

# WEB-BASED POPULATION INFORMATION SYSTEM IN TANJUNG PASIR VILLAGE

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## ABSTRACT

Writing the final task with the title Design of Information Systems Population at Tanjung Pasir Village Using Web Designing a new system to improve the system currently in use by the Village Head of Tanjung Pasir admin Create a website that can be utilized by the village admin to save population data Increase knowledge for the author and overcome the problems faced by the Village Head Office employees. The programming used in writing this Final Project is the programming website using mysql database and notepad for php script creation. From the test results of the proposed system can be stated that The proposed system can help employees to search the data of the people of Tanjung Pasir Village Employees can easily find data about the people of Tanjung Pasir Village; The data processing of the population can be managed well and efisien.

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## 1. INTRODUCTION

The development of information technology has changed the world to be easy and computer technology is able to change the long and difficult working mechanism into effective and efficient. Computers play an important role in carrying out work activities because they are able to provide information quickly and accurately[1].

The Population Information System in Tanjung Pasir Village, the process starting from data input, data search and data storage is still classified as manual or still in writing. At the Tanjung Pasir Village Head Office, the system that is running in collecting population data still uses the Microsoft Excel program and is recorded in the ledger so that the data is not accurate and the data search process takes a long time[2].

Several studies have been conducted on the ongoing system in population data collection at the Tanjung Pasir Village Head Office and the results obtained from the research conducted are a lot of inappropriate data and duplicate population data, there is also data on people who have moved but are still registered as residents of Tanjung Pasir Village.

To find a solution to the problem of population data collection in Tanjung Pasir Village is the need to implement a population information system in Tanjung Pasir Village with the help of computers and applications, which will help the officers of the Village Head Office to do all work related to data storage and processing using the new system.

## 2. RESEARCH METHOD

The research method is an activity that is systematically designed to solve existing problems. The discussion discussed in this chapter consists of two parts, namely the data collection method and the system design method which can be described as follows:

### a. Context Diagram

The context diagram gives an idea of what the interaction relationship between external entities and systems looks like, the relationship is described by the flow of data flowing and the external environment of the system (external entities) into the system or vice versa. The context diagram in the Population information system in Tanjung Pasir Village can be seen in figure 1 as follows:

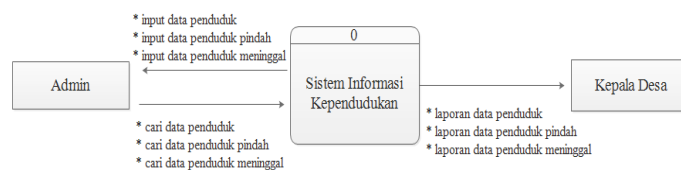


Figure 1. Context Diagram

### b. Data Flow Diagram Level 0

The level 0 flow diagram data in the Population Information System in Tanjung Pasir Village can be seen in the following figure:

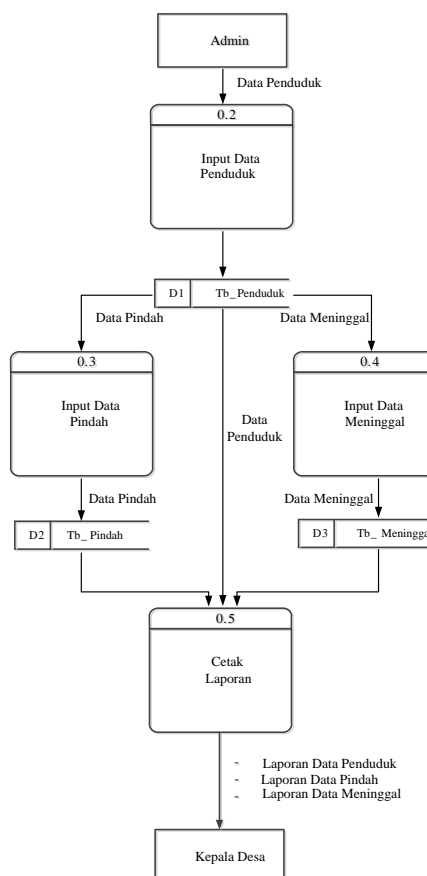


Figure 2. Data Flow Diagram Level 0

From the level 0 flow diagram data image above, it can be seen that there are four processes that occur in the old system with the new system. The processes that exist in the old system do not need to be explained in the form of level 1 flow diagram data because the process is done manually.

