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Development of Sistem Informasi Pendataan Warga (Sitawar) for the Realization of Integrated Population Data at RT Level With RW

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ABSTRACT

Citizen data collection by the majority RT still using manual way, the way it can be said not effective in terms of time of workmanship or quality of information produced.With the existence of SITAWAR can help update citizen data more effectively residing in area especially RT level.However, from the results of previous research, there are SITAWAR problems that have been built, can only be accessed by one RT only (stand alone) in one Rukun Warga area, SITAWAR has not been connected to RW level, so if the chairman of the RW is required to report demographic data that exist in the neighborhood to the village level, still done by call each existing RT in the environment or waiting for reports from each RTchairman.Looking at the issues already described, the existing SITAWAR built is developed using the concept of web application, where all RTs in one RW area are connected to the database. This research was conducted using Development Research. While the method of system development using prototype with system design tool using Object Oriented Approach and built using PHP language (Hypertext Preprocessor). With the development of SITAWAR can produce more qualified population information.

Keywords — *computerization, SITAWAR, population, citizen.*

I. INTRODUCTION

In the previous research, it was revealed that in processing the data kependududkan an administrative area through the data collection of residents on the smallest unit of Rukun Tetangga (RT), data collection of residents by the RTchairmanstill using manual way, and the way it can be said not effective both in terms of time of workmanship and the quality of information produced there are still errors[1].Information quality is influenced by how the data is processed. Improperly processed data, can produce false information, and of course it is difficult to expect correct decisions if built on false information [2].To optimize the existing citizen data information, it is better to use computerized, so it can be used for the acquisition of information about citizens data quickly and accurately.

The problems presented can be solved by the construction of Citizens Registration Information System (SITAWAR), where SITAWAR is a product of information system covering Citizen's data (permanent residents, non-permanent residents), guests (mandatory report 1x24 hours), birth, and death.Based on previous research, with the build of SITAWAR can provide more effective and accurate information about the data of citizens residing in a region especially in Rukun Tetangga and facilitate the chairman of RT in the data collection of its citizens.

However, from the results of previous studies that have been done, there are problems as follows [1] :

1. SITAWAR which has been built, can only be accessed by one RT only (stand alone) in one area of Rukun Warga. That is, between RTs can happen recording one data the same citizens, can be said one citizen recorded in several different RT.
2. SITAWAR is not yet connected to RW level, so if the RW chairman is asked to report the population data in his neighborhood to the village level, it is still done by handling each RT header in his neighborhoodor waiting for a report from each RT chairman.

From the problems that have been presented and see the response from user SITAWAR in previous research, then SITAWAR which has been built developed by using concept of web application, where all RT in one region of RW connected to the database. So with the development of SITAWAR as already described can produce more quality population information. The object of this continued research, conducted in RW 08 consisting of RT 01 to RT 05 in Kelurahan Ciumbeleuit, Kecamatan Cidadap, Bandung City. Selection of this research object based on consideration, in the region to be a pilot for the implementation of the village entrance internet program launched by the central government.

In this study there are some limitations of the problem so as not to deviate from the purpose that has been determined so that the study studied will be more focused. The limits of the problem are:

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1. The scope of the use of SITAWAR information system is at the level of Rukun Tetangga (RT) connected to RW.
2. The user entitled to use SITAWAR is the coordinator of the citizen or someone who becomes the leader in a collection of citizens (The chairman of RT and RW).

II. RESEARCH METHODS

Research method used is Development Research. Development Research is a research method to develop a product based on the needs of a previous research conducted[3,4]. The resulting product can be either objects or hardware and can also be software[5].

While the system approach method used is prototype. The Prototype model begins with the collection of system requirements. Developers and system users meet to fully define the desired software objectives, identify what needs are known, and outline where further definitions are mandator. A "quick design" is then done [1,6]. This method prioritizes communication between developers and customers.By using this method, developers can easily create a system or application according to the needs of the customers [1,6,7].

