



RESEARCH ARTICLE

Patient Service Care Information System (Case Study: Zainoel Abidin General Hospital Banda Aceh City)

Rhauzatul Jannah¹ | Fathurrahmad^{2*} | Syarifuddin³

¹ Informatics Management Study Program, AMIK Indonesia, Indonesia.

³ Informatics Management Study Program, STMIK Indonesia Banda Aceh, Indonesia.

Correspondence

² Informatics Management Study Program, STMIK Indonesia Banda Aceh, Indonesia.
Email: fathurrahmad@stmikiba.ac.id

Funding information
LPPM AMIK Indonesia.

Abstract

Zainoel Abidin Aceh General Hospital is located in Banda Aceh City, Aceh Province, which is one of the health centers in the area. The growing community in the surrounding environment and even people from outside the region who continue to come for treatment at the Zainoel Abidin Aceh General Hospital require a good service to patients with the support of medical personnel and good staff who are expected to be able to provide professional health services this certainly cannot be separated from the management system in the hospital. The author limits the problem only to; How is the Patient Information System at the Zainoel Abidin General Hospital in Aceh and. Designing a Patient Information System at the Zainoel Abidin General Hospital Aceh using Visual BASIC.NET. From the description, the objectives of the discussion are; To find out the Patient Information System at the Zainoel Abidin Aceh General Hospital and Design a Patient Information System at the Zainoel Abidin Aceh General Hospital using Visual BASIC.NET. The Prototyping method is used as a software development model and evaluation activities are also carried out as an assessment of the results of the prototype being built. With this patient information system program, the information system at the Zainoel Abidin Aceh General Hospital becomes precise, and accurate, especially on the patient side. And to obtain information about the patient becomes easier; This information system is able to overcome the problems that often occur at the Zainoel Abidin Aceh General Hospital, namely the difficulty in controlling and supervising patients and planning for procurement of goods. This goods procurement information system can avoid excess patients and overcome the scarcity of goods which is certainly highly expected by business actors and The creation of an information system program in order to obtain quality information and Based on the evaluation of the current desktop application display With the prototype design, it is known that each category has an increase in the usability value. Content, Organization and Readability previously had a value of 0.62 and increased to 0.71. The Navigation category was previously 0.66 to 0.69. The previous User Interface Design category was 0.62 to 0.64 and the previous Performance and Effectiveness category was 0.67 to 0.78.

Keywords

Information Systems; Hospital; Patients; Visual BASIC.NET; Prototyping Models.

1 | INTRODUCTION

Zainoel Abidin Hospital is located in Banda Aceh City, Aceh Province, which is one of the health centers in the area. The growing community in the surrounding environment and even people from outside the region who continue to come for treatment at the Zainoel Abidin Hospital need a good service to patients with the support of medical personnel and good staff who are expected to be able to provide professional health services, this is of course cannot be separated from the management system in the hospital [1][2]. Medical personnel and staff who are able to provide good service to consumers must of course be supported by processing existing data in order to expedite the results of existing reports. patient data and the data archiving process for making reports that are less effective so that the information to be conveyed does not run optimally. Data collection on patients who still use bookkeeping often causes many mistakes, including the existing officers often forget to input data to be made into reports to the leadership and the level of accuracy is also still in doubt. In addition to these things, existing officers often forget to save patient data, so that the data search process is hampered, this is of course also one of the obstacles to the flow of information at first it was not a problem for the hospital, but when the number of patients per day increased then the hospital felt overwhelmed in terms of processing patient data. The purpose of the study was to determine the design of a patient care information system at Zainoel Abidin Hospital and to design a patient care information system at Zainoel Abidin Hospital using Visual BASIC.NET.

2 | BACKGROUND THEORY

The system in various fields is different [3], but in simple terms the system is defined as a collection or set of elements, components/variables that are organized, interact with each other, depend on each other and are integrated [4]. The system is interrelated parts that operate together to achieve some goal or purpose [5]. The system is any unit, conceptually or physically, which consists of parts in a state of interdependence with one another [6]. Meanwhile, Budi Sutedjo revealed that the system is a collection of interrelated elements that form a single unit in an effort to achieve a goal [7][8]. From the three definitions above, the system is a set of elements (elements) that interact with each other so as to form a unified whole in an effort to achieve goals. The school is a system, because the school has a core component consisting of input (input), processing (processing), and output (output). These three components cannot be separated from one another because they are a unified whole that is interrelated, bound, influencing, requiring and determining. Information is the result of processing data obtained from each element of the system into a form that is easy to understand and is the relevant knowledge that people need to increase their understanding of the facts [9]. Often information is equated with data, even though data and information have a fairly basic difference in substance [10]. Data is a fact that describes an event / real unit that occurs at a certain time. Data refers to facts in the form of numbers, text, documents, pictures, charts, certain codes, and other forms [11]. Data that is processed by being processed through a certain system, so that it has value for someone, then the data has been turned into information [12][13]. Data is a form that has not been able to provide great benefits for the recipient, so a process/model is needed to process the data so as to produce useful information [14]. A policy taken by a manager is not based on data, but from data that has been processed, for example: information about the number of students in a school is data, but if the number of students has been processed so that student tendencies are found, for example the percentage of dropout rates, then this said to be information [15]. Thus, information implies data that has been arranged in such a way that it is meaningful and useful because it can be communicated to someone who will use it to make decisions [16].

