



Design of Population Information System based on WEB In Pasirkaliki Village, Cimahi City

Suhana Minah Jaya

Muhammadiyah Cirebon University, West Java, Indonesia, email. suhanaminahjaya@umc.ac.id

Corresponding Author: Suhana Minah Jaya

Abstract: Pasirkaliki Village is one of the government agencies located in North Cimahi District, Cimahi City, that requires an information system for the right solution in disseminating information both for the Pasirkaliki community itself and for other wider communities. One of the information that must be conveyed to the Pasirkaliki community is information about population data, especially in terms of the number of residents, number of births, number of deaths, number of residents who moved, number of migrants, and the number of low-income families living in Pasirkaliki sub-district., While the information that can be conveyed to other wider communities is about the number of residents, the number of disadvantaged residents, and data about the population of Pasirkaliki sub-district. The information system in Pasirkaliki Village has been manually, namely through handwriting, and stored in a book so that it has the risk of being lost, forgotten, and damaged. Data handling like this makes the level of data security less, and time processing data are inefficient. With the information system, it will make it easier for village employees to store population data so that existing risks can be minimized. And with a population information system, Pasirkaliki Village can convey information about population data to the community and agencies that need it.

Keywords: Information System, Population Data, Population Information System.

INTRODUCTION

The development of the world of information technology is currently growing, supported by the availability of hardware and software that is getting better capabilities. Fast and accurate information is increasingly needed by everyone; one of the technologies that can meet these needs is the information system, so the information system has a significant role in various fields, both in the areas of trade, industry, and government agencies.

The development of the world of information technology is currently growing, supported by the availability of hardware and software that is getting better capabilities. Fast and accurate information is increasingly needed by everyone; one of the technologies that can meet these needs is the information system, so the information system has a critical role in various fields, both in the areas of trade, industry, and government agencies. Meanwhile, information that can be conveyed to other wider communities is about the number of residents, the number of indigent residents and data about the population of Pasirkaliki sub-district.

The purpose of holding this scientific writing is as follows:

1. To streamline the data processing process and improve the security of population data.
2. Improve services to the population.
3. More accurate population data.
4. Build a population data information system that has not been computerized into a computerized data information system in the processing process.

METHOD

Data Collection Methods

The data collection methods in this study were carried out in various ways, including Observation. Data collection by making direct observations of the research object, by recording essential things related to the report's title so that complete and accurate data are obtained; Interview. Data collection by conducting direct communication and interviews with related parties; Literature Study. Data collection by using or collecting written sources, by reading, studying, and recording essential things related to the problem being discussed to obtain a theoretical picture; Literature Study. Data collection by using or collecting written sources, by reading, studying, and recording important things related to the problem being discussed to obtain a theoretical picture.

Software Development Methods

The method used to build this system is the Waterfall Model. This model is an approach to systematic software development with several stages, namely:

1. System Engineering. The initial part of working on a software project and starting with preparing everything needed in the implementation of the project.
2. Analysis. Analyze everything in project creation or software development that aims to understand existing systems, identify problems and find solutions.
3. Design. Translator of the needs or data analyzed into a form that is easily understood by the user (user).
4. Coding. Translates designed data into a predefined programming language.
5. Testing. Test the system or program after it has been created.
6. Maintenance. The implementation of the system as a whole is accompanied by care if there is a change in structure, both in terms of software and hardware.

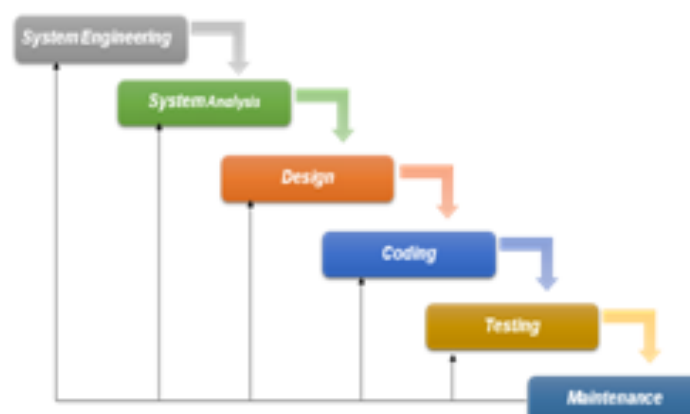


Figure 1. Waterfall Paradigm
(Classic Life Cycle) (Source: Pressman, 1997)

RESULTS AND DISCUSSION

System Implementation.

