of births, deaths and moves or mutations only through mobile android to facilitate village officials and sub-

district officials in handling the administration of incoming reports.

The concept of smart city was originally implemented in the United States and the European Union. At first smart city aimed to create regional independence and improve public services. According to Pratama, Smart city or literally means smart city is a concept of developing, implementing, and implementing technology that is applied to a region (Especially Urban) as a complex interaction between various systems in it[3].

According to [3], Smart City has several parts in it including: Smart Economy, Smart People, Smart Government, Smart Mobility, Smart Environment, and Smart Living. As for the reference in this study is the Smart Government section which is a part or dimension that specializes in governance. Smart Government includes all the requirements, criteria and objectives for the process of empowerment and participation of the community and government together. The existence of cooperation between the government and the community is expected to realize governance and the way of a clean, honest, fair and democratic government and better quality and quantity of public services.

According to Arief [9] "MySQL is one type of database server that is very well known and widely used to build web applications that use databases as source and data processing".

MySQL was developed by a Swedish company called MySQL AB which is currently called Text Data Konsult AB around 1994 - 1995, but the forerunner of the code has been around since 1979. Initially Tex was a software developer and database consultant company, and MySQL has now been taken over by Oracle Corp. MySQL's popularity, among others, because MySQL uses SQL as the basic language to access the database so that it is easy to use, query performance is fast, and sufficient for the needs of database companies that are small to medium scale, MySQL is also open source.

UML (Unified Modeling Language) is diagrams that have certain rules that must be followed, elements in the models that we make relate to each other and follow existing standards [4]. Modeling is actually used to simplify complex problems in a way that is easier to learn and understand. Flowchart

Flowchart is a set of symbols that serves to describe the logical sequence of a problem solving procedure. [5]. Flowchart can be interpreted as a description of a project's flow of work that occurs in an activity, a flowchart can describe the work activities that occur in systems, documents, programs and processes. Flowchart mapping system to the overall flow of work activities from a system that describes the sequence of procedures in the system. Flowchart is a part (chart) in a program or system procedure logically.

## II. METHOD

The method carried out in the Smart Government Study begins with a literature study to find out indicators about Smart Government. After determining the indicators and benchmarks for Smart Government, survey data is needed, processing survey data and analyzing and assessing the current conditions.

Data collection used by the authors in this study are several,

namely:

### 1. Observation

Observation is a data collection technique by way of researchers observing directly in the field, namely researchers directly visiting Gattareng Toa Village.

### 2. Interview

Retrieval of data through interviews / verbally directly with the data source in this case the Gattareng Toa Village apparatus, either through face to face or by telephone

### 3. Documents

Data collection through written and electronic documents from Gattareng Toa Village. Documents are needed to support other data completeness.

The system design method is carried out as follows:

### 1. Use Case Diagram

In this use case we can see several actors, namely the Village Apparatus and the community as reporters, both actors must log in first to access certain functions as shown in Figure 1.

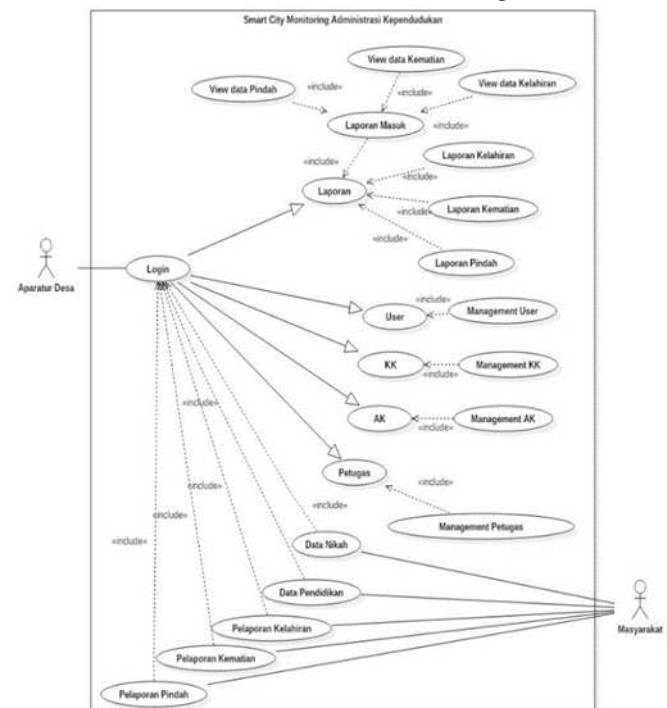


Fig. 1. Use case diagram

### 2. Sequence Diagram

There are 3 (three) sequence diagrams of the Smart Government Administration Monitoring Unit in the village of Gattareng toa namely. The administrative phase of village population data starts from logging in, then the village apparatus will be redirected to the main page to input the KK data and AK data on the form that has been provided, then from that data will enter a report which will be checked and stored in the form of a certificate. as shown in Figure 2

The next sequence diagram is reporting on birth and death, the stage starts from the community in this case the reporter logs in using NIK and full name. as shown in Figure 3.