The patient or patient is someone who receives medical care [17]. The word patient from Indonesian is analogous to the word patient from English. Patient is derived from the Latin *patiens* which has the same meaning as the verb *pati* which means "to suffer". Patients are sick (who are treated by doctors), sufferers (sick). In the Law of the Republic of Indonesia Number 29 of 2004 concerning Medical Practice, it is stated that a patient is anyone who consults on his health problems to obtain the necessary health services, either directly or indirectly, to a doctor or dentist. In the application development process, the author uses Visual Basic.NET, Visual Basic originated from the BASIC language which was developed starting from 1963 [18]. BASIC stands for Beginner's All Purpose Symbolic Instruction Code [19]. As the name implies, the BASIC language was created for the purpose of making it easier for users to easily learn, create, and develop computer programs [19][20]. Visual Basic is a further development of the BASIC language by Microsoft. Visual Basic is intended as a tool to create and develop programs quickly (Rapid Application Development: RAD) [21]. Especially if you use a windows-based interface (Graphical User Interface: GUI). Visual Basic 1.0 is the first version of Visual Basic and was released in 1991. Visual Basic 1.0 is intended for the Microsoft DOS operating system. Then continued with Visual Basic 2.0 in 1992,

version 3.0 in 1993, version 4.0 in 1995, version 5.0 in 1997, and version 6.0 in 1998. Visual Basic 6.0 is very popular and is still widely used today. Unfortunately, support for Visual Basic 6 has been discontinued by Microsoft starting in March 2008. However, programs created with Visual Basic 6 can still be run on the latest operating systems such as Windows Server 2008 and Windows 11 [22][23].

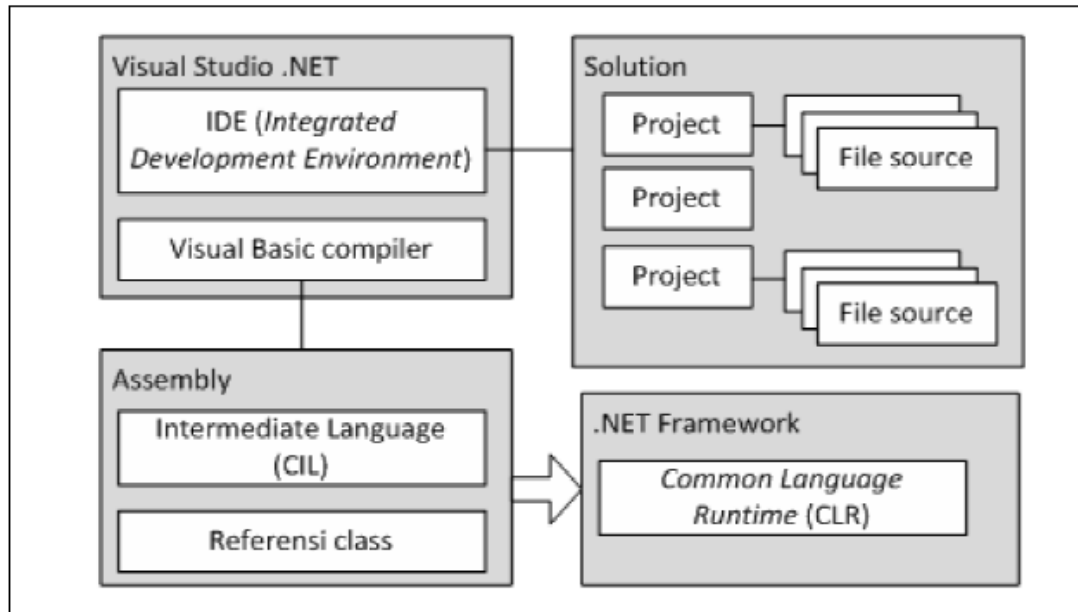


Figure 1. Software Development Stage with Visual Studio 2008

MSIL or now called CIL is a language that is neutral (doesn't depend on the operating system and computer hardware). JIT compilation is carried out by the Common Language Runtime (CLR) to convert the CIL language which is neutral (platform independent), into code that can be read by the hardware (hardware) and operating system used (current platform).

3 | METHOD

In application development, researchers use the prototype method where Prototyping is a software development method that uses an approach to make designs quickly and gradually so that they can be immediately evaluated by potential users or clients [4]. The stages in the prototype method consist of 5 stages, namely; Stage 1: Requirements Gathering and Analysis, Stage 2: Quick Design, Stage 3: Build Prototype, Stage 4: User Evaluation, and Stage 5: Refining Prototype [24][25].

