WEB APPLICATION FOR MANAGING PERSON-FILE-DATA OF THE STANDARD 21 FILES FOR NAKHON PATHOM PUBLIC HEALTH PROVINCIAL OFFICE

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Thematic Paper
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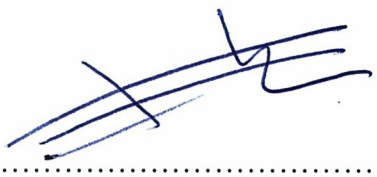
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ABSTRACT

The personal data management system was developed to utilize information and communication technologies for support of public health operations at the Nakhon Pathom Public Health Provincial Office. The Person-File-Data is part of the Standard 21 files data operating system. The system aims to provided early notification to responsible service unit personnel which enables them to submit the required accurate data at a set schedule.

The results of the data collected and analyzed showed the system could effectively manage the Person-File-Data in accordance with the structure of the Standard 21 files data system. It operated fast and produced the expected outputs. The early notification scheme sent notification by way of SMS and e-mail as planned. The system performed preliminary assessment and produced reports on the accurateness and completeness of the required Person-File-Data as well.

KEY WORDS: WEB APPLICATION / MANAGING PERSON-FILE-DATA / STANDARD 21 FILES

61 pages

เว็บแอพพลิเคชั่นสำหรับการจัดการข้อมูลแฟ้มบุคคลตามมาตรฐาน 21 แฟ้ม ของสำนักงานสาธารณสุขจังหวัดนครปฐม

WEB APPLICATION FOR MANAGING PERSON-FILE-DATA OF THE STANDARD 21 FILES FOR NAKHON PATHOM PUBLIC HEALTH PROVINCIAL OFFICE

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บทคัดย่อ

การพัฒนาระบบบริหารจัดการข้อมูลบุคคล สำหรับฐานข้อมูลตามมาตรฐาน 21 แฟ้ม ของสำนักงานสาธารณสุขจังหวัดนครปฐม มีวัตถุประสงค์พัฒนาขึ้นเพื่อใช้เทคโนโลยีสารสนเทศและการสื่อสารในการสนับสนุนการดำเนินงานด้านสาธารณสุขในด้านการจัดการข้อมูลแฟ้มบุคคล (PERSON) ตามมาตรฐาน 21 แฟ้ม ของสำนักงานสาธารณสุขจังหวัดนครปฐม เพื่อช่วยในการติดตามแจ้งเตือนผู้รับผิดชอบในการส่งข้อมูลของหน่วยงานให้ส่งข้อมูลที่มีคุณภาพ และทันกำหนดเวลา

ผลการพัฒนาระบบทำให้ได้ระบบการบริหารจัดการข้อมูลบุคคล สำหรับฐานข้อมูลตามโครงสร้างมาตรฐาน 21 แฟ้ม ที่มีประสิทธิภาพ สามารถทำงานได้อย่างรวดเร็ว อีกทั้งยังได้ผลลัพธ์ที่ถูกต้องตรงตามข้อกำหนด โดยที่ระบบสามารถแจ้งเตือนในการส่งข้อมูลผ่านระบบ SMS และ จดหมายอิเล็กทรอนิกส์ (E-mail) ได้ตามวัตถุประสงค์ นอกจากนี้ระบบยังสามารถรายงานผลการตรวจสอบความถูกต้อง ครบถ้วนของข้อมูลแฟ้มบุคคล (PERSON) เบื้องต้นอีกด้วย

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CHAPTER I
INTRODUCTION

1.1 Background

At present, the Ministry of Public Health in collaboration with the National Health Security Office has supported and encouraged the development of information system by allocating budget for the system development to service units based on their performance and quality in gathering and submitting the data. The aim is to stimulate the units to be able to record, compile and submit the Out Patient service data and the individual health promotion and disease prevention service data effectively. The data can also help the responsible agencies in evaluating service units' workloads, which can consequently contribute to the calculation of the reasonable flat-rate payment per head of beneficiaries under the Universal Health Insurance Coverage system. Main feature of the information system was the set up of data link network that could link database and support data transfer between the Sub-district Health Care Units with all level of provincial hospitals and with the central headquarter in the form of the Standard 21 files of the Ministry of Public Health.

As one of the Standard 21 files, the Person file is very important set of data because it performs as the database for data quality assessment and data input concerning with (population) health care and health promotion information for the rest of the 21 files, as shown in Figure 1. Data of the file is also used in setting up health care and promotion operational goals for specific groups of the population. Incompleteness of the data will, therefore, affected accuracy of the goal setting and flow of the health care and health promotion information.

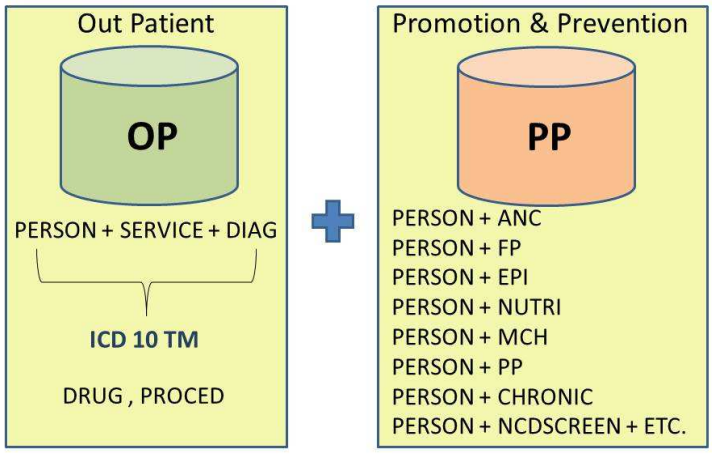


Figure 1.1 Data linkage structure of the Standard 21 files

Although the situation is undesirable, the system has faced with the problems of the incompleteness and the delay submission of the Person file data. These may due to heavy workloads or substitution of personnel and the change of the database structure. These have not only caused the concerned units at both central and provincial levels unable to utilize the data and marked the loss of national resource in the area of data collection and administration, but the absence of the budget from the ministry to the service units for their development of the information system as well.

Today, electronic mail (e-mail) and mobile telephone have been widely used for everyday communication. The e-mail enables people to communicate a bunch of data at a time whereas the mobile phone, as popularly called, allows communication to take place nearly every time and everywhere because of its portability and affordable price. For the reasons all above, the main objective of this project was to develop the Person file management web application that could send notification for data submission to the service units by SMS through the mobile phone network and could inform the units after receiving their data to let them recheck completeness of the data submitted with data center.

The system was also developed for processing person data to produce reports and statistics that the service units could be used in planning and improving their service function and that the administrators as well as organizations at departmental and divisional level could be used in planning, decision making and

policy formulating activities. It is expected that the system will eventually reduce the burden of making such reports for the service units and allow them more time for better provision of services.

1.2 Research objectives

This project aims to develop web application for the Person file data management that links between the service units and the data center. Specifically, the system should contain the following features:

1. Database that store the Person file data, the Out Patient health care, and health promotion and disease prevention service information of people;
2. Data processing system for producing reports and statistics;
3. The notification scheme that can send the data submission message by SMS through the mobile phone networks;
4. The informing scheme that can inform service units their submission by electronic mail (e-mail).

1.3 Scope of the study

The development emphasis of the system was to support the public health operation of public health agencies under the Nakhonpathom Public Health Provincial Office.

1.4 The development process

1) Studying to gain knowledge data

The developer has studied the following topics or issues: the standardized structure of the patient health care, health promoting and disease preventing services; the system development by web applications; Windows2008 Server, the Client-Server operation; the PHP language for web application development; the screen design principles for interacting with users.

2) Data analysis

The developer has analyzed the data for designing structure and requirement of the system, database development, and data structure for effective data processing.

3) Designing the system

The developer has designed the total structure and the operating functions of the system, the database of the system, and the screen for users to manage the data.

4) Developing the system

The developer has developed a database to store health information, the operating functions of the system, and the screen for users to manage the data.

5) Testing the system

The developer has tested the system on data and data file management, and the report and statistics function on the Windows 2008 server.

6) Making the project document.

1.5 Benefits expected to receive

1.5.1 Benefit to the developer

1) Learning about the client – server working system.

2) Learning about the development of web applications by the PHP language.

3) Learning about the health database on the aspects of patient service regarding the health promotion and disease protection according to the standard structure.

4) Learning about the development of web application for communicating between computer and mobile phone.

1.5.2 Benefit to the users

1) Learning about using technology to support the public health operation.

2) Having the system to manage the quality of health information.

3) Having the warning scheme for data submission on the set schedule.

4) Having the data processing system for producing reports and statistics to support the operations.

5) Reducing report making burden and increasing time for service provision.

6) Having submission report and the data completeness checking system that allows an early improvement.

7) Having the complete, accurate, and on-time submission data that pass the ministry standard and the service units receive the budget for information system development.

8) Database is qualified enough for planning and administrating public health services that are more responsive needs and problems of the people.

CHAPTER II
LITERATURE REVIEW

This chapter reviewed related knowledge that the developer used to develop the health information management system.

2.1 Client/Server

2.2 Web Server

2.3 Protocol

2.4 PHP Language (Personal Home Page)

2.1 Client/Server

The client/server architecture is one of computer network that has been designed to be split into two parts : a client / server. There will be one main computer is a server, which will not serve all service to the client, but the entire process will serve as a remote storage (Remote disk) in the database. This could be a database, MS Access, MS SQL Server, Oracle, and some processing to the client only. For example ,the command processor to retrieve data from the database server (Database server) while the client sends a SQL statement to retrieve data from the database to the client's (Database server) etc as shown in Figure 2.1.

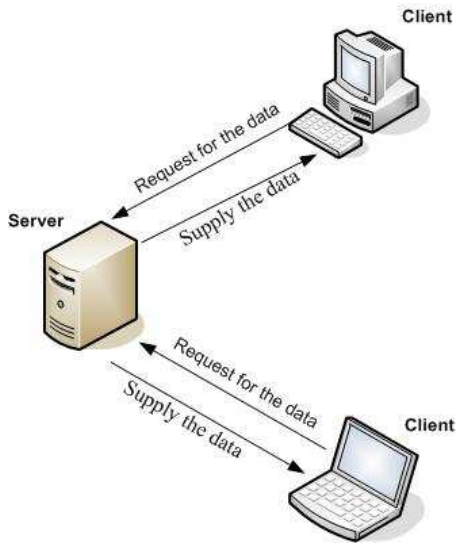


Figure 2.1 The procedure works of Client/Server

From picture can explain as follows.

The client is the software that is the launcher/requester process, client will contact with client other and use the resource can accompany include can contact with beg for use the data and service from server all the client can dare to myself, Which selfish take designing comes to give the user can is usable convenient by must not is omniscient mechanical location background, that be client will Hide complicated of Network Operating System, The lead process has offered the data using cause the user can feel that I working get comfortably theoretically at oneself understands.

Server is a software that can respond to the request and the client data is responsible is to interpret the client's request. To manage with the process of accessing to the data service. Specific information only software needed. The server may be on the computer. The same machine or on different computers at once.

There are 3 types of client / server for example.

1. A single client/server be the format that have the user is using in same machine with the server.

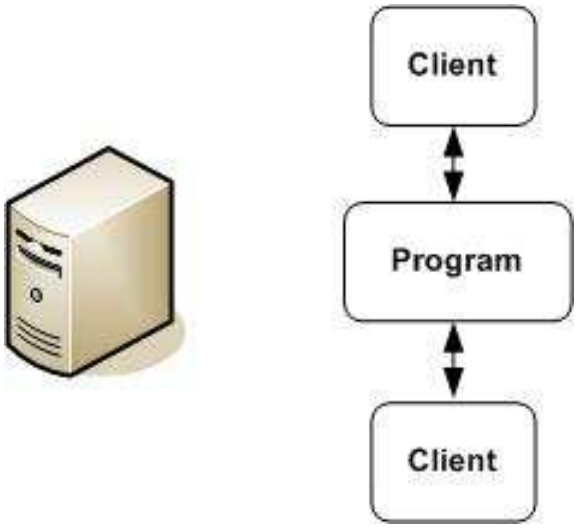


Figure 2.2 The Client/server model a single

2. A model group client/server be the work that the facilitator will serve the database and applications on the server by connected to local area network (LAN) and support functions for a variety of applications can work together or exchange data between them. The processing performance is slower than the client / server model single because of working over the network.

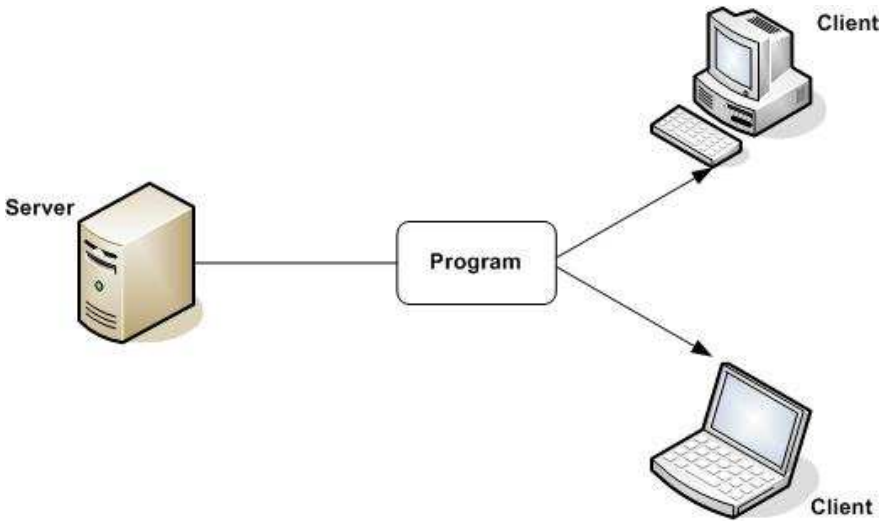


Figure 2.3 The Client/server model a group

3. Enterprise-level client/server is work is linked to a server with a different format together can be used to share resources through the program, which that encourages applications all can work together or exchange data between each other.

