

# Decision Making About Voter Eligibility and Social Assistance Recipients in Bandung

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**Abstract** – This research aims to create alternative media in the form of application design in managing population data and present information related to population data such as citizens who have the right to vote in the regional head election process and the head of state can then present information related to citizens entitled to receive social assistance from the government local. Designing alternative media, the method used is prototyping as an alternative media development model, which is related to population data, as for the steps, among others: Listening to customers, Designing, Evaluating prototypes. The findings of this research can provide convenience for management both at the RT / RW level in managing population data and can easily present information related to population rights both related to election data and those entitled to receive social assistance from local authorities. Business processes carried out in the RW / RT Riung area of Bandung Estate. Further observations at Riung Bandung Estate are needed in the future to provide information related to the data center (database) of a citizen. in short, it is very important for Riung Bandung especially at the RT / RW level, especially as a medium that can provide convenience in managing citizen data centers and presenting information entitled to participate in elections and receiving social assistance, as well as providing the information needed by citizens online. This research is expected to provide a different pattern as an alternative medium in the form of online information presentation, which can make it easy for residents to find out information related to the data center of a citizen.

**Keywords** - Application Design, Data Center, Database.

## I. INTRODUCTION

Riung Bandung is a Real Estate that was established in 1997 and is located in Cisaranten Kidul Village, Gede Bage District, Bandung-West Java. This real estate has approximately ± 6,000 residents were divided into 11 Rukun Warga (RW). Where each RW has a varying number of Neighborhood (RT), especially RT.03 (partner place) is offered by 265 residents, consisting of 64 households. As a social stratum (work) in the RT.03 environment, it is very diverse, such as a group of permanent employees (private/public); entrepreneur (independent); and others. As seen in Table 1. below.

Table 1 Quantity Distribution of Citizens For Public Categories

Number	General category	RT. 03/11
1	The number of citizens	265

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2	Head of family	64
3	Type of work	28

Related to the variety of social strata and the quantity of distribution of citizens in the RT.03 community, the unavoidable thing is mainly related to information or information disregard relating to the number of residents living in each house, the number of permanent residents and contracts, the ability or competence of citizens, etc., matters this is due to behavioral problems related to the background of each citizen, both in terms of education; profession; or other. For example, there are differences in the working time of each citizen; not the same kind of work/business done by every citizen, etc. Conditions like this that will create ignorance of information. From the other side, sometimes the effort made or the ability (skills) of each citizen is not visible to other residents, even though one day it does not rule out the existence of mutual assistance/need among the residents, for example in the case of blood type, if one of the residents needs blood with certain groups, these residents have difficulty in obtaining information related to it. This is due to various social strata.

Besides, the management of the RT / RW level is very difficult to validate and verify citizen data, especially in the lead-up to regional head elections and state head elections and also when distributing social assistance from the government which is sometimes not on target, this is due to data management still not neatly organized and the data storage media still do not utilize information technology

Thus, as a solution to the problems above, it is necessary to utilize information technology in the form of population data center application design in managing population data in Riung Bandung, which is expected to be able to present information as needed.

## II. LITERATURE REVIEW

### 1. The Literature Application

Application is a program command that is found on a computer. Which if executed by the user will provide some functions while displaying the information desired by the user [3].

### 2. Database

a set of interrelated data and become part of a distributed DBMS Database is a data set of interconnected logic that is physically distributed in a computer network that is independent of the application program now and in the future. The file is a collection of data that is designed for an application or set of applications that closely [4].

### 3. Prototype

Prototype development stages according to the model of Roger S. Pressman (2002: 4), is

#### a. Listen to customers

At this stage, the system needs are collected by hearing complaints from customers. For make a system that suits your needs, you have to know in advance how the system is walked to later find out the problem that occurred.

#### b. Designing and making Prototype

At this stage, design and manufacture are carried out prototype system. The prototype is made according to system requirements that have been previously defined by customer or user complaints.

#### c. Testing

At this stage, the prototype of the system is tested by the customer or user. Then an evaluation is carried out deficiencies of customer needs. Development then returns to listening to complaints from customers to improve the existing Prototype.

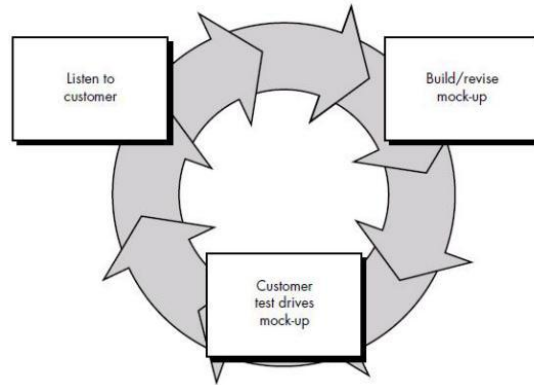


Fig. 1. Prototype Model

### III. METHOD

#### 1. Listening to Customers (System Analysis)

Problems found at Riung Bandung Estate, at the RT / RW level there is currently no media in the form of applications that can manage, and present information related to population data. This causes difficulties in terms of processing and presenting the information.