Procedure Design

Existing procedures on old or running systems are generally good enough. Still, there are several stages of processes that must be refined for the running system to be better and improve overall system performance. The steps of the procedure that need to be perfected include:

1. Method for recording population data. And Population economy.
2. Methods for making certificates of death, birth, moving, immigrants, and incapacitated families.
3. Procedure for making a recapitulation of monthly reports of population data.

Data Flow Design

Flow map design

Diagram of Procedure for Recording Population Data Economic Data

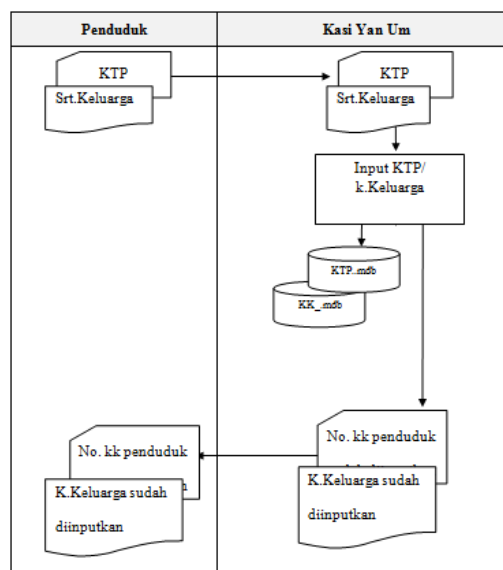


Figure 2. Flow Map Diagram of Population Data Recording.

Interface Design and Menu Structure

Interface Design

Input Design

It is a program design that will be used to enter data, edit data, delete data, and view data.

The advantage of this sub-menu is that it reduces the error rate in inputting data processing data, and can facilitate data changes, deleting data, and viewing data. Input design provides an overview of what data will be entered through the keyboard based on the fields in the designed table.

Input KTP	
NIK	: XXXX
Nama	: XXXX
Tempat Lahir	: XXXX
Tanggal Lahir	: X
Bln Lahir	: XXXXXX
Tahun Lahir	: XXXX
Jenis Kelamin	: X
Agama	: XXXX
Status Perkawinan	: XXXX
Pekerjaan	: XXXX
Alamat/Blok	: XXXX
RT	: XX
Rw	: XX
Pendidikan	: XXXX

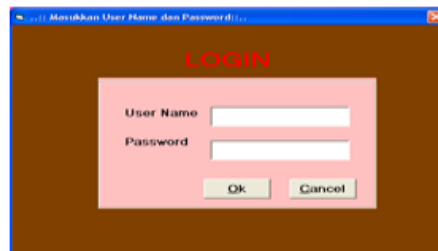
Tambah Simpan Batal Edit Update Hapus Keluar

Input Kk	
No_kk	: XXXX
Nama	: XXXX
Tempat Lahir	: XXXX
Alamat/Blok	: XXXX
RT	: XX
Rw	: XX
Kelurahan	: XXXX
Kecamatan	: XXXX
Kab_kota	: XXXX
Provinsi	: XXXX
Kode_pos	: XXXX

Tambah Simpan Batal Edit Update Hapus Keluar

3. Copy the Population Data Processing Program by right-clicking on the Package folder on Drive F, then select Setup, and save the program on Drive C,
- b. System Operating Procedures
Procedure for Using Login Form.

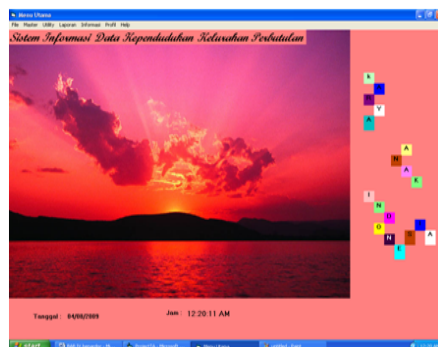
After the program is successfully installed to Drive C, then double click the icon with a blue Computer image that says Resident so that a Login Form will appear, or it can be done by creating a shortcut to the Computer Desktop by right-clicking on the blue Computer picture icon, select Send To Desktop (Create Shortcut) after success then Double click the Icon on the Desktop so that the Login Form appears, as shown below.