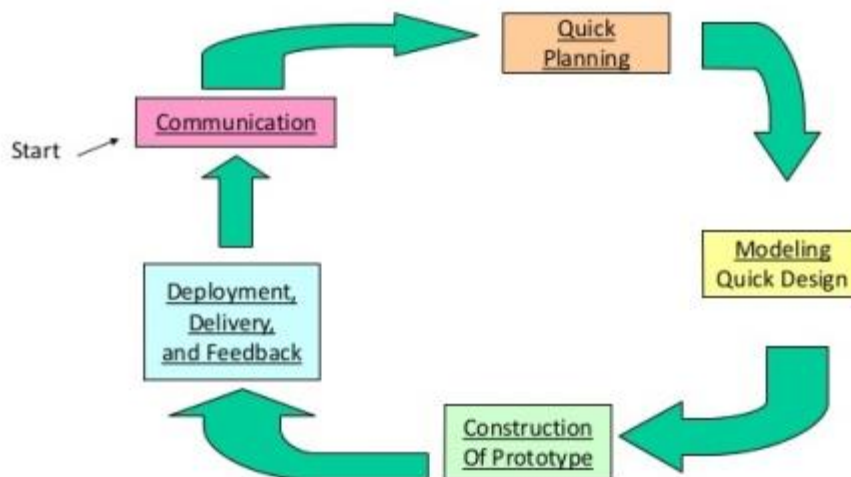


Figure 2. Prototype Method

Prototyping can also be defined as the process of developing a prototype quickly to be used first and continuously improved until a complete system is obtained [26]. Prototyping helps in finding requirements in the early stages of development, especially if the client is not sure where the problem is coming from. In addition, prototyping is also useful as a tool for designing and improving the user interface of how the system will be seen by the people who use it [27][28]. The key to a successful prototype model is to define the rules of the game at the beginning of the collaboration. The developer and client must agree that the prototype is built to define requirements. Prototyping will be partially or completely eliminated and the actual software engineered to the specified implementation quality. The next stage is data collection and interviews which aim to help establish the user context of the system that will be created. The data and information needed are user groups, therefore interviews with stakeholders and users were conducted. Then evaluate the appearance of the current web application which aims to determine the usability value by distributing questionnaires to 30 respondents, the questionnaire consists of 4 categories, namely Content, Organization and Readability, Navigation, User Interface Design and Performance and Effectiveness.

4 | RESULT

Analysis is the stage that finds the technique of decomposing the components to achieve a goal, after the needs of a problem have been identified, the feasibility study is fulfilled to the limits of the analysis that will be implemented into a programming. The analysis is carried out to obtain information about what is currently running in the field of administration where the information collected is mainly about the advantages and disadvantages that apply so that later it can produce new information that is effective and efficient. At this stage, it also describes several procedures or stages in carrying out patients, equipped with a FlowMap about what is currently running and suggestions at the Zainoel Abidin General Hospital. FlowMap is a flow chart that shows the general structure of an information, which displays a general description of the data processing sequence in a general form and shows the overall work flow. Based on the results of direct observations at the Zainoel Abidin General Hospital. The system that is running at the Zainoel Abidin General Hospital so far has used a computerized system, especially in entering patient data but only using Microsoft Office Excel applications. Zainoel Abidin General Hospital currently has a computer as a tool, but the computer is only used for typing letters and not for entering data for new patients due to the absence of applications that support the computer.

The data that is managed on the current system is not systematic, where the data owned cannot describe the data uniquely. Seeing the condition of the data processed by the current system, it is necessary to create a data coding system, so that some data of the same type can be recognized as a desired object. In the process of processing patient data at the Zainoel Abidin General Hospital already using a computerized system using standard applications such as Microsoft Office Excel, but problems also often occur due to repeated data entry in determining data storage per day so the process seems slow. And the process of making reports sometimes errors and sometimes delays in delivery to the parties concerned. It also causes a waste of time and energy. In the current system, the input form or data entry at the Zainoel Abidin General Hospital consists of a patient form which is carried out in the Microsoft Office Excel application. Output or output data from the system that is running after being inputted and processed will display the results in the form of output. System design is an ongoing procedure and process development activity to produce a new system, or update an existing system to increase work effectiveness in order to meet the results used with the aim of utilizing available technology and facilities. In this chapter the author will provide a proposal which is a computerized information system that is expected to help and simplify the work.