### 3. RESULTS AND DISCUSSION

The following is the display of the information system that has been created, including: Login, Main Menu, Population Data Input Form, Deceased Population Data Input Form, Moving Population Data Input Form, Form, and Report.

#### a. Form Login

The process carried out by the Admin to log in to the population data information system in Tanjung Pasir village is the command to input the Username and Password of the Admin to enter the main menu of the Asset data information system. The login form can be seen in figure 3 as follows:

Figure 3. Admin Login Form

The login form serves as a system security that is specifically for an admin of the website. In the form there are two text boxes, namely a text box for username whose content is "admin" and a text box for password whose content is "12345" and then there is a button button which is a login button. The login button is used after filling in the text box of the username and password section. If it is filled in, press it and the admin will enter the main menu of the website.

#### b. Home Menu Page

The Home menu form of the population information system is a process after the admin logs in, in the main menu there are several menus such as the master data menu there are population data inputs, deceased population data, and mobile population data inputs. Search menu to search for data and log out to exit the menu page. Here is a picture of the main menu of the land data information system. The home menu page can be seen in figure 4 as follows:

Figure 4. Home Menu Page

### c. Resident Input Form

The Land Data Input Form is used to process population data input in Tanjung Pasir Village. In the population data input, there are process buttons consisting of a save button that is used to store land data. The cancel button used to cancel the command before clicking the save button. The soil data input can be seen in figure 5 as follows:

Figure 5. Population Data Input Form

### d. Dead Population Data Input Form

The deceased population data input form is used to process the input of deceased population data in Tanjung Pasir Village. In the data input of the deceased, there are process buttons consisting of a save button that is used to store building data. The cancel button used to cancel the command before clicking the save button. The building data input can be seen in figure 6 of the following page:

Figure 6. Dead Population Data Input Form

### e. Moving Resident Data Input Form

The Moving Population Data Input Form is used to process the input data of moving residents in Tanjung Pasir Village. In the data input of the deceased population, there are process buttons consisting of a save button that is used to store the data of the displaced population. The cancel button used to cancel the command before clicking the save button. The input of the moving population data can be seen in the following figure 7 page:

Figure 7. Moving Population Data Input Form

#### f. Population Data Report Form

The population data report form is used to process data output in Tanjung Pasir Village. The population data report form has process buttons consisting of an edit button used to edit population data, a delete button used to delete population data and an export pdf button to print data to pdf format. The soil data report form can be seen in figure 8 on the following page:

No	NIK	Nama	Tempat Lahir	Tanggal Lahir	Jenis Kelamin	Alamat	Agama	Status	Pendidikan Terakhir	Pekerjaan	Foto	Detail	Edit	Hapus
1	123456	YUSI ARDIANA	AEKKANOPAN	1985-01-01	perempuan	AEKKANOPAN	Islam	belum menikah	DIPLOMA III	PNS		Detail	Edit	Hapus

Figure 8. Population Data Report Form

The data displayed is based on the data that has been filled in the population data input form. If you want to edit the data, click the edit button and an edit form will appear, then change what you want to change if you have clicked save and then return to the population data form. If you press the delete button, the data will be deleted and if you press the export pdf button, the data will be printed into pdf format.

#### g. Dead Population Data Report Form

The deceased population data report form is used to process data output in Tanjung Pasir Village. The Dead Population data report form has process buttons consisting of an edit button used to edit population data, a delete button used to delete land data and an export pdf button to print data to pdf format. The land data report form can be seen in figure 9 on the following page:

No	Nik	Nama	Tempat Lahir	Tgl Lahir	Tgl Meninggal	Jenis Kelamin	Agama	Alamat	Edit	Hapus
1	111111111	BUDI	MEDAN	2017-05-01	2017-05-01	laki-laki	Kristen	JAKARTA	Edit	Hapus

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Figure 9. Dead Population Data Report Form

If you want to edit the data, click the Edit button and the Edit form will appear, then change what you want to change if you have clicked Save and then return to the Data form. If you press the delete button, the data will be deleted and if you press the export pdf button, the data will be printed into pdf format.

#### h. Moving Population Data Report Form

The moving population data report form is used to process data output in Tanjung Pasir Village. The moving population data report form has process buttons consisting of an edit button used to edit the moving population data, a delete button used to delete land data and an export pdf button to print the data to pdf format. The soil data report form can be seen in figure 10 on the following page:

No	NIK	Nama	Tempat Lahir	Tanggal Lahir	Jenis Kelamin	Agama	Alamat	Tempat Asal	Tujuan Pindah	Edit	Hapus
1	1234567	YUSI ARDIANA	AEKKANOPAN	2000-01-29	perempuan	Islam	AEKKANOPAN		BALI	Edit	Hapus

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Figure 10. Moving Resident Report Form

If you want to edit the data, click the edit button and an edit form will appear, then change what you want to change if you have clicked save and then return to the moving population data form. If you press the delete button, the data will be deleted and if you press the export pdf button, the data will be printed into pdf format.