To be able to enter the main menu of the program, we must enter the User Name and Password. Keep in mind that 2 (two) Status levels can use this program, including:

1. Admin status as a Program Administrator who can access the entire program's main menu.
2. Operator Status as an Operator who can access all program menu contents that handle population data processing problems and population data checks but cannot access the main menu contents that can be done by the Program Administrator Operator.

For a while, we will enter the main menu of the program; for now, the User Name is "SAS," and the Password is "130188" Then press the Ok or Enter key if the Name and Password are correct, the main menu of the program will appear as shown below.



After the main menu form appears, we can use the Population Data Processing program.
Procedure for using the Main Menu Form.

After successfully logging in the first time, the program will display the Program Main Menu Form, which contains the following menu lines:

a) Files

In the File Menu line, this has sub-menus which include the following:

1. Log off. This sub-menu is a security key if we want to lock the program.
2. Log in. This sub-menu serves as a key by entering the User_Name and password to enter the main menu.
3. Close. In this sub menu serves as an exit button when we are about to exit the program.

b) Master

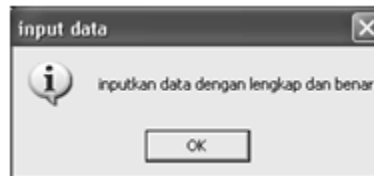
This sub menu contains several sub-menus for processing master file data, which display: User who will display the KK Data Input Form as shown below.



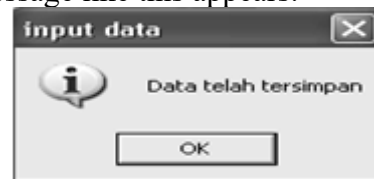
As for the procedure for using the KK Form, it includes:

a). How to Input KK Data

1. Open the Mater => menu line. Input family card data, then the kk Data Input Screen will appear, as shown in Figure 4.20 above.
2. Then fill in the resident KK number. If the KK number is already in the database, the data will appear, but if the KK number is not in the database, the population data input area will be active, and the Save button, cancel button and exit button will be involved.
3. Then fill in all the requested data according to the selection.
4. After filling in the data is complete press the save button. If the data is incomplete then a message will appear like this:



5. Click Ok to complete the data.
6. After filling in the KK data is complete, click the save button again, if the data is successfully saved, a message like this appears:



Then the data will be directly saved to the database.

b). How to Edit KK Data.

1. Type / Input No.KK to be changed.
2. If the KK number is already in the population database, the edit, delete, update, and exit buttons are automatically active. While the save button is disabled.
3. Press Edit, then the Program will automatically activate the columns to be edited.
4. After the data conversion process is complete, press the Update Button to save the changed data.
5. If the KK number does not exist, it will be processed as a new KK number in order automatically for the addition of KK.

c). How to Delete Resident Data

1. Type / Input the KK number to be deleted.
2. The program will automatically search for Population Data based on the KK Number.

3. If the KK number does not exist, it will be processed as a new KK number automatically for the addition of the population.
4. If the KK Data already exists, and automatically the save button is disabled, and the edit, delete, update, and exit buttons are activated.
5. Select the delete button, and a warning message will appear whether the data will be deleted. If the option is Ok, then the data is deleted if Cancel, then the data is not deleted.



6. Select Ok to agree to delete kk. Data.
7. And the data will be automatically deleted.

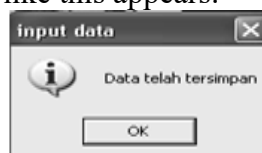
The user will display the Death Data Input Form.

a) How to Input Death Data

1. Open the menu bar Mater =>Input death data, and then the Death Data Input Screen will appear, as shown in Figure 4.24 below.



2. Then fill in the death letter number. If the letter number is already in the database, the data will appear, but if the letter number is not in the database, the population data input area will be active, and the save button, cancel button, and exit button will be involved.
3. After the death data filling is complete, click the save button again. If the data is successfully saved, a message like this appears:



4. Then, the data will be directly saved to the database.

b). How to Edit Death Data.