Moving report is the last sequence diagram, the stage starts

from login using NIK and full name, after that the reporter makes a report of moving domicile by filling out the report form and mentioning the name of another family member if there are several family members who moved. After the report goes to the village apparatus, the village apparatus checks the report and finally prints the decree (certificate) and gives the decree to the reporter. as shown in Figure 4.

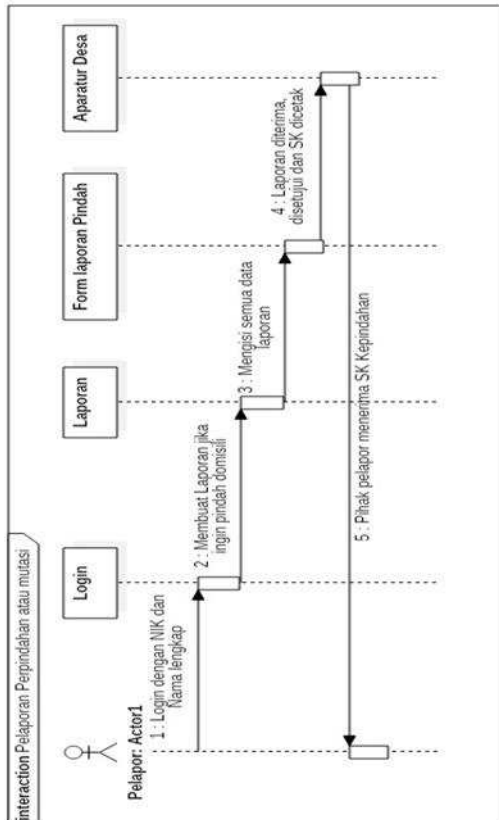


Fig. 2. Sequence diagram

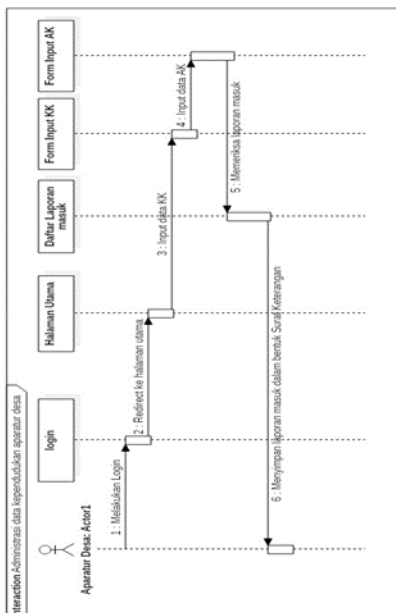


Fig. 3. Sequence diagram report

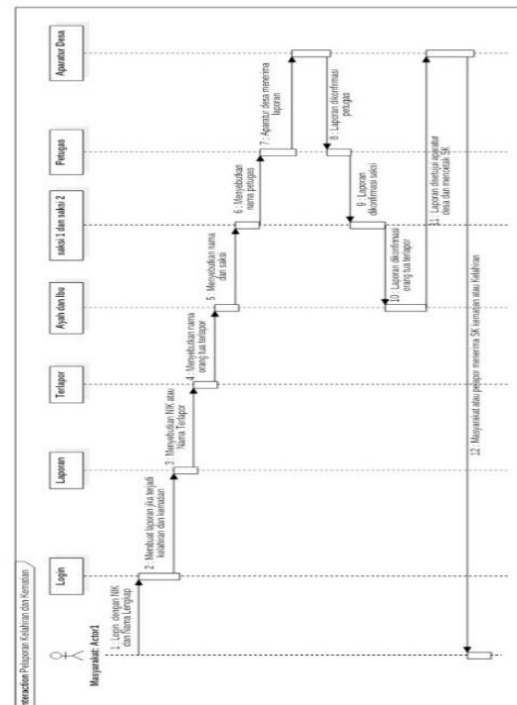


Fig. 4. Moving report

### III. RESULT AND DISCUSSION

Here are the steps for building and installing the Smart Gov application. Build is done on Visual Studio Xamarin 15, then installed on the Mi red 3 android device version 4.4 "KitKt. As shown in Figure 5.