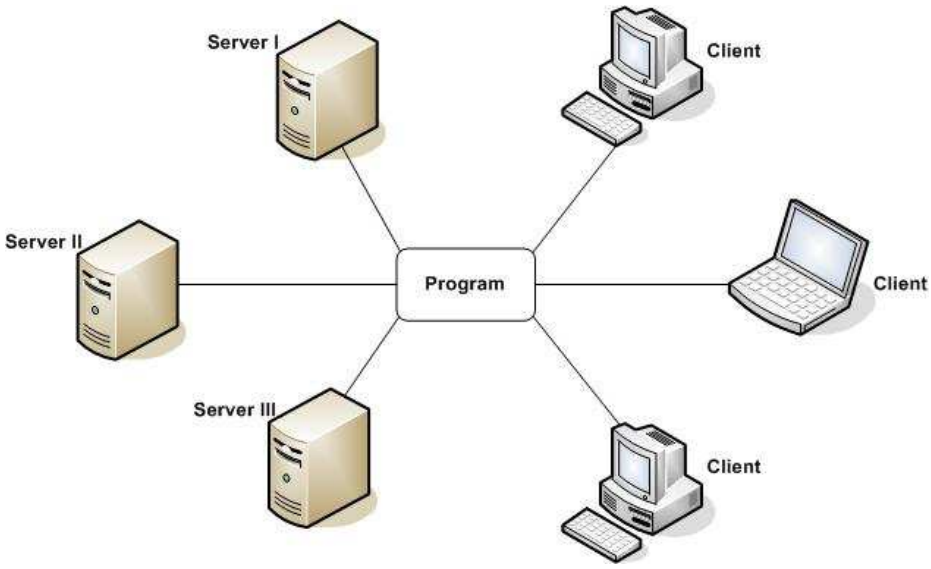


Figure 2.4 The Client/server model enterprise-level

Working on the network the client / server, the server must run process to serve clients that request it. This was a fairly heavy processing. So it should be a server computer with high performance to be sufficient to support the network. They might have several servers in a specific field, such as a file server for storage and manage all the files, network print servers acting on the print control ,database servers acting on storage and management on network of corporate etc. The enterprise which use this network always keep their program on the server so that users can run it immediately.Such as word processors or storage server, when users want to use this application, they can use this program from the server. The client / server system administration must have administrative staff in particular. The management agent on a daily basis, such as backup, monitoring, security and system administration to work consistent. The server usualy running all the time,so most companies tend to store it in a server with security as well to prevent modifying the local system server from anyone and other system errors. In addition, a network client /server is a more flexible system expansion, as it can add clients to the network without the need for expensive high-performance machines.

The advantage of the client/server

In the past, if you want a computer system that will control the server. The client must use the target mainframe architecture. The mainframe requires resource management is a very expensive and also have disadvantages. Flexibility of use is relatively low. But in today's computer systems are becoming more popular. And so the mainframe into a uniform system is a client/server due to the high flexibility and relatively low cost. If you have the technology to maximize efficiency and appropriate size of the system is located. The system has the flexibility to manage rapidly growing.

2.2 Web Server

Web Server is a computer that acts as a web service request to the web browser application (Web Browser) to request information through the protocol HTTP (HTTP = Hyper Text Transfer Protocol). The server sends a request in the form of text, image, audio, or mixed media, which always open port 80 (HTTP Port),allow client to connects and get data to used,such as internet applications executed by dealers Internet Explorer, Google Chrome or Nemo Rock (FireFox Web Browser) etc. The connection began with the identification of the requested Web page (Web Address or URL = Uniform Resource Locator) such as http://www.google.com or http://www.thaiall.com etc. The popular applications using a web service is Apache Web Server or Microsoft IIS (Internet Information Server) while the most popular installed services to enhance the capabilities of the service, such as a script language ,database system etc.

Stage of preliminary work usability on the web browser step as follows:

1. When user enters the RLM (URL) in a web browser. The Client will convert the host name (Host) in the RLM is IP address.

2. The clients connects to the web server is typically used TCP protocol port 80.

3. The client uses of protocol HTTP to run the required information after connected to server.

The software sample can work as a Web Server is as follows.

- Apache HTTP Server From Apache Software Foundation is the web server that has ability and the most commonly used today can run multiple operating systems such as UNIX, Linux, FreeBSD and Windows (See the detail at www.apache.org).

- Internet Information Server (IIS) is a web server, developed by Microsoft which runs on the operating system Windows NT 4.0, Windows 2000, Windows XP and Windows Server 2003 (See the detail at www.microsoft.com).

- Sun Java System Web Server from Sun Microsoft System (Originally the name Sun ONE Web Server, I Planet Web Server and Netscape Enterprise Server).

- Zeus Web Server from Zeus Technology.

2.3 Protocol

Protocol is regulation in the standard specifications or formal agreement on how to format the computer and get the information to communicate with each other includes both sending and receiving data. How to determine the error of sending and receiving data. Protocol displays information when sending and receiving data between two computers in order to carry out the activities of the communication protocol in the event that it is important to communicate. The multi-protocol standard each protocol has its advantages and disadvantages, it's different. The protocol is critical to the development of the system are as follows.

- HTTP Protocol (Hypertext Transfer Protocol) is a protocol used this, when in the calling uses browser program such as Netscape or Internet Explorer for view data or a Web page in order, which this protocol allows the server to send data to the browser as needed. The browser will display information on the screen correctly. The standard form of transport must be set and established between them.

- TCP Protocol (Transfer Control Protocol) is protocol that contact between browser to the server will be done. It need to open communication channels between them. The destination of the communication, both the tag and the port (Port) and Port are monitored with protocols in a named TCP, which allows the server to serve the client or many clients at the same time.

2.4 PHP Language (Personal Home Page)

PHP original stands for Personal Home Page tools by an American programmer Rasmus Lerdorf. It was created in 1994 to develop a program to store user data that are frequented by his own personal home page. An advantages of using C and Perl language called the Personal Home Page and the create the database with the contact information called the Form Interpreter (FI), and the two be called PHP / FI, which is a starting point on the PHP is one of the important visit his website then that likes it. Contact request to code go use and lead to the development of the Open Source aspects of the later with the New York Milwaukee. Up to the very least within three years a website using PHP / FI in a database environment, the knowledge and the skill displayed and more than 50,000 the site. Currently, the group has developed the PHP stands for PHP: Hypertext Preprocessor, which is a Recursive acronym of the word PHP Hypertext Preprocessor.

PHP2 (then called PHP / FI) in the period between 1995-1997 Rasmus Lerdorf is a people who had helped develop the second one is Zeev Suraski and Andi Gutmans Israel, which improves code Lerdorf using C + + to be able to dealing with form data that was created from the HTML and supporting contact management applications and the PHP mSQL database began to be used more quickly. And are supported by the PHP in late 1996 PHP is used to number about 15,000 worldwide web and more. Later the three men who came to help develop the Stig Bakken is the ability to contact Oracle, Shane Caraveo responsibility PHP on Window 9x/NT, and Jim Winstead responsible for the defect and changed its name to Professional Home Page Version 2.

PHP3 out in the period June 1997 to 1999 into the eyes of Programmers in the West now have version Key features of the operating system support the Window 95/98/ME/NT, Linux and the web forum driver at the IIS, PWS, Apache, Omni HTTPd support database the hundreds of types of information such as SQL Server, MySQL, mSQL, Oracle, Informix, ODBC.

PHP 4 since 1999 – 2007, which add Functions to work in the side all very and the source is be paid by Zend, which has Zeev and Andi Gutmans, get share set up (http://www.zend.com) in version will be to compile script, which, version next be embed script interpreter. In current is used PHP greater than 5,100,000 sites then

the global developer the name of the new PHP the PHP: Hypertext. Preprocessor, which refers to the level of professional services for the hypertext.

PHP5 since 2007 – current, which add Functions to work in the side all very such as

- Object Oriented Model
- Specification scope public/ private / protected
- Exception handling
- XML and Web Service
- MySQLi and SQLite
- Zend Engine 2.0

PHP is computer languages in the server - side scripting by copyright as open source. PHP for the web site and displays them in HTML format with the underlying structure of the English language, Java and Perl with PHP is easy to learn. The main goal of this language. Web site developers are able to write a response quickly.

PHP is the growing groups originate developers in the open source code or Open Source PHP has evolved so quickly and widespread, especially when used in conjunction with Apache Webserver operating system such as Linux or FreeBSD compatible with the current PHP Web Server on multiple operating systems such as Windows 95/98/NT/2000/XP.

PHP is kind language a scripting language such commands is stored in a file called a script and requires the use of a set of instructions an example of a script language like JavaScript, Perl, etc. the PHP scripting language that is different from the others is that PHP has been developed and designed, to be used to create an HTML document can be supplemented or modified content automatically. So it is that PHP is called server-side or HTML-embedded scripting language is an important one that allows us to create a Dynamic HTML effectively and have more if anyone knows Server Side Include. (SSI) can be difficult to understand the functions of PHP.

Let's say we want to display the date. It is currently visiting the website at that time. In a certain position within the HTML document that we want. May be used as a command in this format <! - # Exec cgi = "date.pl" -> in HTML documents on the web server to the SSI command. It is done, in which case the date.pl. The script is

written in perl language to read the time from the computer. Enter the time the output (output) and replace the command in the HTML document before it is sent automatically to the reader to another. May be said that the PHP has been developed to replace the traditional SSI by a talented and interfaces with other tools, such as more contact with the data warehouse or database etc.

PHP in the PHP English that is used as an abbreviation of the word Recursive PHP Hypertext Preprocessor or the Personal Home Page.

The PHP scripting language that is different from any other is the PHP has been developed and designed. To be used to create an HTML document can be supplemented or modified content automatically. So it is that PHP is a server-side language called HTML-embedded scripting language is an important tool that allows us to create Dynamic HTML documents more efficiently, and with more features. Be simple PHP is a server-side processing is that the PHP code using PHP to insert it into the html code it will be marked with <> Cross section is code PHP it. So easy to understand from the illustration.

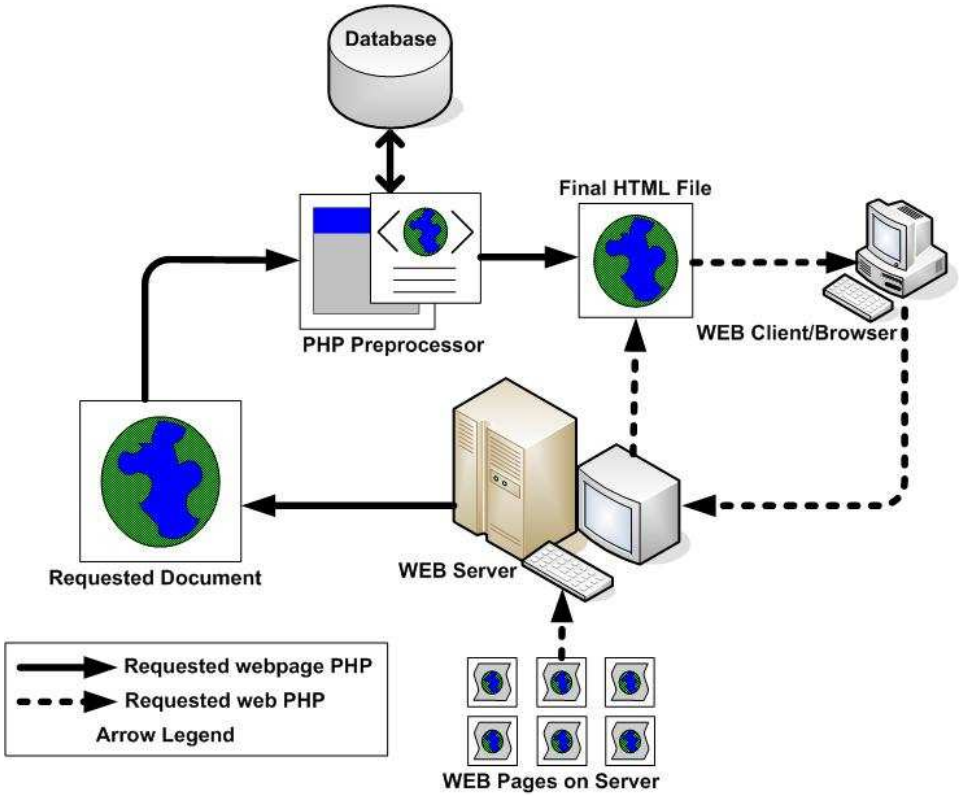


Figure 2.5 Using PHP & MySQL Bible

From figure the user or client that makes a request to a PHP page to the server. The server is running PHP engine and the PHP file with the database and send the result of the translation process and the html to display the user used to. (Will show all html)

Work PHP Language

PHP Language has been working on the Server-Side Script is a server served by the compiler. The server will send results to the user (Client) on request by sending a request to a server that PHP stands for Personal Home Page, but to develop more effective is a Professional Home Page.