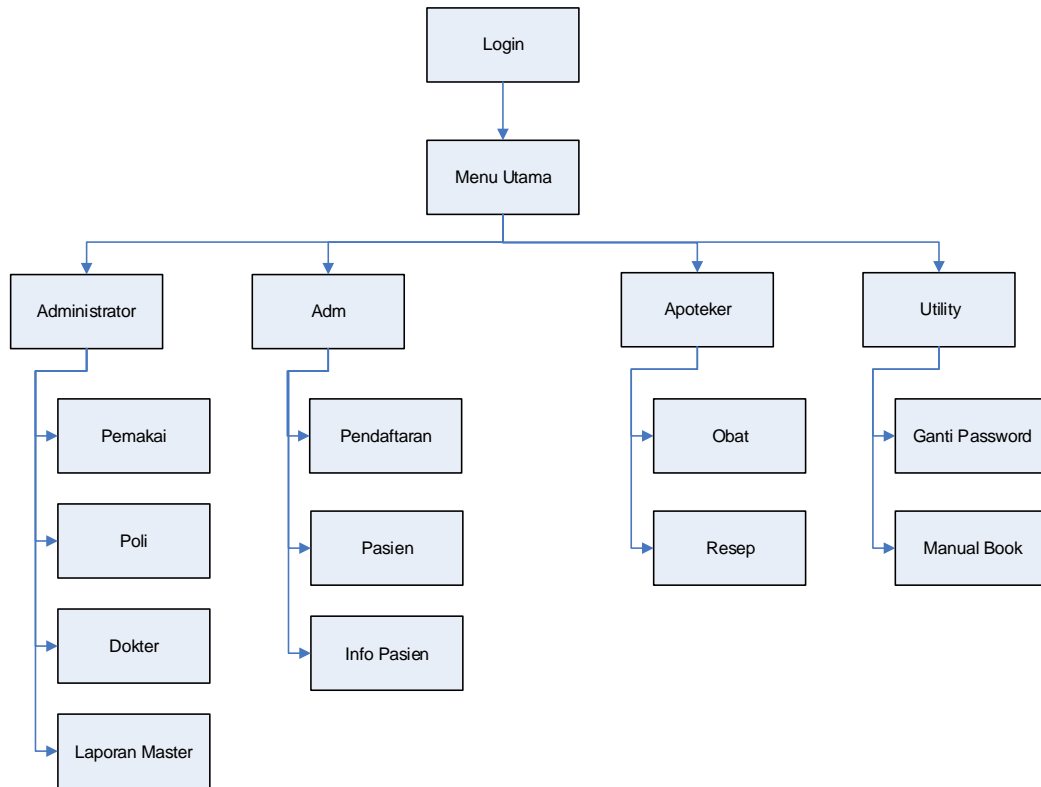


Figure 3. Program Menu Structure

Process analysis aims to determine the process of inventory and production of Zainoel Abidin General Hospital. Analysis of this process can be seen from the activity diagram of the system running below:.