III. RESULTS AND DISCUSSION

III.1 Design of SITAWAR

In general SITAWAR which will be made presented in Figure 1:

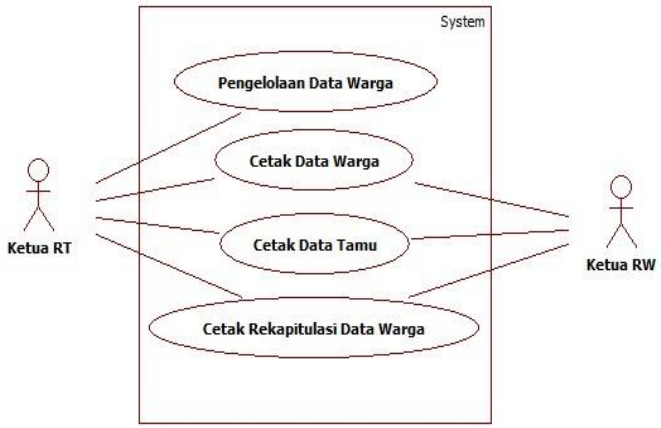

FIGURE 1. GENERAL DEVELOPMENT PLAN OF SITAWAR

Tabel 1. Proses SITAWAR

No	Use Case	Information
1	Management of Citizen Data	Adding, changing and reducing citizen data. This activity can only be done by the Head of RT for data of citizens in their respective territories.
2	Print Citizen Data	Printing data of citizens, both residents and seasonal residents. For the RT Chairman can only print data for the residents in his area, while the RW Chairman can print the data of each RW he leads as well as the whole citizen data.
3	Print Guest Data	The RT Chairman can print the guest data on for the visiting guests in his area while the RW chairman can print all the guest data in the RW environment or can be separated by RT.
4	Print Rekapitulation Citizen Data	Chairman of RW can print the recapitulation of citizen data. Recapitulation of the data of this citizen includes the clustering of data of citizens by age, sex, as well as permanent residents and seasonal citizens. From this report we can see birth and death data for each RT.The chairman of the RT can only print the recapitulation of citizen data in their respective territories.

III.2 Implementation

III.2.1Homepage of SITAWAR

Due to this information system is a development of previous versions, then the addition of access rights feature in this application because it will be accessed by someChairmanof RT and Chairman of RW so when first

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accessing the SITAWAR page, the system will display the main page containing the "home" menu and the "login" menu as shown below:

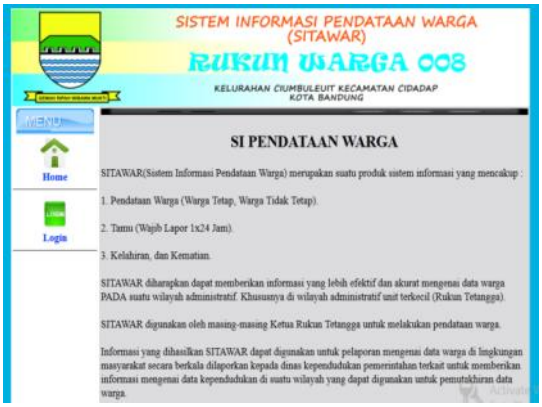

FIGURE 2. HOMEPAGE OF SITAWAR

III.2.2 LoginMenu Page

After pressing the login menu, then the system will redirect to the login page to enter the data user name and password.

FIGURE 3. LOGIN MENU PAGE OF SITAWAR

III.2.3 Homepage for Chairman of RT After Login

Here is the main page view after the RT Chair successfully login. On this page is presented home menu, recording, citizen data, guest data, reports, search, and exit menu.

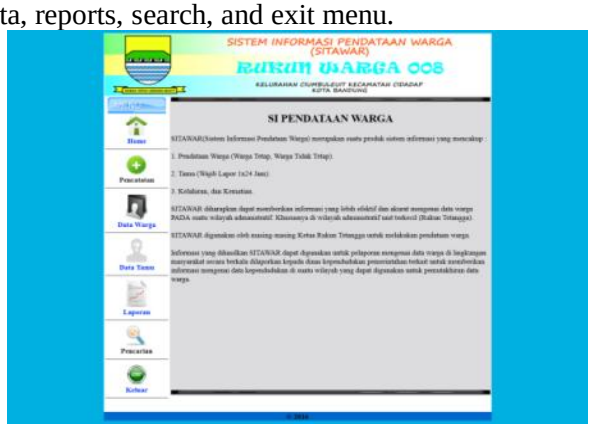

FIGURE 4. HOMEPAGE OF THE CHAIRMAN OF RT

III.2.4 Homepage for Chairman of RW After Login

Here is the main page view after the RW Chair successfully login. On this page is presented data menu of permanent residents, data of seasonal residents, guest data, citizen recapitulation, and exit menu.The menu is generated based on research that has been done for RW in checking the data of citizens throughout the region.

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FIGURE 5. HOMEPAGE OF THE CHAIRMAN OF RT

III.2.5 Data Pages of Permanent Residents

On this page the system will provide options before presenting the data. The choice of data to be displayed can be based on RT as well as all data.