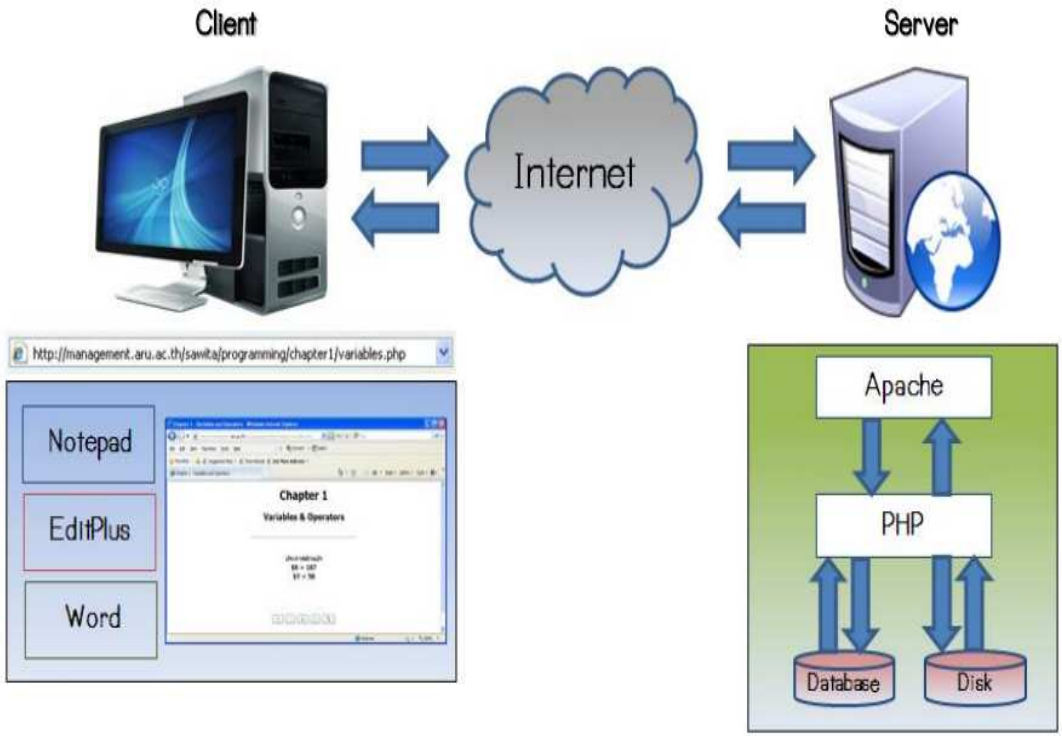


Figure 2.6 Work PHP Language

Property

Show of php will appear in the HTML, which does not show the user-written commands, which are characteristics of the PHP variant of the language in the client-style side scripting. Such as Java Script language that the audience website can be read view and copy commands to use them. In addition, PHP is also a language that is easy to learn and get started by the tools help and guides that can be found for free on the Internet. The Primary processing capacity of the automated material handling PHP for example automatic content generation manage the command, to read data from the user and processing, to read data from the database ability to manage cookies, which the program like works as a CGI another property such as Processing the command line scripting makes programming a PHP script. Park's work through PHP parser without any server or browser. It looks like Cron (for UNIX or Linux) or Task Scheduler (In Windows) script can be used in the Simple text processing tasks.

Show of php although the main purpose is to show HTML, but also can generate XHTML or XML are also compatible with the accessories. It can display data PDF Flash (using libswf and Ming).

PHP have the ability to work as a processing the message from the POSIX Extended or a Perl are to convert the XML document to transform and to document XML supports SAX and DOM standards, we can use our XSLT to transform XML documents XML.

When using PHP to do e-commerce compatible with other programs such as Cyber cash payment, Cyber MUT, VeriSign Pay flow Pro and CCVS functions for use to create a financial transaction.

PHP Support

PHP orders can create through a text editor such as Notepad or vi, which makes the PHP can work in almost all major operating systems. When a command to be processed, beside HP can be used in fixed UPS for all major as well as Linux, Unix many (including HP-UX, Solaris and Open BSD), Microsoft Windows, Mac OS X, RISC OS, and many other options. PHP Webserver is compatible with almost all of it included in this Apache, Microsoft Internet Information Services (IIS), Personal Web

Server, Netscape and I Planet servers, Oreilles Website Pro server, Caudium Xitami, Omni HTTPd and many others for the main part PHP. There is also Module in supporting CGI standard, which PHP can work as a CGI processor.

And with PHP, you have the freedom to choose. Operating system and Web server. You also can use the program structure. Object-oriented programming (OOP) is a program that combines the two together although the capability of the OOP version of this standard is not yet complete. I have a library of programs and applications (including the PEAR library) are written only using OOP design patterns.

One of the core competencies and capabilities of PHP's strengths is its ability to interact with the database, which is a web interface to a database, which can easily accommodate the ever aim at is as follows.

Adabas D	Ingres	Oracle (OCI7 and OCI8)
dBase	InterBase	Ovrimos
Empress	FrontBase	PostgreSQL
FilePro (read-only)	mSQL	Solid
Hyperwave	Direct MS-SQL	Sybase
IBM DB2	MySQL	Velocis
Informix	ODBC	Unix dbm

Beside structure of the database DBX, making HP the database anything that supports this format and PHP supports ODBC (Open Database Connection), which is standard the database connection used widely as well. You can connect to various databases supporting this world standard.

PHP also supports the communication service in protocols all such as LDAP IMAP SNMP NNTP POP3 HTTP COM (on Windows) and many others you can open a Socket on the network directly and responded by using a profile. protocol in any PHP has support for information exchange WDDX Complex with Web Programming Others are mentioned in the Interconnection, PHP has support for Java objects and turns it into a PHP Object to use it, you still can use CORBA to access the Remote Object as well.

A program that use PHP the structure of the main.

- Mambo
- Joomla
- Drupal
- Media Wiki
- PhpBB

However, the core of PHP is a script processing site on the server that you can do anything any other CGI program can do. Such as getting information from a form, create interactive content, or send and receive Cookie But PHP can do much more than.

There are three mains goals of the site script PHP.

1. The processing on the server-side scripting. If you want to use PHP for this purpose, you need a third one in the works that is PHP Parser (CGI or Server Module), Web Server and Web Browser. You need to be. Webserver install PHP to work with, you can see the PHP page through the Web Browser View Server.

2. The processing the command line scripting, you can create a script site PHP without a Server or Browser., You just want to process the PHP (PHP Parser) only in the use of this format may change compared with Cron (a Linux operating system, Unix or Linux) or Task Scheduler (on the operating system Windows). these Scripts site can also be used in Simple text processing tasks.

3. The writing desktop applications of course, PHP is the best language to write applications Window but if you know PHP very up and I use a PHP form processing on a machine (Client-side applications), it is possible to use PHP-GTK to programming. You can also program the system (Cross-platform).

2.5 PERSON-FILE-DATA

2.5.1 The PERSON-FILE-DATA will examine in standard structure under the following conditions.

1) The data must be complete and correctly the fields specific.
2) Check citizen identification code from the field CID.

3) Check PCUCODE field must have standards Bureau of Policy and Strategy Ministry of Health (five digit codes).

4) Check the field SEX female or male.

5) Check OCCUPA field must have standards Bureau of Policy and Strategy Ministry of Public Health.

6) Check NATION field must have standards Bureau of Policy and Strategy Ministry of Public Health.

7) Check RELIGION field required validation code standards Bureau of Policy and Strategy Ministry of Public Health.

8) Check EDUCATE field required validation code standards Bureau of Policy and Strategy Ministry of Public Health.

9) Redundancy check of the data by examination of field PCUCODE and CID.

10) Check the status of housing in the area of field TYPEAREA.

2.5.2 Flow structure check to the PERSON-FILE-DATA.

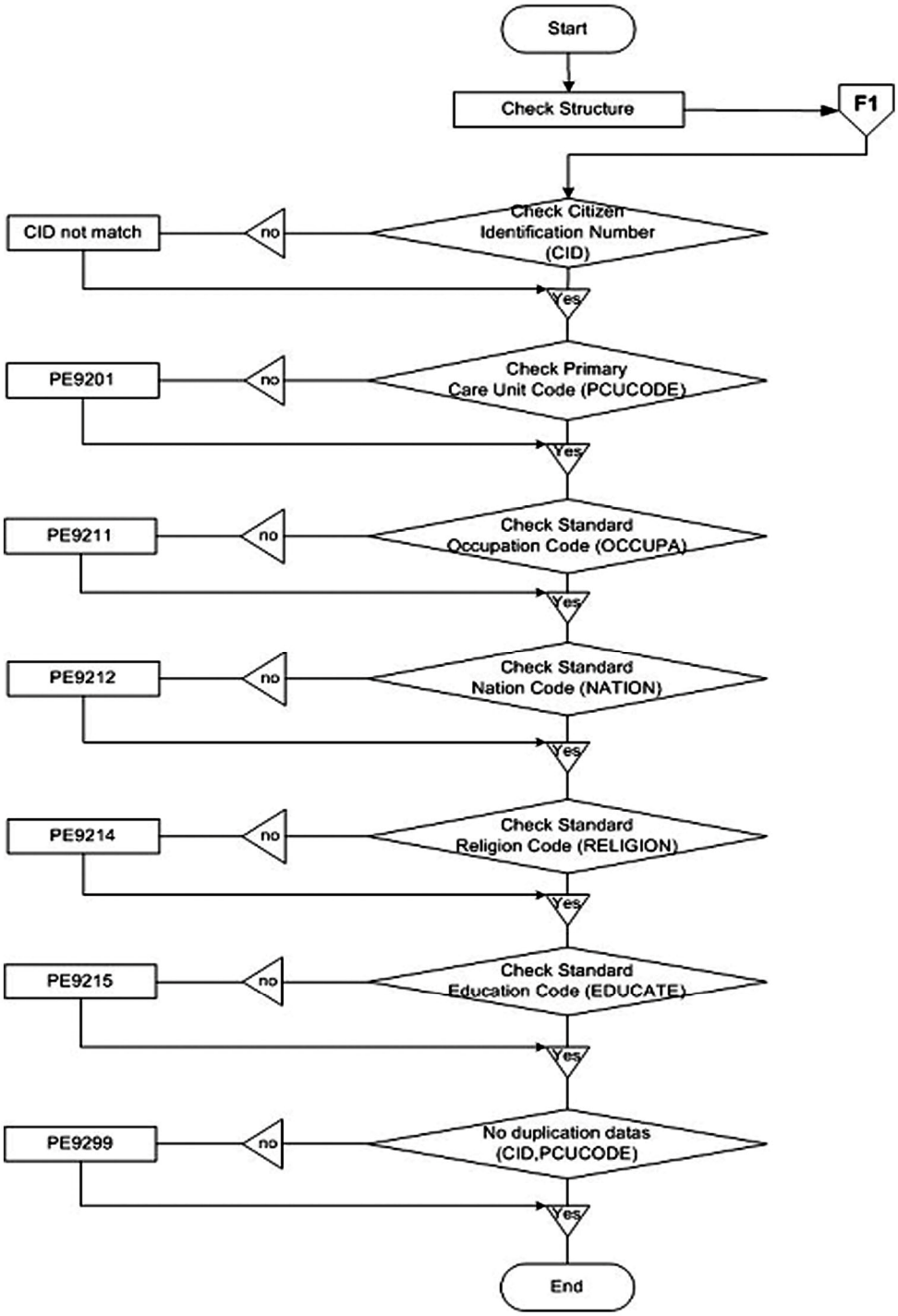


Figure 2.7 Flow structure check to the PERSON-FILE-DATA.

2.6 Results for the PERSON

The ability to record in the PERSON file for providers of services, although it would have helped to save the codes correctly (Drop Down) and a warning system and errors in the record, but it may have an error in recording the data. Because of their expertise attitude of data (user) change the migration appointing personnel to make a record (user) new, In addition to the standard code of Policy and Strategy. Affect quality. The accuracy of any Person as a result of the PERSON file of the National Health Security Office in September 2555 with the transfer of the person in the hospital, Hospital Health District and Medical Center, a community of 142 units and agencies through all the checks, only 2 percent from 1.59 outside the agency that the information is not verified to 140 percent 98.41 Based on amount of data. Found that a total of 1,938,813 records contain information that is not validated 954,120 record of 49.21 percent.

A problem of error of the PERSON-FILE_DATA is agencies can not verify data before submitting the data. They know that after the data had submitted and processing from the National Health Security Office which could not be resolved immediately. This causing harm and several agencies such as they can not processing data of outpatients and health promotion and disease prevention data from incorrect data of PERSON-FILE-DATA. This impacts to agency can not receive a promotion and development budget of information systems that allocate per the quantitative and qualitative data. In addition to the departmental level can not be utilized data due to the lack of quality information. The overall losses of resources, both in terms of budget, personnel, Hardware, Software and Network for the storage, processing, quality management and a lack of accuracy data.

2.7 Related Research

Aditep Pienpaingam (2006 : Abstract) made a study on Development of information system for administration of Wiangsa district public health office, Nan province finding indicated that The development of Information system was developed on database MySQL and PHP Language in order to command run on server side. The system will conclude report each month to Health Center for management level and

record report data through website http://www.saphd.org of Wiangsa District Public Health Office. The developed systems was designed under 3 types of user such as manager health officer and administrator and are responded on 4 main processes which comprised of management system, database management, data processing and report printing. The result of this study was evaluated from actual usage by staff members at Wiangsa Public Health and 40 questionnaires assessment. The result showed the average of efficiency level in actual usage of system was excellent.

CharukanInkaew and BenchapornSriwanwit (2008 : Abstract) made a study on Pharmaceutical Warning System Via MMS. Pharmaceutical Warning System Via MMS is developed to help patients using medicine from doctor's recipe. This warning system will send MMS to patient's mobile. MMS that is easy to understand than text messages will support these patients to get the right medicines. Pharmaceutical Warning System Via MMS consist of three subsystems. There are web application, server application and mobile emulator which is used to open notifications. We collect data from believable sources for analysis and determine system's capability. Then Pharmaceutical Warning System was designed and developed Via MMS using these data and technologies. In the test process, the system can run correctly. The issues and answer of development for anyone who's interested in this area are defined.

Chumphon Sutti (2007 : Abstract) made a study on Development of management information system for electronic office at Wiangsa Public Health Office, Nan province finding indicated that The system was developed by using the MySQL (native driver PHP) to construct the relative database server. This composed of five processes, which were system management, leave management, document and format management, report and compute, and organizer calendar for the managers to organize their works through the website http://pirapar.or.hn/pirapat/edoc. Applications of the developed system in collecting, analyzing, monitoring, and computing made more efficient in data management of the Public Health Office. The system was evaluated by four groups of users (total n=81), including, office manager (n=1), officer (n=9), network user (n=70), and system controller (n=1). Mean value of satisfactory evaluation gave the best results since the excellent features of the developed system, which are user friendly, not a time consuming process, and high accuracy that

provided complete and desired data for the users. It can be used as the model for software development for the other offices. Moreover, it can be used as data resources for management, monitoring, and evaluation. However, the user interface gave the moderate results.