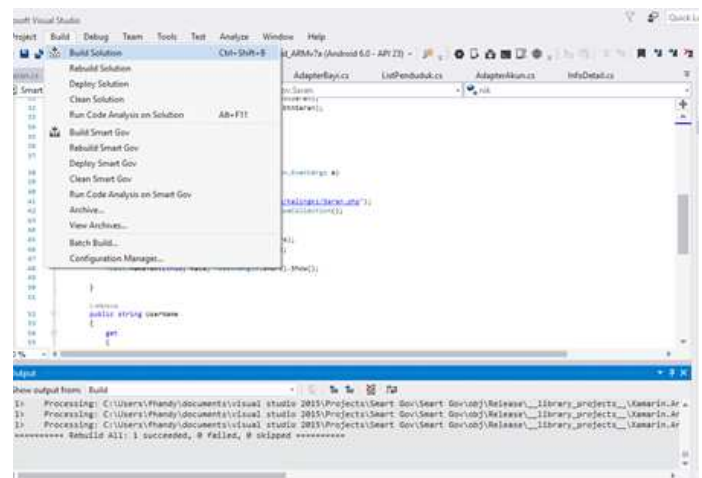


Fig. 5. Building and Installation

Make sure the required components are available like the SDK Manager, then build the project, The next stage after the build project do the project archiving by right-clicking the project then archive, while the archive menu can be seen in the picture as shown in Figure 6.

The results of the archive are then distributed into the APK form and saved into the project folder, while the distribute view can be seen in the picture as shown in Figure 7.

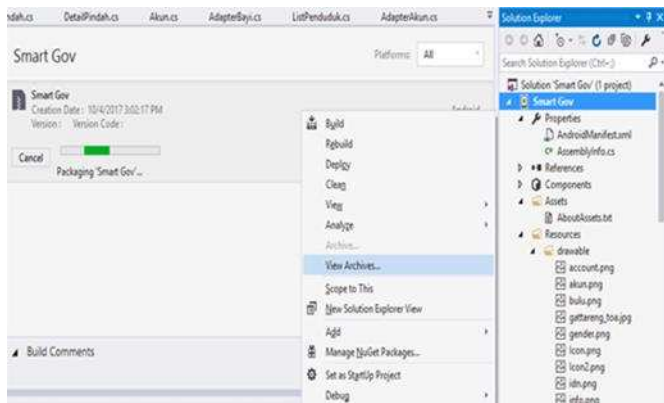


Fig. 6. Build project

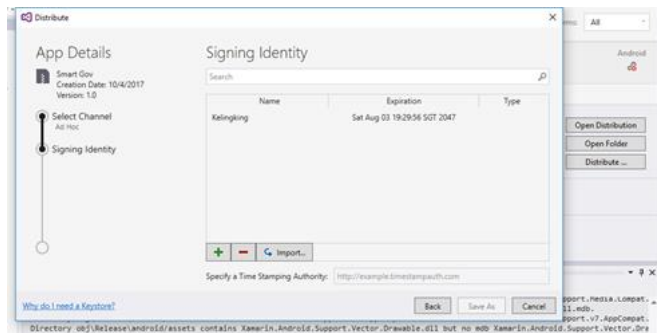


Fig. 7. APK form

Here are the steps for installing the Smart Gov application, the APK file is first transferred to the device storage then the installation process can be done on the Mi Red 3 device. The first step press or click the Smart Gov icon. that is on the storage media as shown as shown in Figure 8. The next step will appear the Permission dialog for installing the Smart Gov application, as shown as shown in Figure 9. The installation process will take a while as shown in Figure 10