#### 4. CONCLUSION

Based on the description that has been presented in the previous chapters of this Final Project, several conclusions can be drawn that need to be made related to the Population information system in Tanjung Pasir Village.

This system is designed or built based on the website and is recorded or stored in a database using mysql. In the population information system, it is built to store population data, population data dies, population data moves so that management is carried out using information technology.

This Population Information System is implemented using information technology that can produce faster, more accurate and accurate information and also makes it easier for the parties concerned to make a decision based on existing reports. This information system was created so that population data collection in Tanjung Pasir Village can be carried out effectively and efficiently.

#### REFERENCES

- [1] A. A. Sofyan, M. Iqbal, and I. Awanda, "Sistem Informasi Pelayanan dan Controlling Franchise Berbasis Web Rumah Makan Raja Raja," vol. 8, no. 2, pp. 2–8, 2018.
- [2] R. Aisyah, R. Watrianthos, M. Nasution, R. A. Siregar, R. Watrianthos, M. Nasution, A. Manajemen, I. Komputer, and L. Batu, "SISTEM INFORMASI DATA GURU MDTA PADA KANTOR KESRA SETDAKAB," vol. 5, no. 2, 2017.
- [3] S. Informasi and P. Pupuk, "Jurnal TEKNOIF ISSN : 2338-2724 Pendahuluan Vol . 3 No . 2 Oktober 2015 Jurnal TEKNOIF ISSN : 2338-2724," vol. 3, no. 2, 2015.
- [4] R. Yunida, R. Watrianthos, M. Nasution, R. Yunida, R. Watrianthos, M. Nasution, A. Manajemen, I. Komputer, and L. Batu, "SISTEM INFORMASI SELEKSI PENERIMAAN BEASISWA PTN SISWA / I," vol. 6, no. 2, pp. 24–34, 2018.
- [5] A. N. Putra, "SISTEM INFORMASI PEMESANAN PERCETAKAN BERBASIS WEB PADA PT . BPC CIHAMPELAS BANDUNG PROGRAM STUDI SISTEM INFORMASI UNIVERSITAS KOMPUTER INDONESIA," vol. 1, 2017.
- [6] F. Rahman, J. T. Informatika, P. Negeri, T. Laut, M. Kamus, and L. Dunia, "Aplikasi pemesanan undangan online," vol. 1, pp. 78–87, 2015.
- [7] A. Fauzi, S. I. Akuntansi, U. B. Sarana, S. Informasi, U. B. Sarana, T. Komputer, U. B. Sarana, K. C. Form, and A. B. Web, "SISTEM INFORMASI PEMESANAN KERTAS CONTINUOUS FORM," vol. 5, no. 1, pp. 123–127, 2019.
- [8] S. Mallu and S. P. Keputusan, "Sistem pendukung keputusan penentuan karyawan kontrak menjadi karyawan tetap menggunakan metode topsis," vol. I, no. 2, pp. 36–42, 2015.
- [9] J. S. Informasi and S. D. Yulianti, "SISTEM INFORMASI PENJUALAN ALAT TULIS KANTOR BERBASIS WEB PADA CV . SUMBER REZEKI JAKARTA," pp. 283–288, 2016.
- [10] U. Salamah, "Sistem Informasi Penjualan Barang Berbasis Web Pada Percetakan Rahayu Bekasi," vol. 6, no. 1, pp. 61–74, 2018.
- [11] S. I. I. B. Darmajaya and B. Lampung, "Prosiding issn: 2598 – 0246 | e-issn: 2598-0238," pp. 326–335, 2017.
- [12] A. Pramodita, P. Susanto, and D. Oscar, "Pemodelan Sistem Informasi Penjualan Produk Kecantikan Secara Online Dengan Metode Rational Unified Process Studi Kasus : PT . Lautan Angsa Indonesia," vol. 3, no. 2, pp. 222–227, 2018.
- [13] I. Purnama, "APLIKASI PEMESANAN KULINER HALAL RANTAUPRAPAT BERBASIS," vol. 6, no. 3, pp. 7–13, 2018.