Roongjit Termtaw (2000 : Abstract) made a study on Design And Development Of Database System Case Study: Summarize Health Related data from Bureau of Health Policy and Planning, Ministry of Public Health finding indicated that The ease of use of the automated program helps the end user and executive manager with secondary information. Research has found that the application program (Prototype Program) has helped educators, executive managers and customers to retrieve important information quicker than old document processing for administrative tasks and policy making. It also reduced the task of the officers to produce timely information. It can be used as a guideline for other departments to develop a health information system.

Supachai Tammawong (2007 : Abstract) made a study on Development of information management system on Mae Hong Son Provincial Public Health Office Website finding indicated that The website was structured into two major systems. First, general officers and general users can only browse website. Second, administrative users can manipulate data – update and delete. The data that can be manipulated are vision, mission, reservation of meeting room cars and projectors, population, AIDS status, list of communication diseases, personal, file download, picture album, activity news, auction news, article and password management.

The evaluation of this development is from the questionnaire that asking about satisfaction of general usage of administrators, data management officers, general officers and general persons show 4.35, 4.25 and 4.75 respectively, which mean satisfied. Therefore, the development of information on Mae Hong Son Provincial Public Health Office website is useful and follows all objectives of the independent study.

From the research study and research papers related to the above studies, respectively the principle of the development of information system and management information systems for management used in the planning process to analyze and determine the needs of the system. The principles of database management to the

design process solutions and database design, as well as the concept of website design and management system designed to display the site in preparation of the home. The home page of the Nakhon Pathom Public Health Provincial Office, also. The study was the variation in the use of tools used in the development of the Education Independent Study as a tool in system development is to create a relational database using MySQL PHP in order to write the work computer server.

CHAPTER III
RESEARCH METHODOLOGY

In this chapter the developer of a data collection method in system development and discusses the data analysis to be applied to the system performance as well as the capabilities of the system.

3.1 Flow of system

3.2 The Design of Web Application

3.3 Database Design

3.4 System Development

3.5 The Minimum System Requirements

3.1 Flow of system

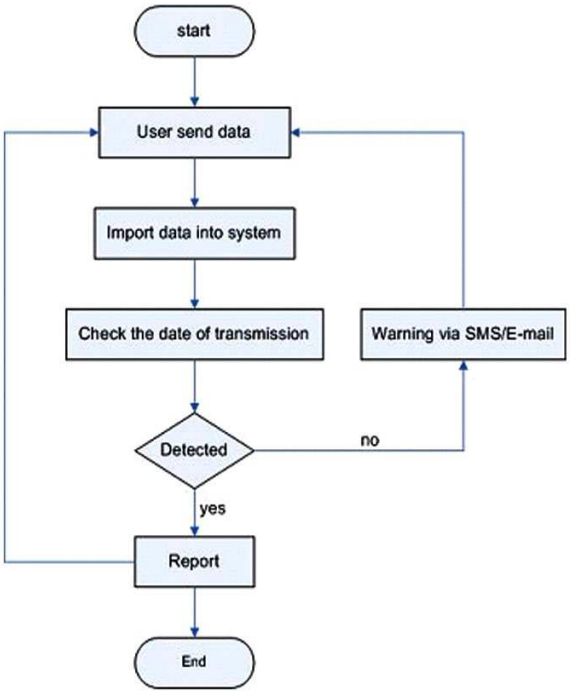


Figure 3.1 System Flow

3.2 The Design of Web Application

3.2.1 Targeting database (Database Planning) can be summarized as follows:

3.2.1.1 Part of the management of the system.

1) Personal information of users (add, edit, delete).

3.2.1.2 Part of the report.

1) Record your report importing data.
2) Report the results of the data quality.
3) Timely reporting of sending data.
4) Quantity data report.

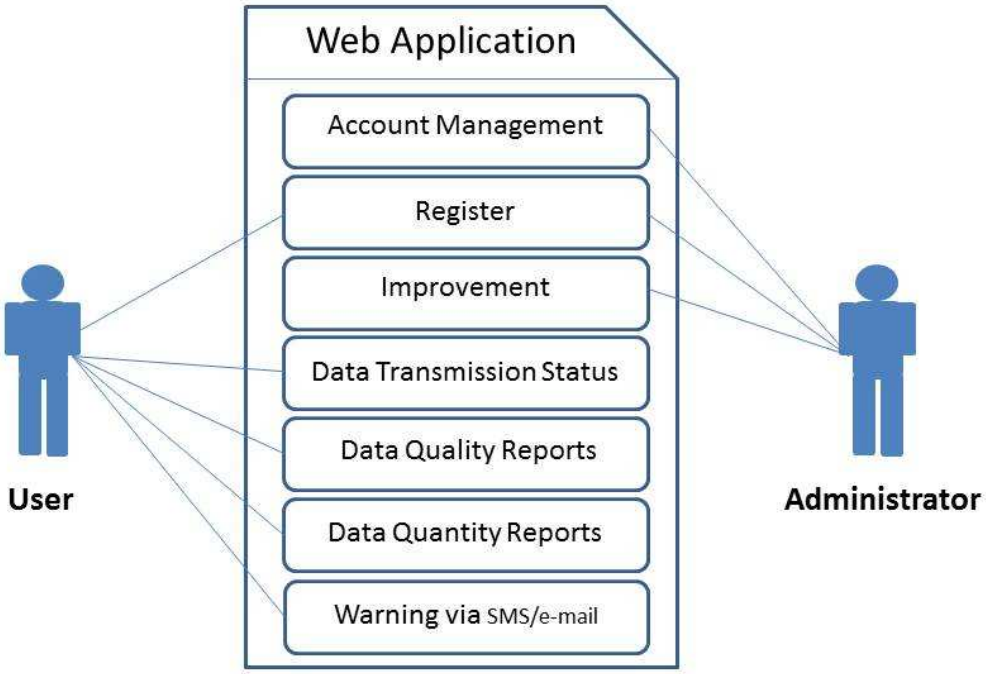


Figure 3.2 Use Case

3.2.2 System Definition defined as follows.

3.2.2.1 Administrators can manage users, such as registration, edit, delete and authorize user to system.

3.2.2.2 System administrator handles the standard data 21 files by decompress the compress file to database.

3.2.2.3 System users must register for right to access the system.

3.2.2.4 System user imports the compressed file of the standard data 21 files into the system.

3.2.2.5 System users can check quality of the PERSON file data (part of the standard data 21 files) of their service unit.

3.2.2.6 System users can check the amount of record of the PERSON file data (part of the standard data 21 files) of their service unit.

3.2.2.7 The system users can monitor the punctual of imported data of their service unit.

3.2.2.8 The System can inform warns sending data status via SMS and E-mail to each users.

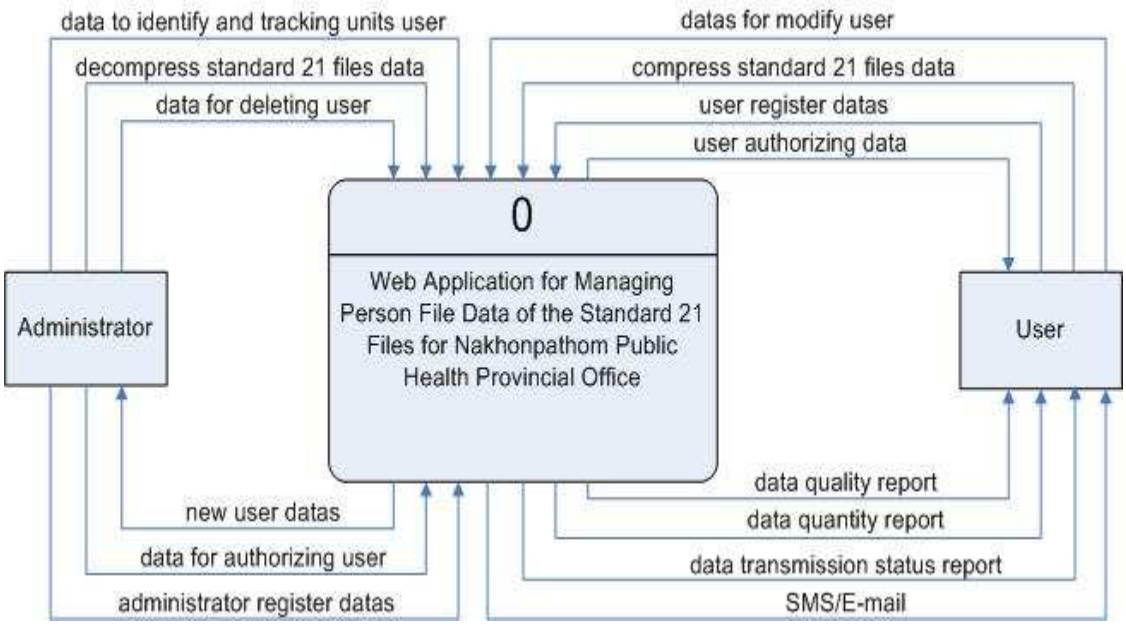


Figure 3.3 Context Diagram

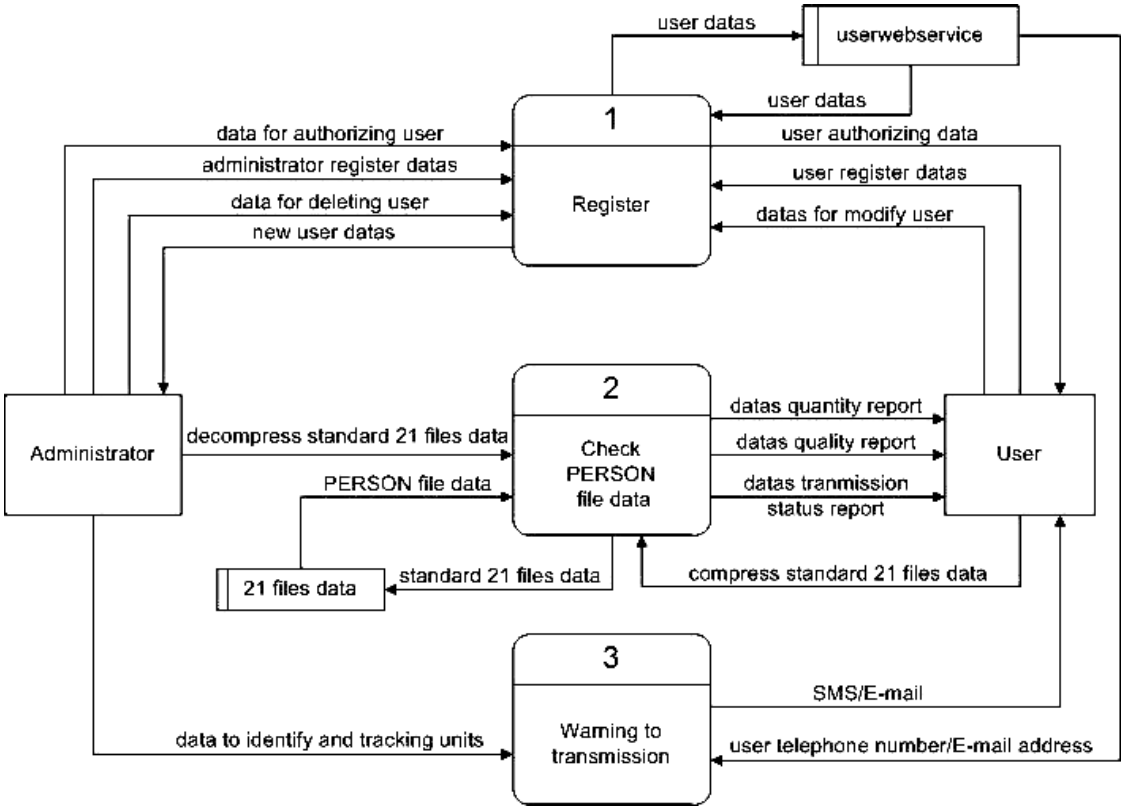


Figure 3.4 Data Flow Diagram Level 0

Process 1 User management system

As part of the management system users. Users are registered to use, modify their registration information. The administrator can delete users and allow users to access the system. (The details shown in the Figure 3.5)

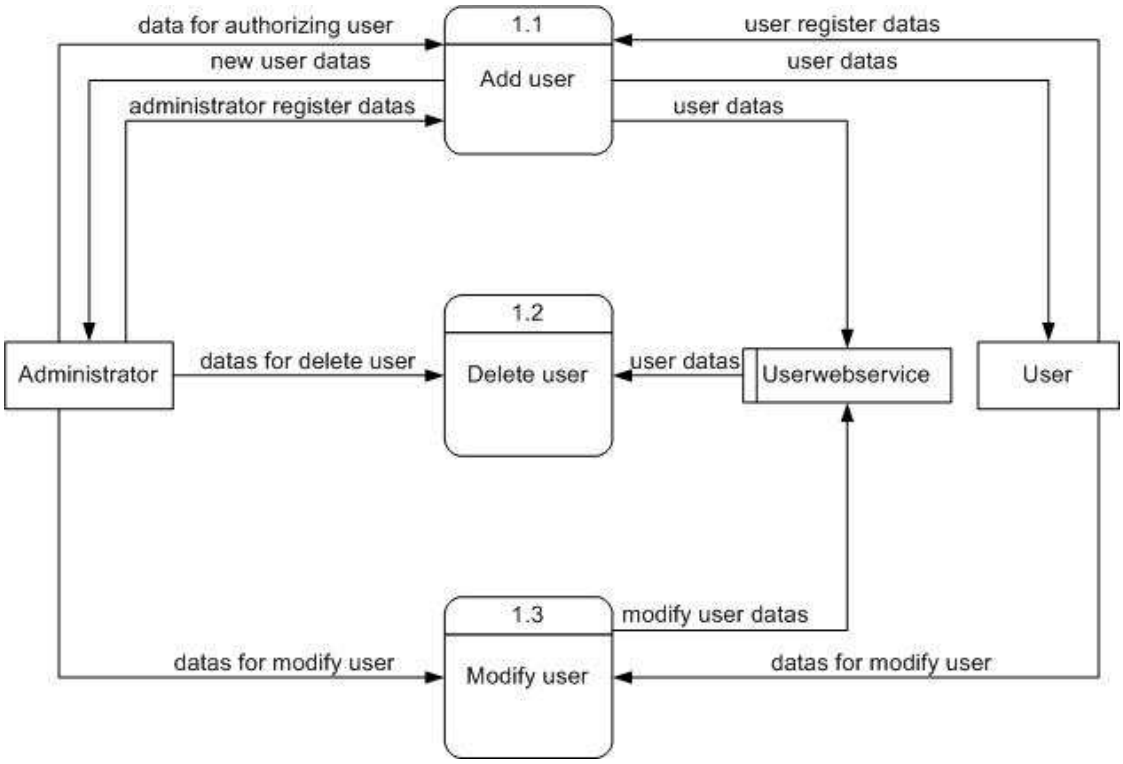


Figure 3.5 Data Flow Diagram Level 1 (Process 1)