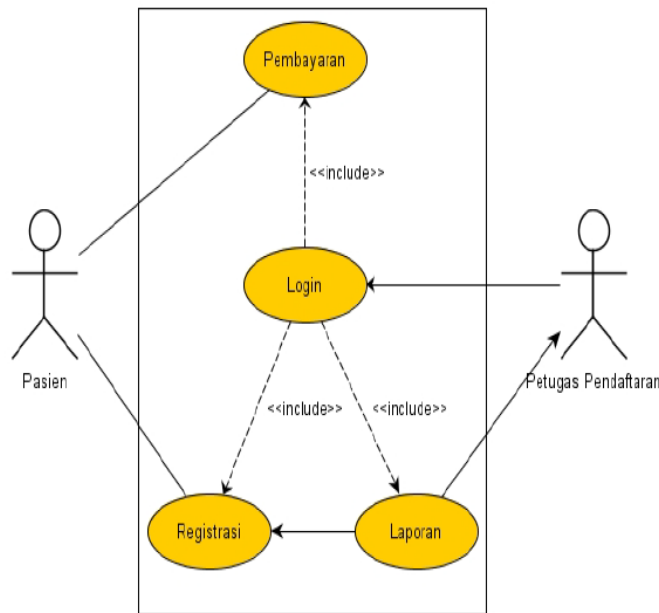


Figure 4. Activity Diagram of Patient Registration

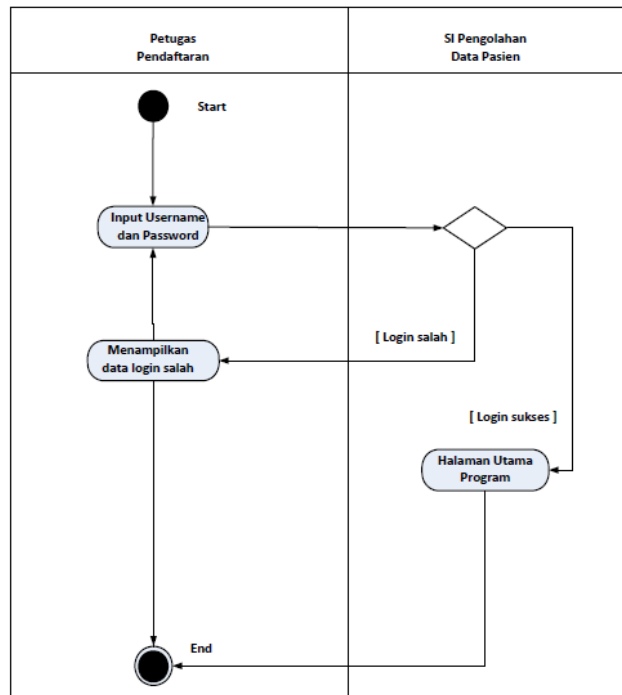


Figure 5. Patient Registration Use Case

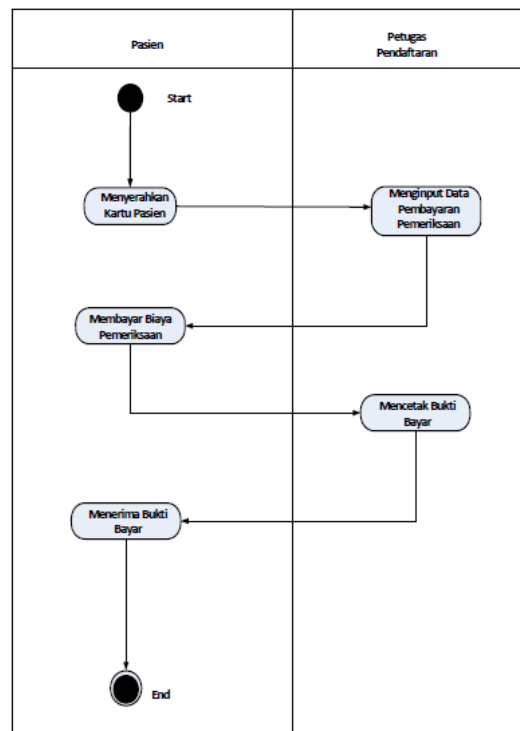


Figure 6. Payment Activity Diagram

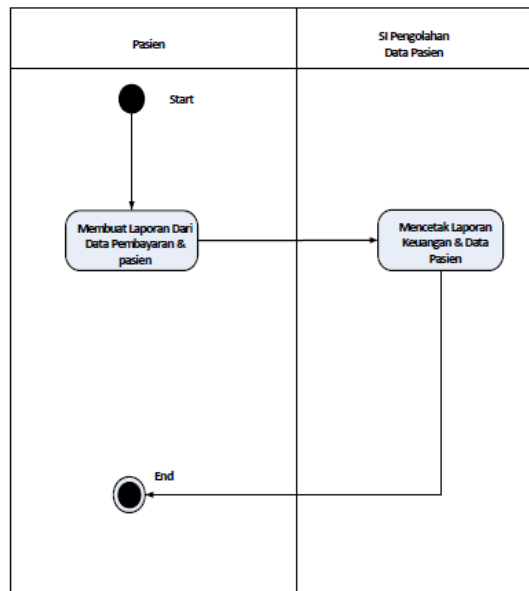
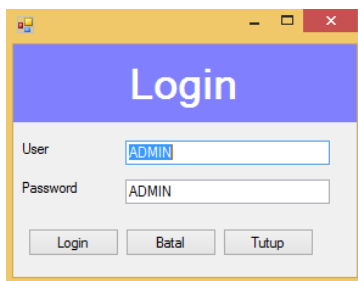


Figure 7. Activity Diagram Report

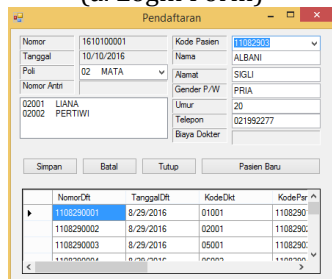
The results of the application display that was built can be seen in Figure 8 below::



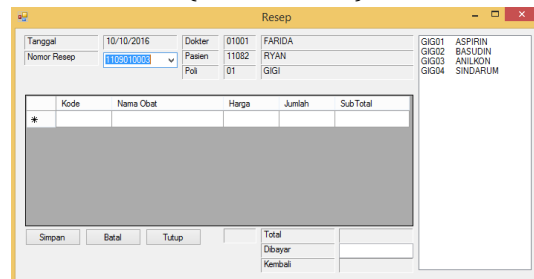
(a. Login Form)



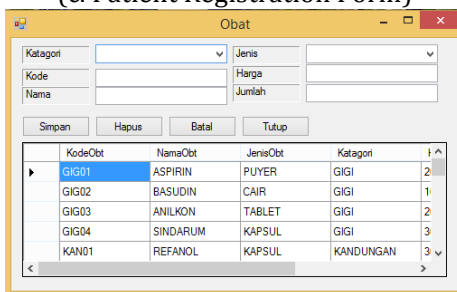
(b. Main Form)



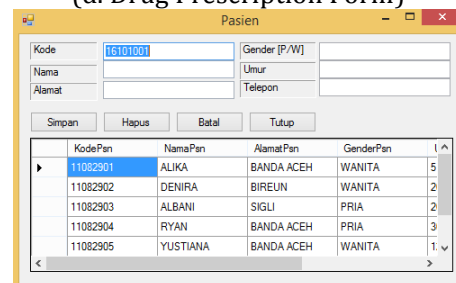
(c. Patient Registration Form)



(d. Drug Prescription Form)



(e. Medicine Form)



(f. Patient)

Figure 8. Application Display Results

While the output design consists of several program outputs as shown in Figure 8 below.

LAPORAN DATA DOKTER

Kode	Nama	Spesialis	Alamat	Telepon
01001	FARIDA	Dokter Umum	BANDA ACEH	02199228833
01002	AGUSTIN	Dokter Umum	BANDA ACEH	02299117722
02001	LIANA	Dokter Gigi	BANDA ACEH	02399228811
02002	PERTIWI	Dokter Gigi	BANDA ACEH	02188227733
03001	RIAWATI	Dokter Spesialis JIWA	BANDA ACEH	02188336644
03002	VICKA	Dokter Spesialis JIWA	BANDA ACEH	02177226655
04001	SAFITRI	Dokter Spesialis JIWA	BANDA ACEH	02288337745
04002	SEFIATIN	Dokter Spesialis JIWA	BANDA ACEH	02177665544
05001	ANDARINI	Dokter Spesialis Saraf	BANDA ACEH	02199009988
05002	MUSTHOFA	Dokter Spesialis Saraf	BANDA ACEH	02299887766
06001	KAMALUDIN	Dokter Spesialis Saraf	BANDA ACEH	02299887766
06002	FAUSTIN	Dokter Spesialis Saraf	BANDA ACEH	02188227733