#### 2. Design

##### a. Use Case Diagram

Use case diagram is a functional requirement that is described for a user of a system. Use Case answers the question of how actors interact with the system and describe the actions that will be carried out by the system.

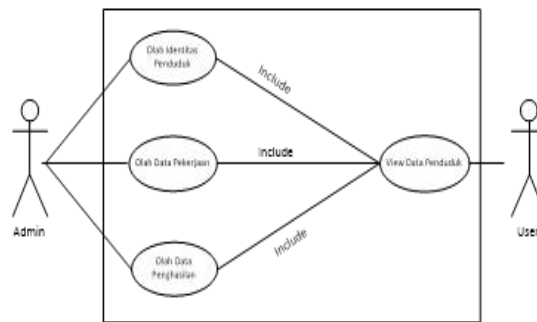


Fig. 2. Use Case Diagram

##### b. Class Diagram

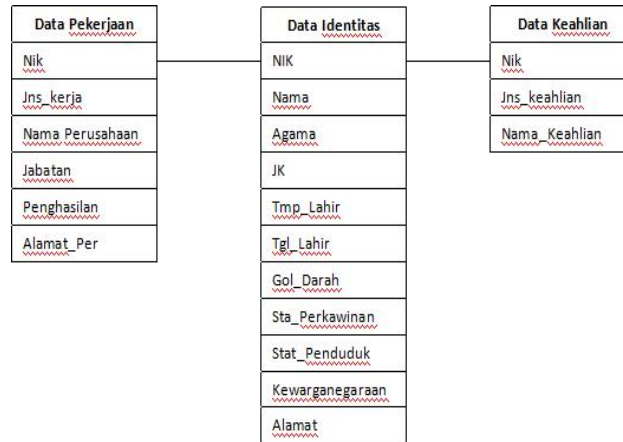


Fig. 3. Class Diagram

### 3. Prototype Testing Final Stage.

The system that has been built, is not directly implemented but the testing process is done first. Testing was conducted to find the error (errors) as much as possible to minimize the failure of a system or application at the time of implementation. This test uses a top-down testing strategy and black box testing using testing or also known as behavioral testing.

### 4. User Interface



Fig. 4. Main Menu Interface



Fig. 5. Main Menu Interface

The Main Menu interface provides a general overview of the contents of the population data center application, especially in RW 11 Riung Bandung estate.

Pusat Data Kependudukan RW 11

HOME OUR STORY Cari DATA EVENTS GALLERY LOGIN

Cari Data

Berdasarkan:  Umur:

Mencari:

Penghasilan:

Fig. 6. Searching Interface

Pusat Data Kependudukan RW 11

HOME OUR STORY Cari DATA EVENTS GALLERY LOGIN

Cari Data

nama	Tempat Lahir	Tanggal Lahir	jenis Kelamin	Alamat	agama	status_perkawinan	kewarganegaraan
Heri Supriyadi	Bandung	1990-11-11	Laki-laki	Jl.Rung Mulya VI No.26	Islam	Menikah	WNI

Fig. 7. Searching Interface

Pusat Data Kependudukan RW 11

HOME OUR STORY Cari DATA EVENTS GALLERY LOGIN

Cari Data

nama	penghasilan	Alamat
Heri Supriyadi	Rp. 1000000000	Jl.Rung Mulya VI No.26

Fig. 8. Searching Interface

Citizens' data search menu interface serves as a page that can be used by citizens to seek information related to the identity of the population, age and income information of citizens.

Selamat Datang!

Masukkan NIK...