Process 2 Data processing system

As part of the data processing which system users import compressed the standard data 21 files to the system. Administrator will run script to extend the data to database. The results of processing will be able to report the data quantity report, the data quality report and data transmission status to user. (The details shown in the Figure 3.6)

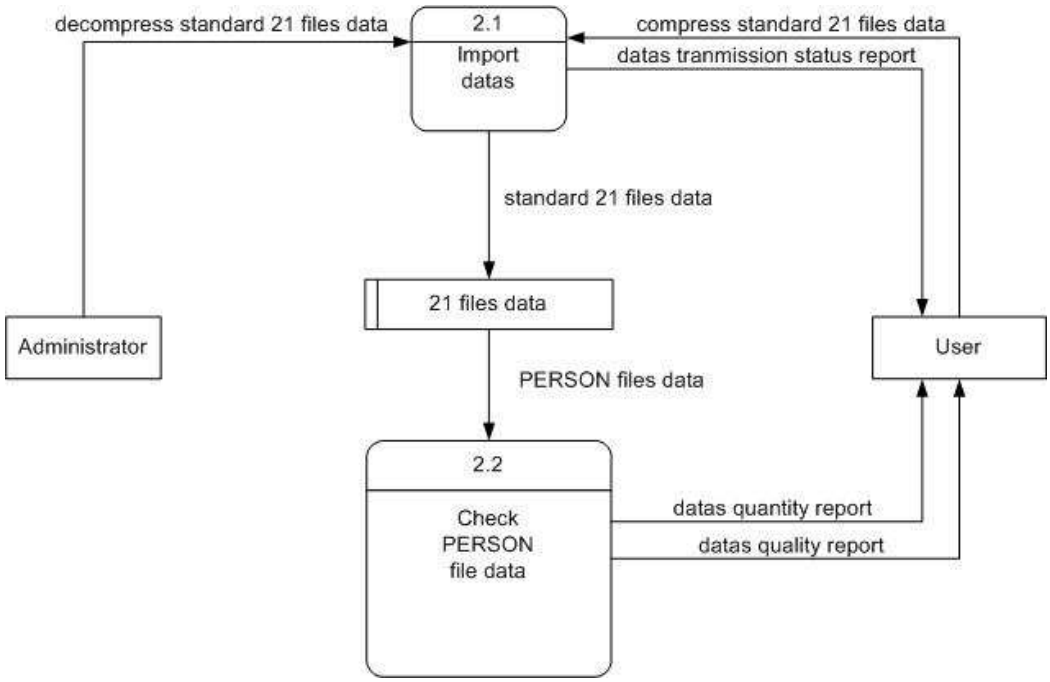


Figure 3.6 Data Flow Diagram Level 1 (Process 2)

Process 3 Warning system

As part of checking the service unit that lack of sent the standard data 21 files. The administrator will process to check that then the system will send alerts via SMS and e-mail to system users. (The details shown in the Figure 3.7)

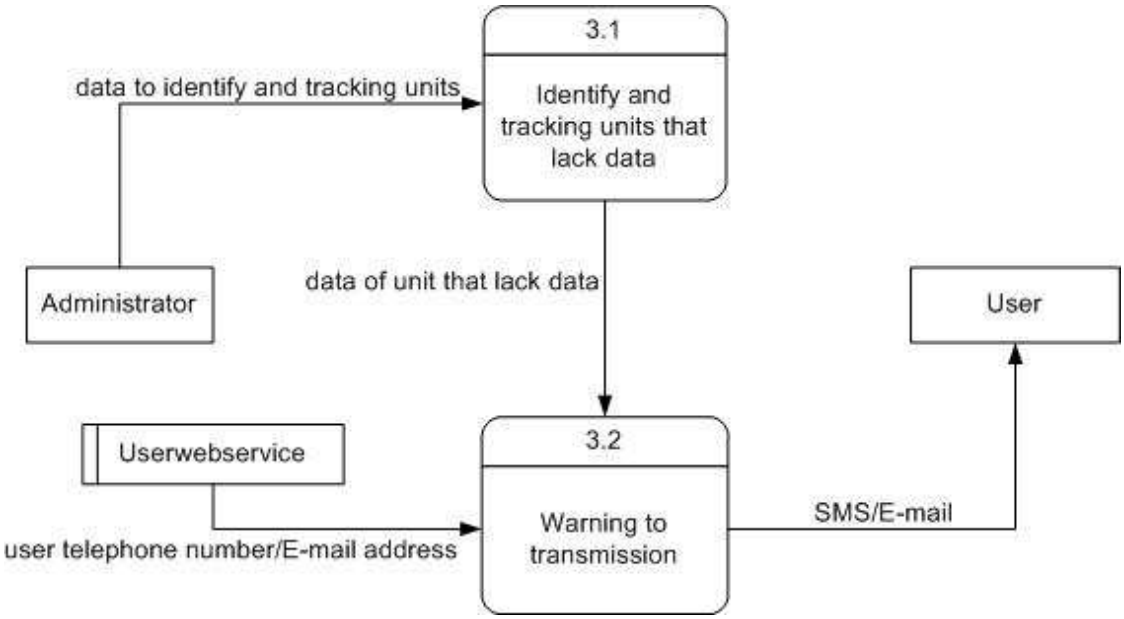


Figure 3.7 Data Flow Diagram Level 1 (Process 3)

3.3 Database design

3.3.1 Database design by divided into two levels as follows:

1) Conceptual database design

2) Physical database design

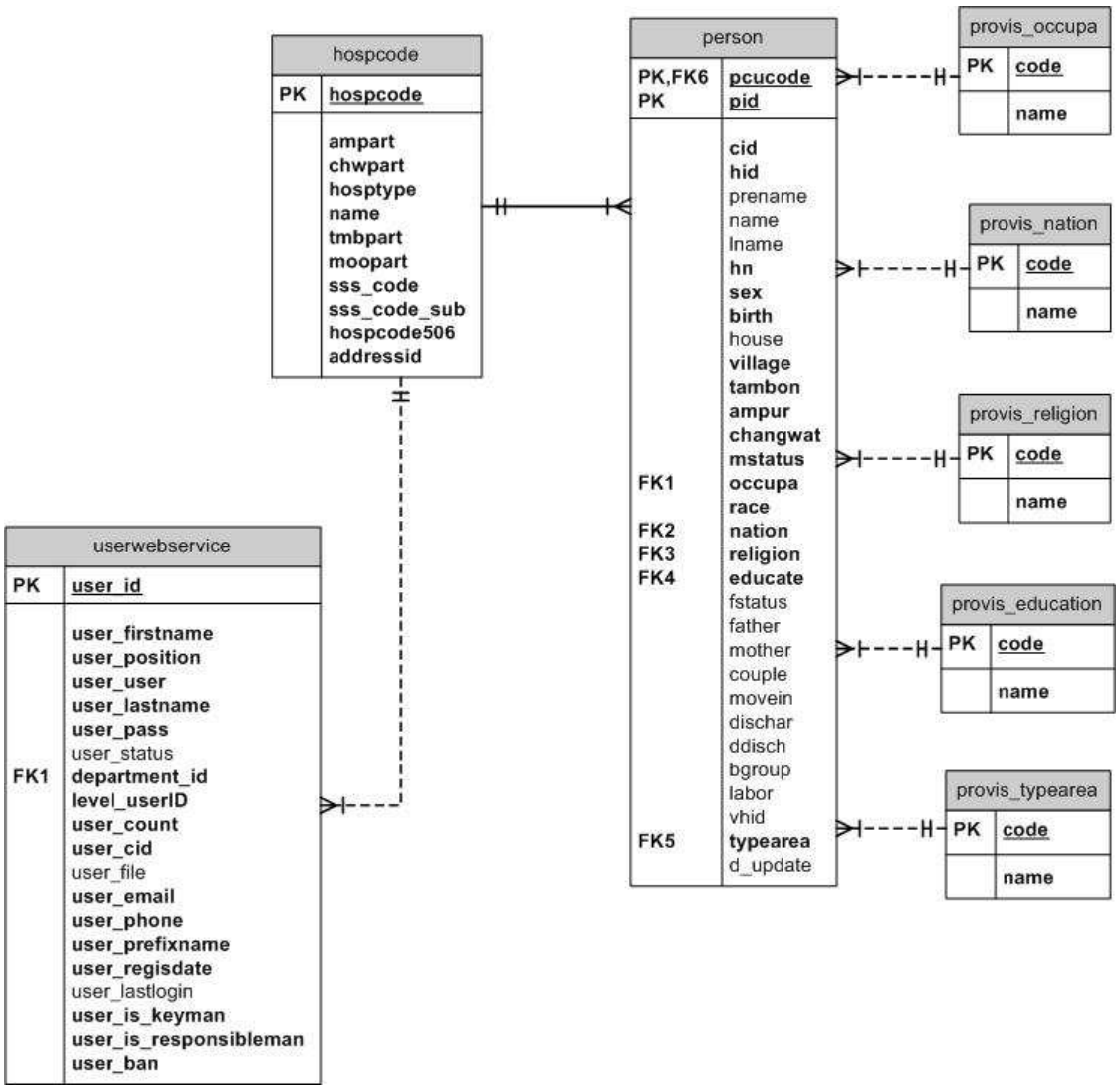


Figure 3.8 Entity Relationship Diagram

3.3.2 Application Design

The Transaction Design and User Interface Design, which is concerned with the design of the screen and form and report.

3.4 System Development

Consists of two parts.

1) The hardware section is part of the device that is used in development system, with details as follows:

Hardware refers to devices that make up a computer with an outline can be seen with the eye and the touch screen, keyboard, mouse, printer etc.

- CPU Intel Pentium four over.
- Ram 1 GB over.
- Hard Disk minimum 40 GB.
- Network Card for connection Internet.
- Display
- Mouse and Keyboard

2) Part of the software as part of the operating system and programs used by the use.

Software refers to the meaning of human experience is not directly (abstract) a program or set of instructions that were written to instruct the computer to run the software as well as the link between a PC and computers. If we cannot use computer software to do anything with it. Computer software is used to run the computer. Because the sequence of the computer. One computer to work with much different software. Software means any computer program that makes the computer work.

- Microsoft Windows XP is Operating system.
- And the Apache Web Server to use as a computer simulation Server.
- MySQL Server database for database storage.
- PHP Language in development Web application.
- Program Macromedia Dreamweaver for make Website.
- Program Adobe Photoshop for decorate picture.

3.5 The Minimum System Requirements

The system developed for this system can work effectively should have the following minimum system requirements.

1) Server setup for Web Application.

- A central processing unit (CPU), 4-core (4 core) or better for the host computer (Server), especially with a clock speed of at least 2.4 GHz At least one unit of CPU for processing. a 64 bit memory at least 8 MB Cache Memory and bus Speed of not less than 1,066 MHz.
- The main memory (RAM) of ECC DDR3 or better with at least 4 GB.
- Support work at least RAID RAID 0, 1, 5.
- The storage (Hard Disk) type SATA or SAS or SCSI or better with a minimum speed of 7200 rpm and a capacity of at least 140 GB At least 2 units.
- A DVD-ROM or better than 1 unit.
- There is connection with the network 10/100/1, 000 Mbps, not less than 2 channels.
- The LCD screen size is less than 17 inches 1 unit.
- There is a Power Supply Hot Swap Redundant Power Supply or 2 units.
- Install the operating system software Windows Server2008.

2) Client

- A central processing unit (CPU) of not less than 4 core (4 core) with at least 2.5 GHz clock speed and memory speed or HTT is not less than 1,066 MHz 1 unit.
- The main memory (RAM) of DDR3 or better with at least 4 GB.
- The storage (Hard Disk) SATA or better capacity of not less than 1 TB 1 unit.
- A DVD-ROM or better than 1 unit.
- There is connection with the network 10/100/1, 000 Mbps, not less than 1 channel.
- The LCD display has a 600:1 Contrast Ratio of not less than 18 inches and no smaller than number 1 unit.

CHAPTER IV
RESULTS

In this study of Information System for Health Information Management of Nakhon Pathom Public Health Provincial Office which development result and testing of Web Application system for data management person. By testing system with user for example executive Public Health Provincial Office, Public Health District Office, Tambon Health Promoting Hospital, Hospital and System administrator by integrated standard data set21 files. The developer system divides the two parts of the system design as follows.

4.1 Part of the developer System

4.2 Part of the User

4.1 Part of the system developer

The system developer mean persons who are employed in order to view and manage systems or computer networks. Administrative duties are diverse depending on the organization or project. General administrative duties often installed on a server administrator or other computer systems. Including planning, supervising projects related to computer systems. In addition, the administrator may have duties of programmers as well. In the field of programming included to prepare and teaching applications to users.