(a. Doctor Master Report)

LAPORAN DATA OBAT

Kode	Nama	Jenis	Kategori	Harga	Jumlah
G001	ASPIREN	PILER	G001	Rp. 2.000	82
G002	BANFEN	CABR	G001	Rp. 1.000	84
G003	ANALOG	TABLET	G001	Rp. 2.000	83
G004	INDAPROL	KAPSEL	G001	Rp. 3.000	82
KAN01	REKANSOL	KAPSEL	KANDIDANGAN	Rp. 3.000	84
KAN02	AKRIFIN	CABR	KANDIDANGAN	Rp. 10.000	89
KAN03	LITORE	KAPSEL	KANDIDANGAN	Rp. 20.000	86
KAN04	BANFIN	TABLET	KANDIDANGAN	Rp. 10.000	89
KEL01	ANTALON	TABLET	KELAMIN	Rp. 10.000	89
KEL02	YOHIMIN	TABLET	KELAMIN	Rp. 1.000	100
KEL03	DIBASIN	KAPSEL	KELAMIN	Rp. 2.000	89
KEL04	ANDRO	PILER	KELAMIN	Rp. 2.000	100
KUL01	ASPIREN	TABLET	KULIT	Rp. 12.000	89
KUL02	PIREBE	PILER	KULIT	Rp. 1.000	87
KUL03	MAKNE	TABLET	KULIT	Rp. 2.000	89
KUL04	BANASIN	SIPIP	KULIT	Rp. 11.000	82
MAT01	VITEN	TABLET	MATA	Rp. 20.000	87
MAT02	BRETO	TABLET	MATA	Rp. 11.000	82
MAT03	ANTAM	TABLET	MATA	Rp. 2.000	85
MAT04	MOTON	CABR	MATA	Rp. 1.000	86
TH01	SUKABA	TABLET	THY	Rp. 2.000	89
TH02	ARGON	CABR	THY	Rp. 2.000	87
TH03	LAKON	TABLET	THY	Rp. 3.000	100
TH04	BETOLA	CABR	THY	Rp. 10.000	87

(b. Medicine Master Report)

DATA PENDAFTARAN

Nomor	Tanggal	Nama Pasien	Nama Poli	Biaya
1108290001	8/29/2011	ALIKA	GIGI	Rp. 20,000
1108290002	8/29/2011	DENIRA	MATA	Rp. 25,000
1108290003	8/29/2011	ALBANI	KULIT	Rp. 15,000
1108290004	8/29/2011	RYAN	KELAMIN	Rp. 40,000
1108290005	8/29/2011	YUSTIANA	MATA	Rp. 10,000
1108290006	8/29/2011	ROSITA	THY	Rp. 25,000
1108290007	8/29/2011	ALIKA	GIGI	Rp. 20,000
1109010001	9/1/2011	ALIKA	GIGI	Rp. 20,000
1109010002	9/1/2011	DENIRA	GIGI	Rp. 20,000
1109010003	9/1/2011	RYAN	GIGI	Rp. 20,000
1109020001	9/2/2011	RYAN	MATA	Rp. 25,000
1109030001	9/3/2011	ALIKA	GIGI	Rp. 20,000

(c. Patient Registration Report)

Laporan Pembayaran Mingguan

Tanggal: 07 October 2016

Nomor	Nama Pasien	Jumlah
1109010001	ALIKA	Rp. 3,000
Sub Total		3,000
Grand Total		Rp. 3,000

(d. Weekly Payment Report)

Laporan Pembayaran Bulanan

BULAN: OKTOBER
TAHUN: 2016

Nama Pasien	Jumlah
ALIKA	Rp. 3,000
Grand Total	Rp. 3,000

(e. Monthly Payment Report)

InfoPasien

Nama Pasien	Tgl Daftar	Nama Dokter	Nama Poli
ALIKA	8/29/2016	ANDARINI	KULIT
ALIKA	8/29/2016	AGUSTIN	GIGI
ALIKA	8/29/2016	FARIDA	GIGI
ALIKA	9/1/2016	FARIDA	GIGI
ALIKA	9/3/2016	AGUSTIN	GIGI
DENIRA	8/29/2016	LIANA	MATA
DENIRA	9/1/2016	FARIDA	GIGI
ROSITA	8/29/2016	VICKA	THY
RYAN	8/29/2016	FAUSTIN	KELAMIN

(f. Patient Search)

Figure 9. Application Output Results

The following are the hardware and software needed to use the patient system program, namely:

a. Hardware

Hardware that can support this application requires hardware with specifications:

- 1) CPU at least Pentium 3 with a speed of 633 Mhz
- 2) Ram 256 MB
- 3) Hard disk minimum 50 MegaByte
- 4) Monitor
- 5) Keyboard dan Mouse
- 6) Printer

b. Software

Software that supports this application include:

- 1) Windows 7,8,10
- 2) Net. Framework 3,5
- 3) Crystal Report

In the evaluation activity, an assessment of the resulting display is carried out. Evaluation using a Google Form questionnaire. Questionnaires were distributed to 30 respondents from AMIK Indonesian students. The results of the evaluation of the current application display in each category, namely the Content, Organization and Readability categories, obtained an average usability value of 0.62. Navigation category obtained an average value of 0.66. User Interface Design category obtained an average value of 0.66. Performance and Effectiveness category obtained a value of 0.67. Design analysis before repairs and also after completion of the user interface improvement and discussion of the comparison between the results of the evaluation conducted by 30 respondents to the current desktop application display and the results of the evaluation of the prototype design.