1. Type / Input the letter number to be changed.
2. If the letter number is already in the death database, the edit, delete, update, and exit buttons are automatically active. While the save button is disabled.
3. Press edit, then the Program will automatically activate the columns to be edited.
4. After the data conversion process, press the update button to save the changed data.
5. If the letter number does not exist, it will be processed as a new letter number in order automatically for the addition of resident deaths.

c). How to Delete Death Data

1. Type / Enter the letter number to be deleted.
2. The program will automatically search the death data based on the letter number.
3. If the Letter Number does not exist, it will be processed as a new letter-number sequentially automatically for the addition of deceased residents.
4. If Death data already exists, and automatically the save button is disabled, and the edit, delete, update, and exit buttons are activated.

5. Select the delete button, and a warning message will appear whether the data will be deleted. If the option is Ok, then the data is deleted if Cancel, then the data is not deleted.



6. Select Ok to agree to remove the death data.
7. And the data will automatically be erased.

The user will display the Birth Data Input Form.

a). How to input birth data.

1. Open the menu line Mater => Input birth data, then the Birth Data Input Screen will appear as shown in figure 4.28 below.



2. Then fill in the birth letter number, if the letter number is already in the database, the data will appear, but if the letter number is not in the database, the birth data input area will be active, and the save button, cancel button and exit button will be involved.
3. After filling in the birth data is complete, click the save button again. If the data is successfully saved, a message like this appears:

Information

This sub-menu contains information from residents of Pasirkaliki sub-district, including as below:

Table 1 Respondents' assessment of the information system display

Tanggapan	Jumlah Responden	Presentase
Menarik	12	65%
Cukup	4	20%
Kurang menarik	2	10%
Tidak menarik	1	5%

Information about age groups

Kelompok Umur	Jumlah Jawa	Jumlah (Laki)	Jumlah (perempuan)
0 - 5 Th	2	1	1
6 - 18 Th	3	2	1
19 - 50 Th	4	2	2
50 Keatas	1	1	0
Total Penduduk	10	6	4

How to display age group information.

1. Select Information Menu Line => age group. Then the age group information screen is displayed, as shown in Figure 4.51 above.
2. How to print Age group information Select Menu Line Information => age group, then the User Data Input screen is displayed as shown in Figure 4.51 above. Select the print Kel age button. Then the age selection will appear to be intercepted.



Select the age to be printed, and then the program will automatically print according to the generation that has been selected.

CONCLUSION

1. Pasirkaliki Village is a government agency located in North Cimahi District. Cimahi City needs an information system to facilitate the performance of village employees to store data about the residents of Pasirkaliki Village and as a means of disseminating information.
2. From the results of making an information system in Pasirkaliki Village that the author worked on, it can be concluded that in this era of globalization, the role of information systems as an information medium is needed. Information systems which are technological facilities that contain various data and information, can make it easier for parties in need to find out different information in an area.

SUGGESTION

Based on the results of observations and research that the author made in Pasirkaliki Village, the author will try to put forward several suggestions that are constructive and advanced, namely to further optimize the existing system in information system following the current system in Pasirkaliki Village such as the population system (KTP data collection, Family Card data collection, and other population data), community service system (making official letters such as land certificates, proof of birth, death certificates, business licenses, etc.) and other systems in Pasirkaliki Village so that village employees will find it easier to store data and obtain more information on the information system.

REFERENCES

- Anonim, 2008. Profil Kelurahan Pasirkaliki
- Hariato Kristanto, 1979. Konsep Dan Perancangan Database, Andi Offset, Yogyakarta.
- Jogiyanto Hartono. 1999. Pengenalan Komputer, Andi Yogyakarta, Yogyakarta.
- Jogiyanto Hartono. 2000. Analisis Dan Desain: Sistem Informasi Pendekatan Tersetruktur Teori Dan Praktek Aplikasi Bisnis, Andi Offset, Yogyakarta.
- Kok Yung, 2002. Membangun Database dengan Visual Basic 6.0 dan perintah SQL, PT Elex Media Komputindo, Jakarta.
- Lani Sidharta. 1995. Pengantar Sistem Informasi Bisnis, PT Elex Media Komputindo, Jakarta.
- Patansyah. 2004. Perancangan Sistem Informasi.

Subana, M, Sudrajat. 2001. Dasar - Dasar Penelitian Ilmiah, Pustaka Setia, Bandung.

Tata Sutabri. 2004. Analisa Sistem Informasi, Andi, Yogyakarta.

Tim Divisi Penelitian dan Pengembangan MADCOM – MADIUN, 2005. Aplikasi Pemrograman Database dengan Visual Basic 6.0 dan Crystal Report, Andi Offset, Yogyakarta,