1234  
123

Fig. 9. Admin Login Interface

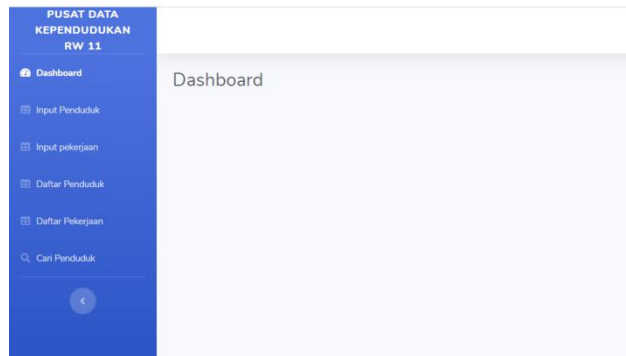


Fig. 10. Admin Interface

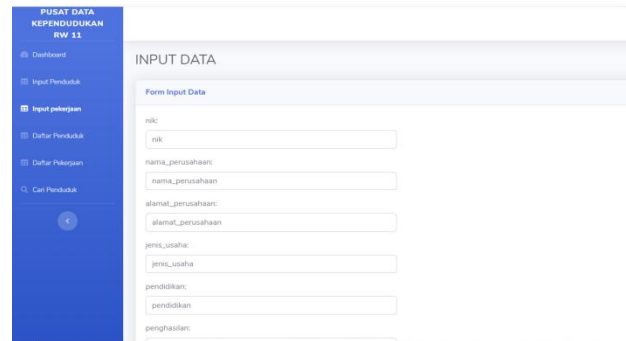


Fig. 11. Admin Interface

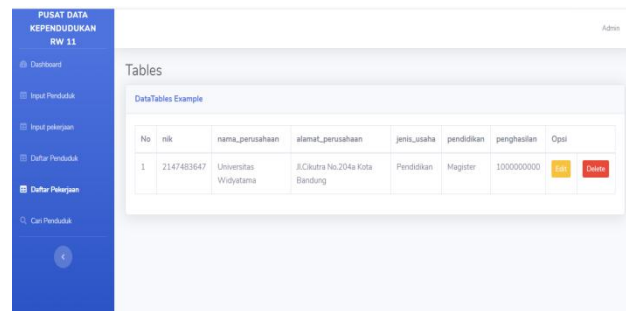


Fig. 12. Admin Interface

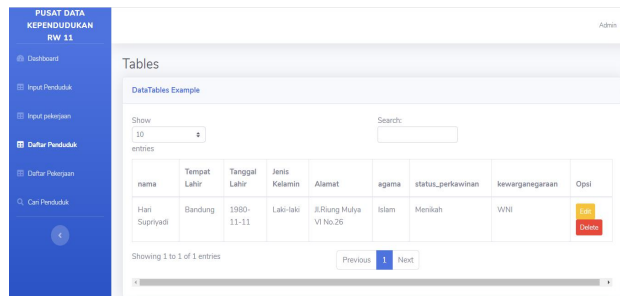


Fig. 13. Admin Interface

Admin menu interface is a page used to manage data related to population data, including population identity data, employment data, and expertise data. This menu can only be accessed by an administrator or who is responsible for managing population data.

### III. FINDING AND DISCUSSION

In 1 month, counted 100 citizens have access to the website of the decision-making regarding the right to elect regional or state heads and social assistance in the Gede Bage District area of Bandung. Users who have access to the website are divided into several categories, including: based on age which is divided into several age ranges: 25-29, 30-39, 40-49 and age > 50 years, the second category is gender: Men and women, for the third category of media: Manual and Web-based, the above categories are the categories used in accessing the website, from which it can be concluded according to the table below:

Table 1: Sample 1

Criteria	Category	Number	Percentage
Visitors (Gender)	Male	42	42%
	Female	58	58%
Visitors (Age Group)	25-29	15	15%
	30-39	25	25%
	40-49	35	35%
	>50	25	25%
Media Information	Manual	15	15%
	Web Based	85	85%

Many elements can be used as a reference in terms of the extent to which citizens can use and utilize decision-making websites about the rights of voters and recipients of social assistance in the District of Gede Bage, Bandung. Website-based media is one of the media that can be used as a tool to convey communication and means of communication between citizens.

Previously, it was difficult for residents to obtain information related to citizens who have the right to vote in regional elections or heads of state, citizens who are entitled to receive social assistance from government and information related to other matters such as blood type that can be used at any time for those who need blood donors, someone's work competency that can be used for residents who will share related work or projects, this is because the management of citizen data is still done The manual hasn't used information technology yet. These constraints or problems can be overcome by building a system in the form of applications that can present information related to voting rights and information of citizens who are entitled to receive social assistance from the government so that citizens are expected to be able to use this media as a means of communicating and interacting.

#### IV. CONCLUSION

Based on the description that has been explained in the previous sections, it can be concluded that it is related to the development of a decision-making system concerning the suffrage of citizens and the determination of citizens entitled to receive social assistance from the government, including:

1. This system can provide convenience for management, particularly the management of the sub-district level, RT / RW. Population in managing data.
2. This system can make it easier for management to present information related to the citizens who are entitled to choose when pemeliharaan head of the region, as well as the head of state and can, present any information of citizens eligible for assistance from the government, but it also can provide information type of blood group every citizen, it is necessary if there are people who need blood donations, information competence and areas of work of citizens, it can also be used as reference doing or job sharing capabilities.

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