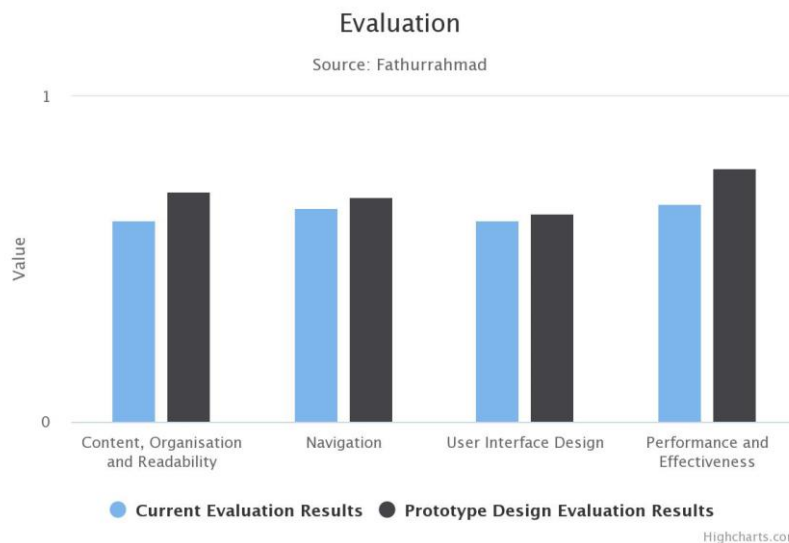


Figure 9. Category Value Diagram of Evaluation Results of the Current Desktop Application Display with Prototype Design.

Based on the picture, it can be seen that each category experienced an increase in the usability value. Content, Organization and Readability previously had a value of 0.62, an increase to 0.71. The Navigation category was previously 0.66 to 0.69. The previous User Interface Design category was 0.62 to 0.64 and the previous Performance and Effectiveness category was 0.67 to 0.78.

5 | CONCLUSIONS AND FUTURE WORK

From the results of research and observations that have been carried out at the Zainoel Abidin Aceh General Hospital, it can be concluded that; With this patient information system program, the information system at the Zainoel Abidin Aceh General Hospital becomes precise, and accurate, especially on the patient side. And to obtain information about the patient becomes easier, this information system is able to overcome the problems that often occur at the Zainoel Abidin Aceh General Hospital, namely the difficulty in controlling and supervising patients and planning for procurement of goods. this procurement information system can avoid excess patients and overcome the scarcity of goods which is certainly highly expected by business actors, the creation of an information system program in order to obtain quality information and based on the evaluation of the current desktop application display with prototype design it is known that each category has increased usability value. Content, Organization and Readability previously had a value of 0.62, an increase to 0.71. The Navigation category was previously 0.66 to 0.69. The previous User Interface Design category was 0.62 to 0.64 and the previous Performance and Effectiveness category was 0.67 to 0.78. The suggestions that the writer wants to convey after making observations are; To be able to produce accurate data with a minimal error rate, the use of computers must be optimized, one of which is not only focusing on Microsoft Office, but the use of all existing software will be able to optimize the results of data processing, and to optimize the use of computers, additional brainware as a person who will communicate with the computer to produce optimal results.

ACKNOWLEDGEMENTS

Thank you to the entire research team and LPPM AMIK Indonesia as funders for research development activities in 2018.

REFERENCES

- [1] Qarimuda, R., 2019. Keterbukaan Informasi Pelayanan Medis Pada Rumah Sakit Umum Zainal Abidin Banda Aceh. *Jurnal Ilmiah Mahasiswa Fakultas Ilmu Sosial & Ilmu Politik*, 4(4).
- [2] Wali, M., 2015. Kualitas Pelayanan Medis dan Kepuasan Pasien Rawat Inap (Studi Kasus di Rumah Sakit Harapan Bunda Banda Aceh). *Jurnal Ekonomi Manajemen dan Bisnis (EMBiS)*, 3(1), pp.554-567.