Beside as for the system developer will function management with all personnel by the screen for give the system developer use login for admin as shown in the Figure 4.1.

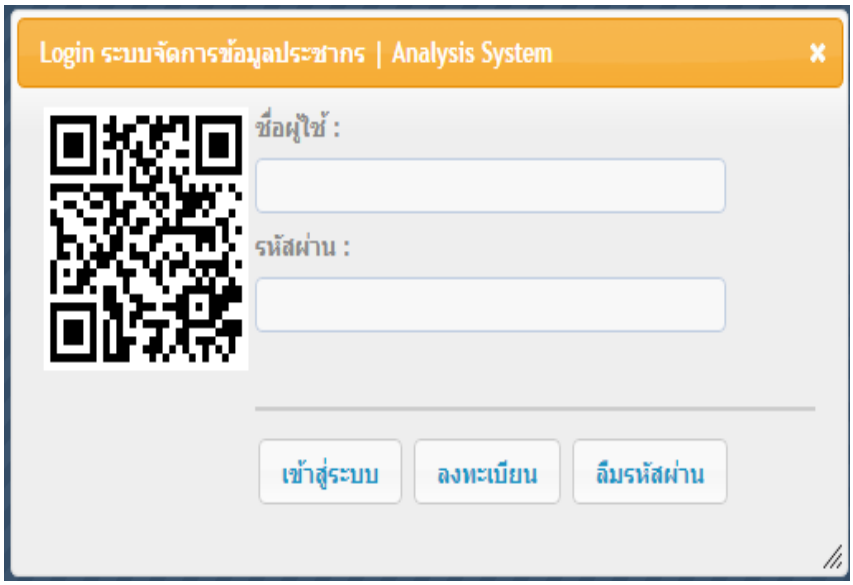


Figure 4.1 Login System for Admin

Enter the username and password prior to the use of various forms username and password that you received from the Web Sever on the information is correct appears in the first page of a web applicationas shown in the Figure 4.2.

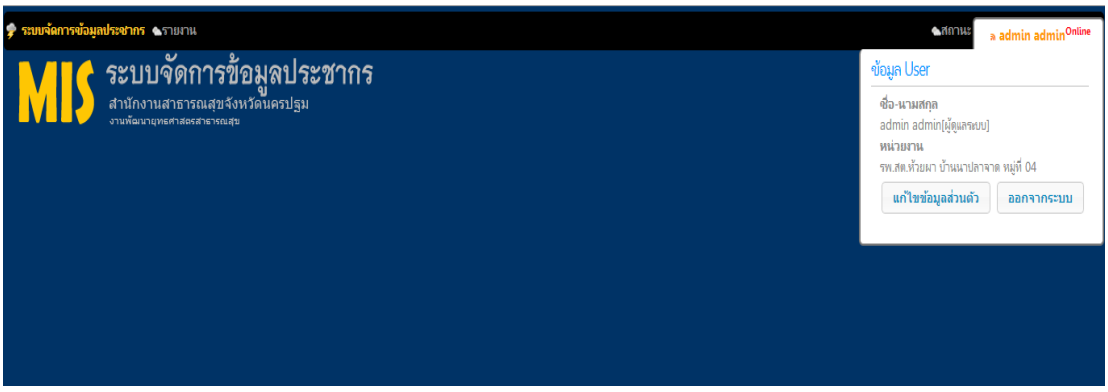


Figure 4.2 In the first page of a web application

4.1.1 Management system .The system developer can manage the system as follow.

1) Monitoring data and information are listed and condition monitoring data quality. The developer will be able to configure the monitoring data.

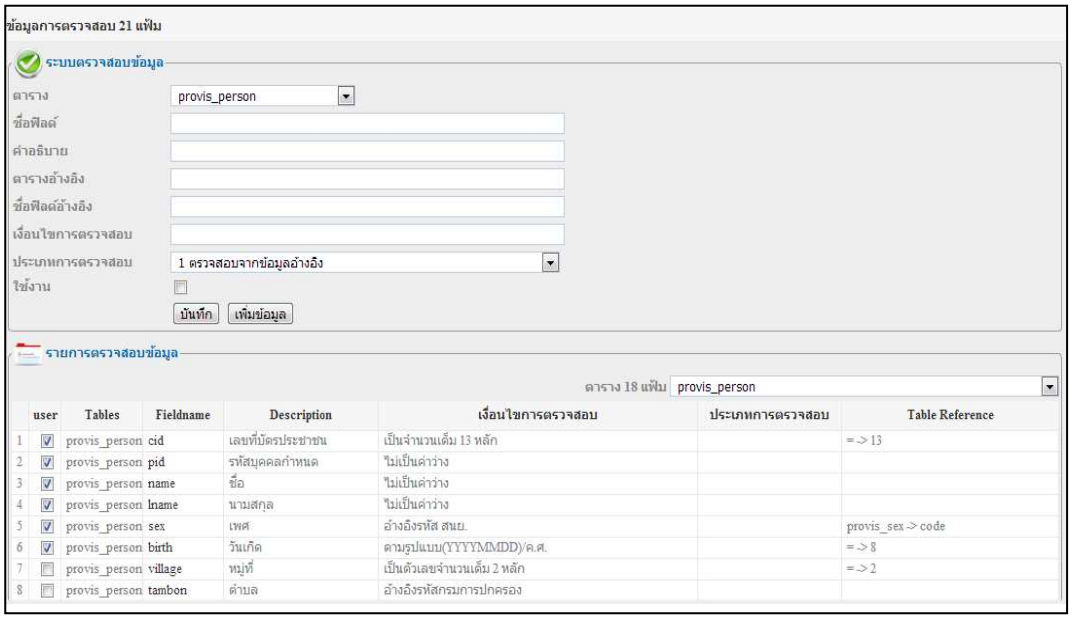


Figure 4.3 Check the person settings.

2) Management menu be defined as the use of web applications for users. The menu can be set to any active or not.

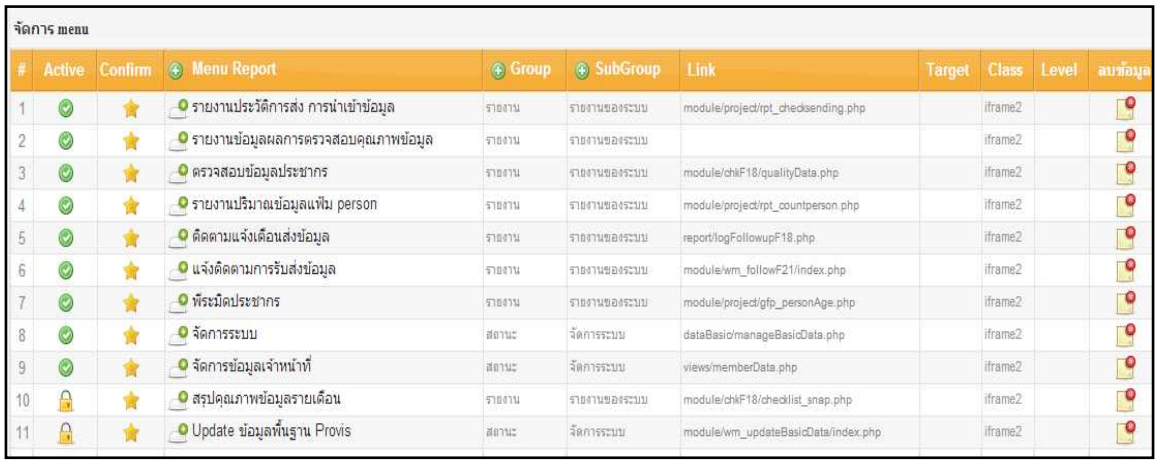


Figure 4.4 Management menu

3) SMS settings as part of the detailed settings for sending SMS notifications sent data.

Figure 4.5 SMS settings

4) E-mail settingas part of settings a profile and send E-mail notification sent data.

Figure 4.6 E-mail setting

5) Set notification send data for developer can determine the details of the notification send data as follows.

- The last day of each month to send information such as date 25th of every month.
- Style notification be E – mail or SMS.

- Recipient notification,who is the determine warning to recipient notification.

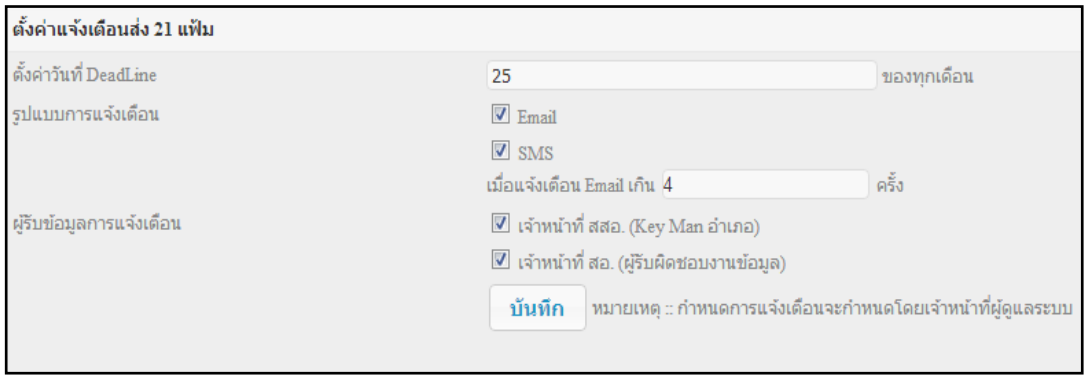


Figure 4.7 Set notification send data

4.1.2 Information management officer for data management staff at the registration system by developers to approve the application can access it or remove users log off.

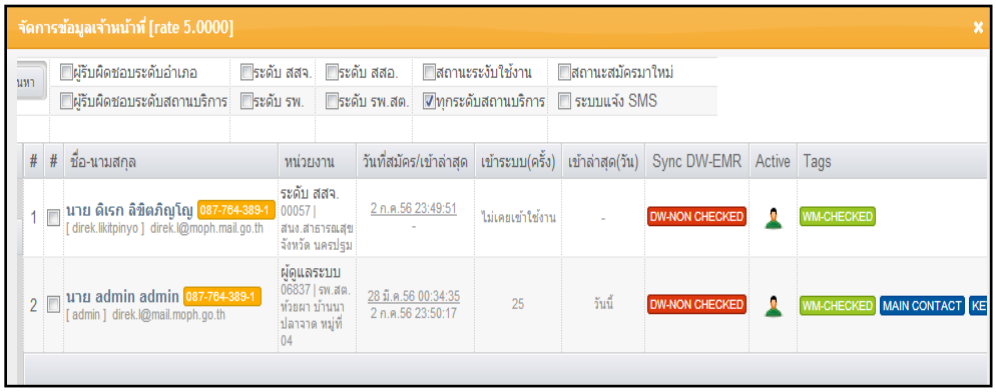


Figure 4.8 Information management officer

4.1.3 Administrators can identify and tracking units that lack data by select the desired month follow-up data, the system will assess and notification to the sender via SMS and e-mail as show in Figure 4.9.

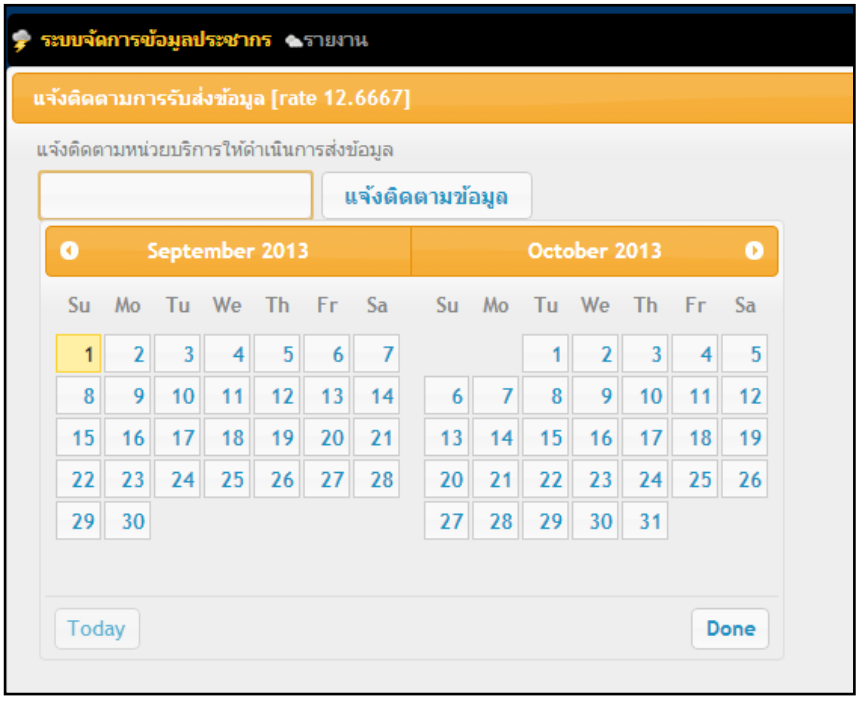


Figure 4.9 Identify and tracking units that lack data

4.2 Part of user

System user mean ndividuals who control and manage enterprise information systems or operational staff directly related to information systems besides include general computer user. Previous work by the agency itself. In this place user mean Provincial Public Health Office, District Public Health Office, Tambon Health Promoting Hospital and Hospital

Therefore the system developer segmentation of users into two parts for example.

4.2.1 Registration and Login.

4.2.2 System applications.

Users can access the web application with a login username and password to login to the online registration page, If do not have an account can register on the page login as shown in the Figure 4.10.