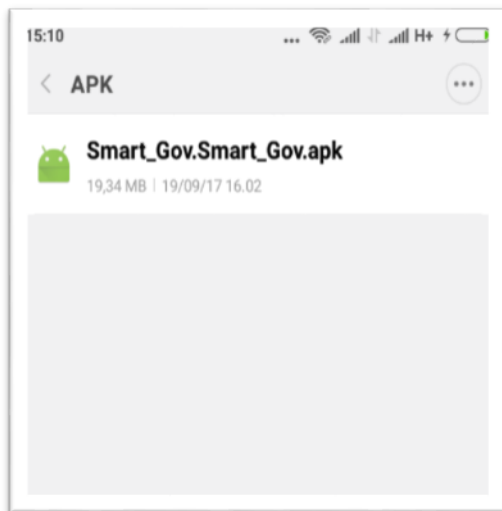


Fig. 8. Install Smart Gov

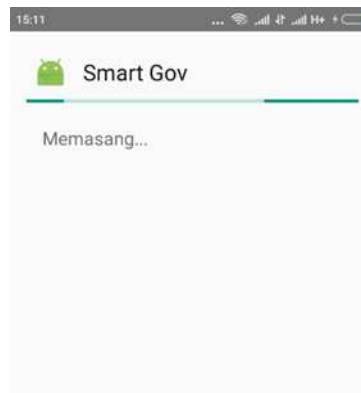


Fig. 9. Proccess installation



Fig. 10. Permission dialogue

After the installation process is successful a notification will appear that the application has been successfully installed into the device and the Smart Gov Application icon will be seen on the menu page, for more details can be seen in the picture as shown in Figure 11.

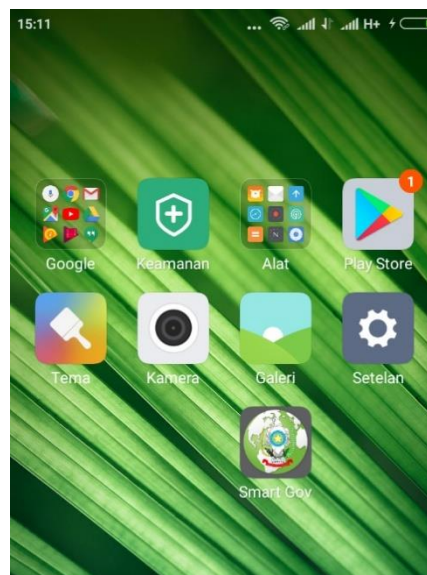


Fig. 11. Menu page

The program manual consists of two parts namely website and android, the website program manual consists of the login page as below. As shown in Figure 12.

Fig. 12. Login page

After logging in, the user will get the main page menu that contains menus to access various activities on the website.



Fig. 13. Main page

As for Android also consists of the login menu and menu page, the login menu can be seen in the picture as shown in Figure 14.

Fig. 14. Android login

To login, the user must enter an NIK, full name and date of birth, after logging in, the user will get a menu page to do certain activities as shown in Figure 15.



Fig. 15. Menu Page

#### IV. CONCLUSION

Based on the results of the research and discussion that has been described, we can conclude that this application will make it easier for people to report the occurrence of births, deaths and moves or mutations only through the Android mobile and facilitate village officials and district officials in handling the administration of incoming reports. Whereas for future development it is expected that this system can be developed by adding additional application modules related to the administration of the village apparatus and sub-district apparatus.

#### V. ACKNOWLEDGMENT

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#### VI. REFERENCES

- [1] Anthopoulos dan Reddick. 2016. Smart City and Smart Government:
- [2] Safitri Jaya. 2014. Implementasi dan perkembangan E-Government di Indonesia, [http://jim.stimendp.ac.id/wp\\_content/uploads/2014/03/Implementasi-Dan-Perkembangan-E-Government.pdf](http://jim.stimendp.ac.id/wp_content/uploads/2014/03/Implementasi-Dan-Perkembangan-E-Government.pdf), diakses April 2
- [3] Hutahaean Jepsen. 2014. Konsep system informasi, deepublish, Yogyakarta. I Putu Agus Eka Pratama. 2014, Smart City beserta Cloud Computing, Informatika, Bandung.
- [4] Muslihudin dan Oktafianto. 2016. Analisis dan Perancangan Sistem Informasi Menggunakan Model Terstruktur dan UML, Andi offset, Yogyakarta.
- [5] Sitorus Lamhot. 2015. Algoritma dan Pemrograman, Andi offset, Yogyakarta
- [6] Holle S. Erick. 2011. Pelayanan public melalui electronic government: upaya meminimalisir praktek maladministrasi dalam meningkatkan public service, Jurnal Sasi Vol.17 No.3, [http://ejournal.unpatti.ac.id/ppr\\_iteminfo\\_inl.php](http://ejournal.unpatti.ac.id/ppr_iteminfo_inl.php), diakses April 2017
- [7] Junaidi. 2015. Implementasi electronic government untuk penyelenggaraan pelayanan administrasi kependudukan. Vol., No. 1, 2015, <https://jurnal.unitri.ac.id/index.php/reformasi/article/viewFile/74/72>, diakses Juli 2017
- [8] Sudarma S. 2010. Panduan Belajar MySQL Database Server, media kita, Jakarta.
- [9] Arief, 2011. "Pemrograman Web Dinamis Menggunakan PHP dan MySql", Andi, Yogyakarta