FIGURE 6. DATA PAGES OF PERMANENT RESIDENTS WITH SELECTING DATA

After making the selection of data view based on needs, it will display data according to the choice that has been selected.

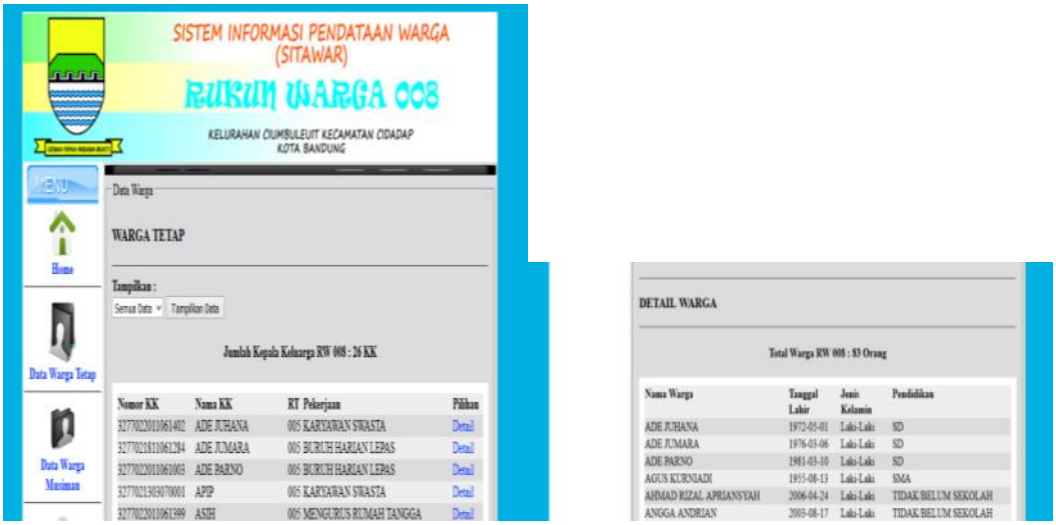

FIGURE 7 PERMANENT RESIDENT DATA GENERATED BY CHOICE

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On this page provided links to download data of permanent residents. Downloadable data can be based on the number of Family heads only, as well as the overall population data.

III.2.6 Page of seasional Citizens Data

As in the data pages of permanent residents, on this page even the system will provide choice of data that will be displayed either the data by RT or the overall data. In addition, for permanent data inipun RW Chairman can print Data Residents Permanent either based on the head of the family or the whole citizen.

FIGURE 8 SEASIONAL CITIZENS DATA GENERATED BY CHOICE

III.2.7 Guest Data Page

On this page, data will be presented in the form of guest data. Data to be hacked by the system can be displayed based on the RT as well as the overall data. The data presented is the guest data that is still visiting and the data of the guest who has returned with the information in the form of interest of the visiting guests.

FIGURE 9. DATA OF REMAINING GUESTS

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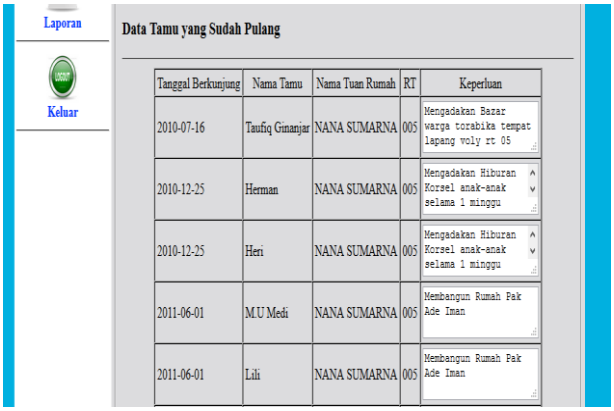

FIGURE 10. DATA OF GUEST WHO HAS GONE

III.2.8 Report Page

This page contains the data recapitulation of residents in the area of RW 008. The data presented are data of citizens by age and gender, guest data, birth data, and death data.

FIGURE 11.REKAPITULATION OF CITIZEN DATA

IV. CONCLUSION

Based on the results of the analysis that has been done in the development of Sistem Informasi Pendataan Warga (SITAWAR) to the conclusion that is with the construction of SITAWAR data collection of residents by the coordinator of citizens (Chairman of RT) run more effectivelywith minimal error and ambiguity. In addition, the coordinator of citizens can easily obtain information on the residents in the environment more quickly and optimally.

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