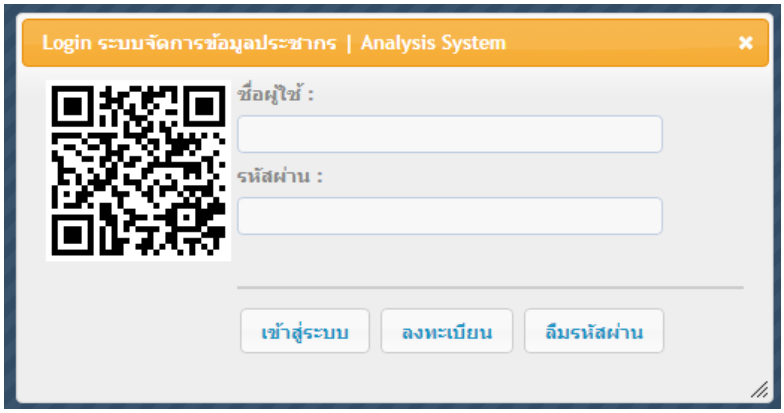


Figure 4.10 Login for User

A new user account can apply for username and password by clicking the registration page to login page will appear as shown in the Figure 4.11.

Figure 4.11 Agreement, the rules and regulations for system user

Rights and responsibilities user about register to use the WM Webmanager system.

Your Welcome, 21 file information systems for databases by Public Health Provincial Office. Please read on to understand terms. Our rules and regulations listed below. If you agree to the terms and conditions, click Agree (acceptance) to enter the next stage of the registration process, If you do not accept the conditions. Please click Disagree (not OK) to log out.

Condition

1. The Systems Management Information of Public Health Provincial Office Datacenter were made to the system used in the management of centralized data management 18 file (Datacenter) to be able to manage such a system. It is divided into levels of access to different levels in order to cover the personal data of patients.

2. Fill in the information you will need to register a new, complete and true. According to the information in the system.

3. We reserve the right not to use these words in the username, username or ID as webmaster, admin, administrator or other words that are identified as the administrator or as a team of Public Health Provincial Office to prevent misunderstandings and deceive as a team of Public Health Provincial Office, If you suspect that the application name is available or not. You can contact the team before the application process can be otherwise, if the ID will be deleted log out.

4. If you do not login for the first time after you register within 7 days your membership will be terminated and during use, if you do not login to use for 60 consecutive days from the date of your last visit. The members will be terminated. I assume you do not want to use the service. If you want to use another service. You will need to register here.

5. For safety you must keep your username, password and personal information as well. Do not let others know.

6. All applications must cooperate by regulations (Our Rules) of the Public Health Provincial Office.

7. If team finds to have violated the terms and conditions set forth Public Health Provincial Office. We reserve the right to suspend your ID without notice.

Regulations

The team collaboration for public health officials. Please read all terms of use and thorough, follow strictly,in order to maintain the confidentiality of patient.

1. Do not release patient information to unrelated third parties.
2. Do not use someone else's ID.

Information into the systemas shown in the Figure 4.12

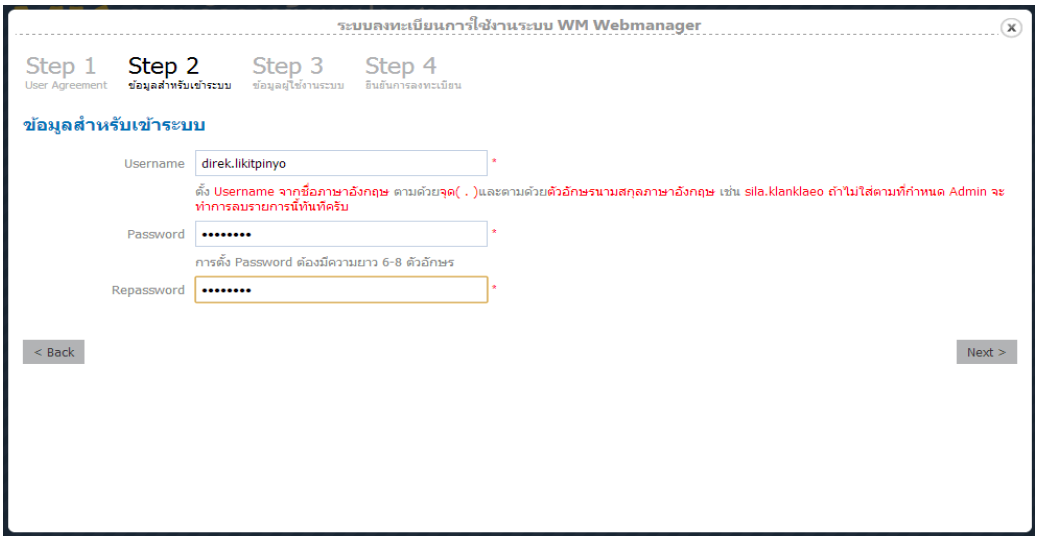


Figure 4.12 The fill in data username and password for user

Information System User as shown in the Figerure 4.13

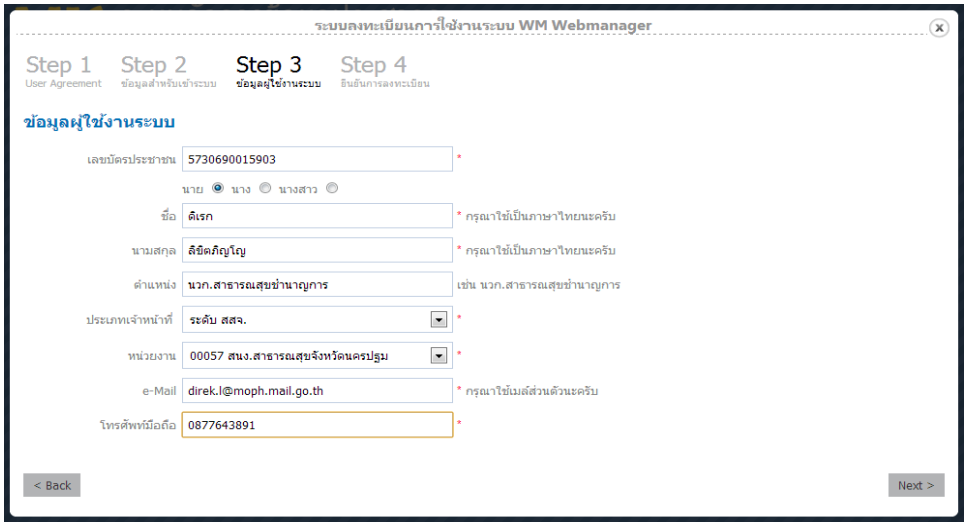


Figure 4.13 To fill indata System User

Registration confirmation as shown in the Figure 4.14

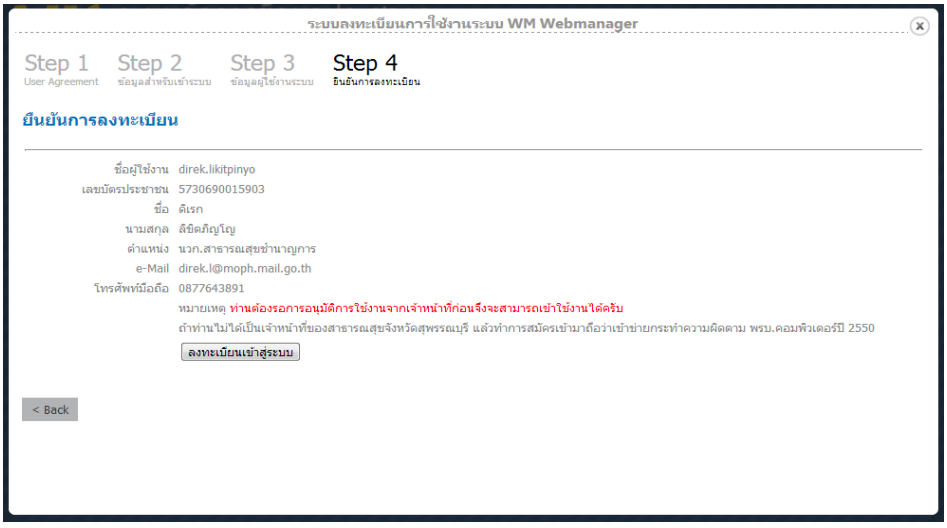


Figure 4.14 Registration confirmation for User

4.2.2 System applications

4.2.2.1 Demographic report in a population pyramid can data included or separate entities as shown in the Figure 4.15.

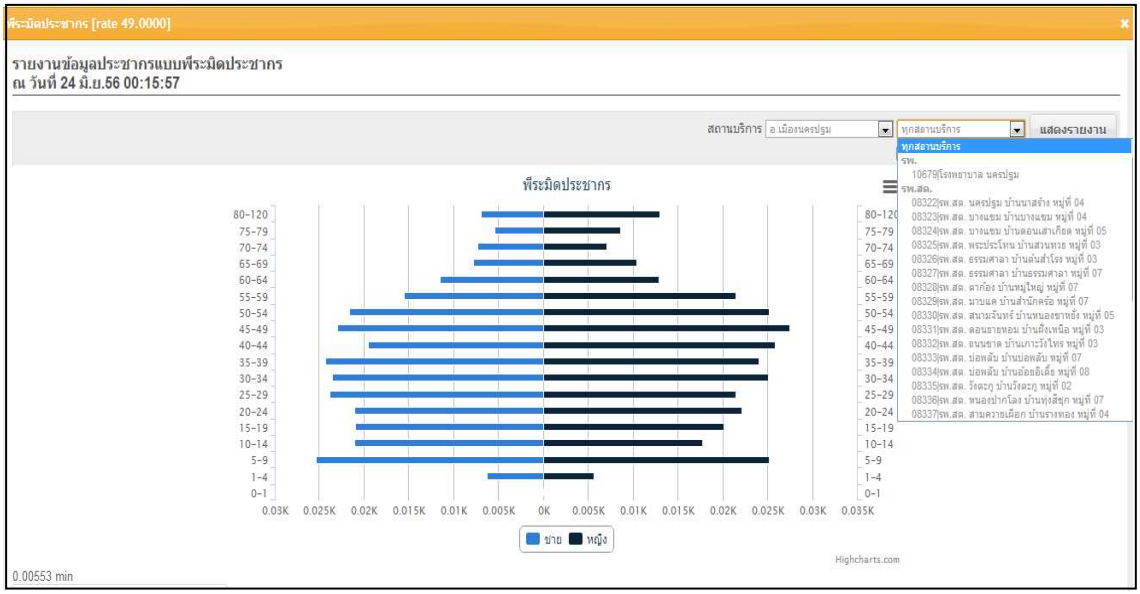


Figure 4.15 Demographic report in a population pyramid

4.2.2.2 Reporting quality data. Quality data and reports can display incorrect information. Required by condition monitoring,which can be shown for the agency as shown in the Figure 4.16.

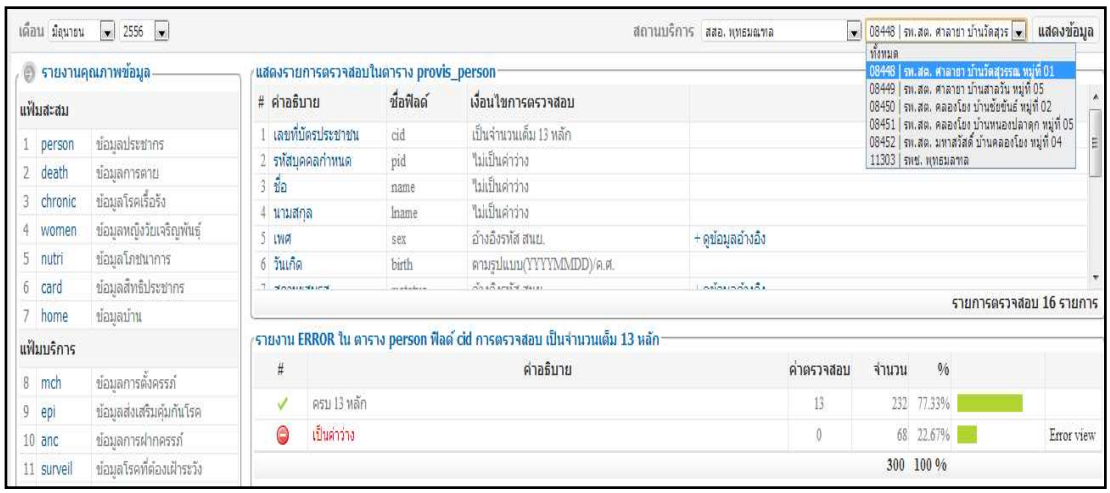
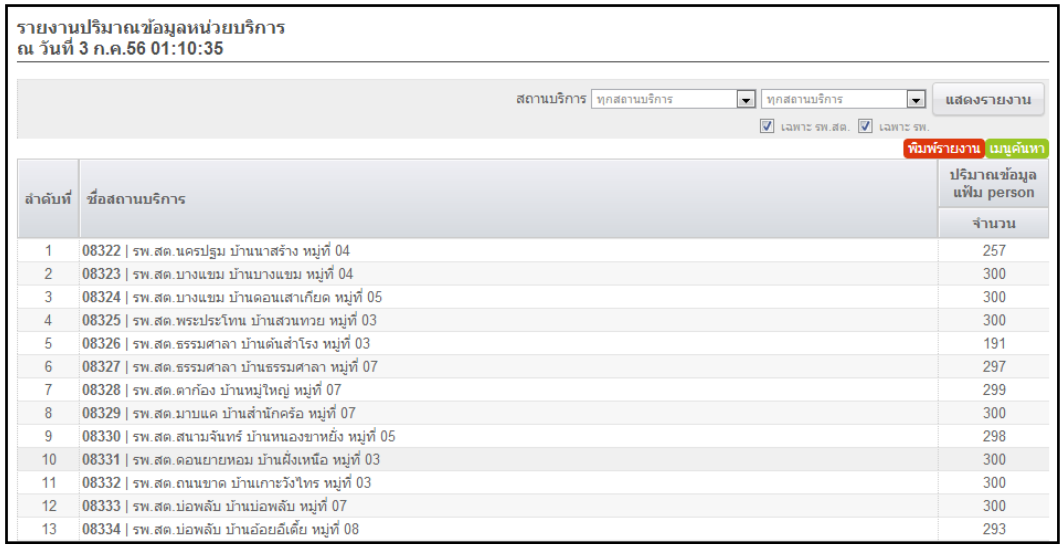


Figure 4.16 Reporting quality data

4.2.2.3 Report the amount of information available. Show context information to the individual agencies as shown in the Figure 4.17.