- [3] Kurniadi, D. and Mulyani, A., 2016. Implementasi Pengembangan Student Information Terminal (S-IT) Untuk Pelayanan Akademik Mahasiswa. *Jurnal Algoritma*, 13(2), pp.437-442.
- [4] Wali, M., 2020. Modul Praktikum Rekayasa Perangkat Lunak. Ellunar Publisher.
- [5] Rizal, S., & Wali, M. 2018. Perbankan Komputer: Teori dan Praktikum. Deepublish.
- [6] Wali, M., & Salam, A. Pengembangan Access Open Journal System (AOJS) sebagai Sistem Indeksasi dan Manajemen Pengelolaan Publikasi Jurnal. *Journal Digital Technology Trend*, 1(1), 1-14. DOI: <https://doi.org/10.56347/jdtt.v1i1.31>.
- [7] Wali, M., & Ahmad, L. 2020. Source Code Library (SCL): Application Support Learning Software Development: Source Code Library (SCL): Application Support Learning Software Development. *Jurnal Mantik*, 4(1), 7-13.
- [8] Wali, M. 2022. Pelatihan Manajemen Pengembangan Usaha bagi UMKM Provinsi Aceh. *Jurnal Pengabdian Nasional (JPN) Indonesia*, 3(1), 33-38. DOI: <https://doi.org/10.35870/jpni.v3i1.65>.
- [9] Wali, M. 2022. Analisis dan Interpretasi Data Riset Berbasis Digital. *Metode Riset Berbasis Digital: Penelitian Pasca Pandemi*. 89-108. Media Sains Indonesia.
- [10] Wali, M., Amri, K., Rizal, S. and Salam, A., 2022. Sosialisasi Peluang Home Business dalam Ekonomi Digital. *Kawanad: Jurnal Pengabdian kepada Masyarakat*, 1(1), pp.25-31. DOI: <https://doi.org/10.56347/kjpkm.v1i1.9>.
- [11] Rizal, S., & Wali, M. 2020. The Impact of Using Technology (Technostress) with the Forward Chaining Method as a Decision Support System: The Impact of Using Technology (Technostress) with the Forward Chaining Method as a Decision Support System. *Jurnal Mantik*, 4(1), 521-527.
- [12] Wali, M., & Mukhtar, M. (2020). PKM: Pelatihan Microsoft Excel 2013 Dalam Rangka Membentuk Tenaga Pengajar Yang Profesional. *TRIDARMA: Pengabdian Kepada Masyarakat (PkM)*, 3(1, Mei), 31-34.
- [13] Wali, M. and Ahmad, L., 2021. Computer Assisted Learning (CAL): A Learning Support System Solution. *Webology*, 18(1).
- [14] Wali, M. 2017. *Membangun Aplikasi Windows dengan Visual Basic. NET 2015 Teori dan Praktikum: Indonesia* (Vol. 1). KITA Publisher.
- [15] Wali, M. 2022. Pemrograman PHP. *Pemograman Web*. 51-59. Indie Press.
- [16] Wali, M. 2022. Teori Game. *Riset Operasi*. 131-144. Indie Press.
- [17] Wibowo, T., Jeffry, J., La Wungo, S. and Zaman, I., 2021. Perancangan Aplikasi Register Penyakit dan Rekam Medis Pasien Pada Puskesmas Tikupon Kecamatan Bualemo. *Journal of System and Computer Engineering (JSCE)*, 2(1), pp.70-84. DOI: <https://doi.org/10.47650/jsce.v2i1.245>.
- [18] Wali, M. 2018. *Add-ins Microsoft Office: Add-ins Microsoft Office* (Vol. 1). KITA Publisher.
- [19] Petroustos, E., 2010. *Mastering Microsoft Visual Basic 2010*. John Wiley & Sons.
- [20] Zak, D., 2015. *Programming with Microsoft Visual Basic 2015*. Cengage Learning.
- [21] Petroustos, E., 2008. *Mastering Microsoft visual basic 2008*. John Wiley & Sons.
- [22] Willis, T. and Newsome, B., 2008. *Beginning Microsoft Visual Basic 2008*. John Wiley & Sons.
- [23] Halvorson, M., 2003. *Microsoft Visual Basic. NET Step by Step Version 2003*. Microsoft Press.
- [24] Junior, R.P., Triayudi, A. and Ningsih, S., 2022. Rancang Bangun Sistem Informasi Info Rapid Test Antigen di Jakarta Berbasis Website. *Jurnal JTIK (Jurnal Teknologi Informasi dan Komunikasi)*, 6(1), pp.34-41.

- [25] Wali, M. and Ahmad, L., 2018. Perancangan Access Open Journal System (AOJS) dengan menggunakan Framework Codeigniter dan Reactjs. *Jurnal JTIK (Jurnal Teknologi Informasi dan Komunikasi)*, 2(1), pp.48-56.
- [26] Mubarak, R., 2021. Perancangan Aplikasi LIMS Pada PT Organo dengan Metode Prototyping. *Jurnal ESIT (E-Bisnis, Sistem Informasi, Teknologi Informasi)*, 15(2).
- [27] Sutabri, T., Putrasandi, Y.N. and Widodo, Y.B., 2020. Perancangan Aplikasi Posyandu Digital Berbasis Android. *Jurnal Teknologi Informatika dan Komputer*, 84.
- [28] Agung, L., 2022. *Sistem Informasi Peminjaman Dan Pengelolaan Barang Pada Pusdiklat Keuangan Umum Jakarta Selatan Dengan Metode Prototyping* (Doctoral dissertation, Institut Teknologi Telkom Purwokerto).

How to cite this article: Jannah, R., Fathurrahmad, & Syarifuddin. 2022. Patient Service Care Information System (Case Study: Zainoel Abidin General Hospital Banda Aceh City). *Journal Dekstop Application (JDA)*, 1(1), 9-19. <https://doi.org/10.35870/jda.v1i1.100>.