รายงานปริมาณข้อมูลหน่วยบริการ
ณ วันที่ 3 ก.ค.56 01:10:35

สถานบริการ ทุกสถานบริการ ทุกสถานบริการ แสดงรายงาน
เฉพาะ รพ.สต. เฉพาะ รพ.
พิมพ์รายงาน เมนูค้นหา

ลำดับที่	ชื่อสถานบริการ	ปริมาณข้อมูลแฟ้ม person
		จำนวน
1	08322 | รพ.สต.นครปฐม บ้านนาสร้าง หมู่ที่ 04	257
2	08323 | รพ.สต.บางแขม บ้านบางแขม หมู่ที่ 04	300
3	08324 | รพ.สต.บางแขม บ้านดอนเสาเกียด หมู่ที่ 05	300
4	08325 | รพ.สต.พระประโทน บ้านสวนทวย หมู่ที่ 03	300
5	08326 | รพ.สต.ธรรมศาลา บ้านต้นสำโรง หมู่ที่ 03	191
6	08327 | รพ.สต.ธรรมศาลา บ้านธรรมศาลา หมู่ที่ 07	297
7	08328 | รพ.สต.ดาก้อง บ้านหมู่ใหญ่ หมู่ที่ 07	299
8	08329 | รพ.สต.มาบแค บ้านสำนักครัว หมู่ที่ 07	300
9	08330 | รพ.สต.สนามจันทร์ บ้านหนองขาหยั่ง หมู่ที่ 05	298
10	08331 | รพ.สต.ดอนยายหอม บ้านฝั่งเหนือ หมู่ที่ 03	300
11	08332 | รพ.สต.ถนนขาด บ้านเกาะวังไทร หมู่ที่ 03	300
12	08333 | รพ.สต.บ่อพลับ บ้านบ่อพลับ หมู่ที่ 07	300
13	08334 | รพ.สต.บ่อพลับ บ้านอ้อยอิเตี้ย หมู่ที่ 08	293

Figure 4.17 Report the amount of information available

4.2.2.4 The system can report transmission status. This report can be viewed by time period and the service units as shown in the Figure 4.18.

รายงานสถานะการส่งข้อมูล
วันที่ให้บริการ 1 ต.ค.55 ถึง 31 ต.ค.55
ณ วันที่ 3 ก.ค.56 01:15:03

สถานบริการ ทุกสถานบริการ ทุกสถานบริการ แสดงรายงาน
ช่วงวันที่ 2012-10-01 ถึง 2012-10-31
เฉพาะ รพ.สต. เฉพาะ รพ.
พิมพ์รายงาน เมนูค้นหา

ลำดับที่	ชื่อสถานบริการ	สถานะการส่งข้อมูลของหน่วยบริการ	
		สถานะการส่ง	จำนวน service
1	08322 | รพ.สต.นครปฐม บ้านนาสร้าง หมู่ที่ 04	ส่งแล้ว	499
2	08323 | รพ.สต.บางแขม บ้านบางแขม หมู่ที่ 04	ส่งแล้ว	499
3	08324 | รพ.สต.บางแขม บ้านดอนเสาเกียด หมู่ที่ 05	ส่งแล้ว	500
4	08325 | รพ.สต.พระประโทน บ้านสวนทวย หมู่ที่ 03	ส่งแล้ว	451
5	08326 | รพ.สต.ธรรมศาลา บ้านต้นสำโรง หมู่ที่ 03	ส่งแล้ว	500
6	08327 | รพ.สต.ธรรมศาลา บ้านธรรมศาลา หมู่ที่ 07	ส่งแล้ว	499
7	08328 | รพ.สต.ดาก้อง บ้านหมู่ใหญ่ หมู่ที่ 07	ส่งแล้ว	500
8	08329 | รพ.สต.มาบแค บ้านสำนักครัว หมู่ที่ 07	ส่งแล้ว	500
9	08330 | รพ.สต.สนามจันทร์ บ้านหนองขาหยั่ง หมู่ที่ 05	ส่งแล้ว	500
10	08331 | รพ.สต.ดอนยายหอม บ้านฝั่งเหนือ หมู่ที่ 03	ส่งแล้ว	500

Figure 4.18 Reported transmission status

4.2.2.5 This section shows the details of the system developer as shown in the Figure 4.19.

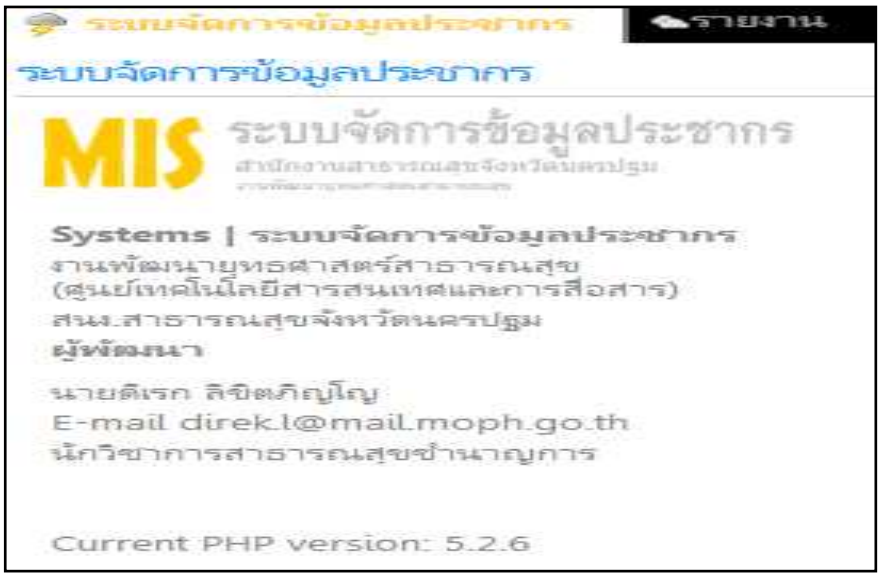


Figure 4.19 The developer System

4.2.2.6 Log out of the system when not in use program

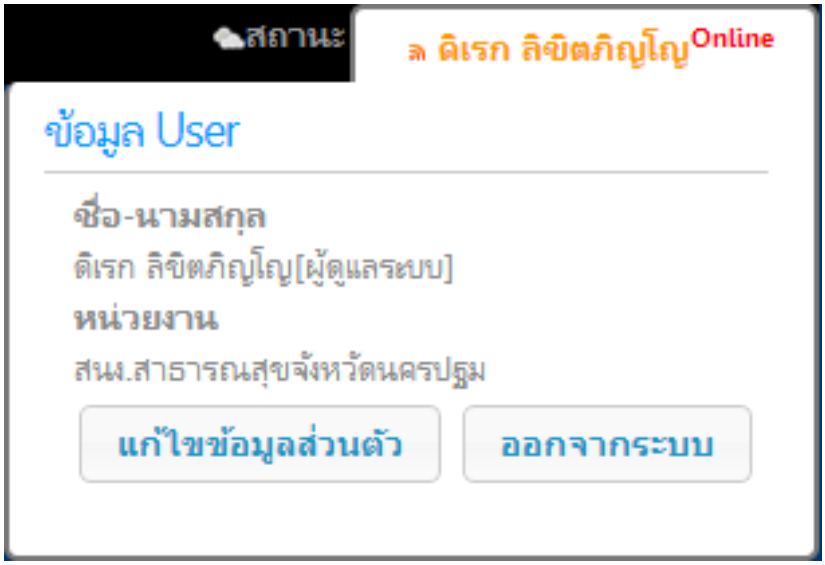


Figure 4.20 Log out of the system

CHAPTER V
CONCLUSION AND RECOMMENDATIONS

The data management system was developed to utilize information and communication technologies in supporting management of the Person File data, as it was one of the Standard 21 Files data system of the Ministry of Public Health. Its main feature was the ability to notify service units to submit the data within the set schedule and to recheck accuracy and completeness of the data submitted.

As its name suggested, the Standard 21 Files database consists of 21 files and this system is designed for data management of only the Person File because of importance of its data. Data of this file was the main database to be used and rechecked data accuracy of other files. The intended operators of the system were public health personnel who were authorized to operate the system. As a result, they were required to submit their names, positions, and the identification number of their Thai National card before each access.

Results the development, problems and limitations, and recommendations for improving the system were summarized as follows.

5.1 Results

Following concept and method mentioned in chapter three, the system has been successful developed. It could help manage data of the Person file according to the structure of the Standard 21 Files requirements effectively. It ran fast and produced the expected data. The early warning scheme could send notifying SMS and e-mail to service units to submit and recheck completeness of the data as planned. The system provided opportunities for Personnel who used the system to learn how to utilize technologies to support their works, data quality improvement in particular.

The system allowed its developer to gain wide range of knowledge and experiences, academic and working habit, as well. The academic knowledge included computer program development both in the forms of web and server applications, web application development by PHP language, database management by the MySQL database program, database structure and data relation of the Standard 21 Files structure. Beside the academic knowledge and experience, the developer has learnt time management, responsibility, problem solving and thinking skills and working endurance. With these, the developer has confidence that he can be able to develop his work in the future.

5.2 Problems and Limitations

5.2.1 Person file data according to the Standard 21Files structure of the Ministry of Public Health was not designed to record data submission date, so that the developer cannot compare the timeliness of submission. To solve this problem, the developer has to use time and date of actual service provision to clients of the service units that appeared in the Service Receiving file of the Standard 21 Files system

5.2.2 The system could perform data recheck only for the Person file data and not all Fields of the Person file table, except the main Fields specified by the Office of Policy and Strategy, was included for the function.

5.2.3 This system was developed by demonstrated the server on notebook computer, which did not linked with the Internet Network. General users cannot, therefore, access the system.

5.3 Recommendations

1. The system should be developed to be able to perform data recheck to more files of the Standard 21 files.

2. The system should be developed to allow the users to be able to download the inaccurate or incomplete data for an improvement before resubmission.

3. The system should be installed on the server that operates on the Internet network.

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APPENDIX

DATA DICTIONARY

The Service Desk environment consists of 5 entities as follow:

Table : hospcode

No	Data Element	Data Type	PK	FK	Definition
1	hospcode	varchar	√		Code of hospitals
2	ampart	char		√	Code of amphurs
3	chwpart	char		√	Code of provinces
4	hosptype	varchar			Code type of hospital
5	name	varchar			Name of hospitals
6	tmbpart	char		√	Code of tambon
7	moopart	char			Number of moo
8	sss_code	varchar		√	Code of Social Security Scheme
9	sss_code_sub	varchar		√	Code of hospitals that receive social security scheme registration.
10	Hospcode506	varchar		√	Code of hospitals in epidemiology system
11	addressid	char			Address number

Table : provis_occupa

No	Data Element	Data Type	PK	FK	Definition
1	code	char	√		Code of the occupational
2	name	varchar			Name of the occupational

Table : PERSON

No	Data Element	Data Type	PK	FK	Definition
1	pcucode	Char	√		Code of hospitals
2	pid	Char	√		Number of person
3	cid	Char			Citizen identification number
4	prename	Varchar		√	Code of name prefix
5	name	Varchar			Name of person
6	lname	Varchar			Last name of person
7	hn	Varchar			The hospital service number of person
8	sex	char			Code of gender
9	birth	int			Date of birth
10	house	Varchar			House number
11	village	char		√	Number of village
12	tambon	char		√	Code of tambon
13	ampur	char		√	Code of ampur
14	changwat	char		√	Code of province
15	mstatus	char			Status of married
16	occupa	char		√	Code of the occupational
17	race	char		√	Code of the race
18	nation	char		√	Code of the nationality
19	religion	char		√	Code of the religion
20	education	char		√	Code of the education
21	fstatus	char			Code of the status in family
22	father	Varchar			Citizen identification number of father
23	mother	Varchar			Citizen identification number of mother
24	couple	Varchar			Citizen identification number of mate
25	movein	int			The day moved into the area

No	Data Element	Data Type	PK	FK	Definition
26	discha	char			Type of move from the area
27	ddischar	int			The day moved from the area
28	bgroup	char			Blood group
29	labor	char			Status of labor
30	vhid	char			Code of village
31	typearea	char		√	Status of living in the area
32	d_update	int			Date of improvement

Table : provis_nation

No	Data Element	Data Type	PK	FK	Definition
1	code	char	√		Code of the nationality
2	name	varchar			Name of the nationality

Table : provis_religion

No	Data Element	Data Type	PK	FK	Definition
1	code	char	√		Code of the religion
2	name	varchar			Name of the religion

Table : provis_education

No	Data Element	Data Type	PK	FK	Definition
1	code	char	√		Code of the education
2	name	varchar			Name of the education

Table : provis_typearea

No	Data Element	Data Type	PK	FK	Definition
1	code	char	√		Code of living status in the area
2	name	varchar			Name of living status in the area

Table : userwebservice

No	Data Element	Data Type	PK	FK	Definition
1	user_id	int	√		The sequence number of user
2	user_firstname	varchar			The name of user
3	user_position	varchar			The job position of user
4	user_user	varchar			The login name of user
5	user_lastname	varchar			The last name of user
6	user_pass	varchar			The password of user
7	user_status	varchar			The status of user
8	department_id	varchar		√	The department of user
9	level_userID	int			The level of user
10	user_count	int			The Number of logins of user
11	user_cid	varchar			The citizen identification number of user
12	user_file	blob			The user profile
13	user_email	varchar			The e-mail address of user
14	user_phone	varchar			The telephone number of user
15	user_prefixname	varchar			The prefix name of user
16	user_regisdate	timestamp			The register date of user
17	user_lastlogin	datetime			The last login of user
18	user_is_keyman	varchar			The level of user
19	user_responsibleman	varchar			The authority of user

BIOGRAPHY

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