Prototype Application for Operating Equipment Delivery At PT Patriot Medika Nusantara

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ABSTRACT

Seiring dengan berjalannya waktu semakin hari teknologi semakin berkembang. Banyak perusahaan yang sudah menggunakan aplikasi berbasis desktop menggunakan intranet untuk menunjang pekerjaan para karyawan selain lebih efektif dan efisien, penggunaan aplikasi menggunakan intranet juga lebih aman karena memang menggunakan private network yang menggunakan protokol-protokol internet (TCP/IP), untuk membagi informasi rahasia perusahaan atau bisa disebut juga situs web internal. Maka dari itu PT. Patriot Medika Nusantara terus berusaha dalam meningkatkan kualitasnya lebih tinggi dari perusahaan lain. Dengan begitu PT. Patriot Medika Nusantara memerlukan aplikasi untuk menunjang pekerjaan para admin pada divisi logistik agar lebih cepat dalam memproses alat operasi yang akan dikirim. Tujuannya kepada user admin yang berperan dalam proses pengiriman alat lebih cepat dan mudah serta dapat meningkatkan produktifitas dalam bekerja.

Keywords: *Prototype Application, Operating Equipment Delivery, Company System*

I. INTRODUCTION

As time goes by, technology is increasingly developing. Many companies that already use desktop-based applications use the intranet to support the work of employees in addition to being more effective and efficient, using an intranet application is also safer because it uses a private network that uses internet protocols (TCP / IP), to share company confidential information or can also be called an internal website.

PT Patriot Medika Nusantara is a medical equipment importer (orthopedic) branch of medicine that specializes in treating bone diseases and injuries, established to provide goods and services needed by related institutions such as government hospitals and private hospitals. All activities in the company are interrelated activities between one activity and another. Company management is required to make the best effort so that the implementation of all company activities can run well, because failure in carrying out one of the company's activities will affect other activities in a section even able to affect the entire company. Supervision and delivery of goods is the most important priority to the importer company, because the demand for goods to carry out operations must arrive on time after the operation is planned by the hospital.

Under these conditions it is necessary to have an application to speed up the process of making an operation request and a Letter of Delivery (SPB) to help administrators complete requests for goods to be used by hospitals faster. Thus the research needs to be

done to design the prototype of an application request operation model.

The application is expected to be able to ease the work of the admin so that he no longer needs to write his hand to make the operation Request form and Item Delivery. The absence of a database to store data both delivery data, operation request data, or operating tool data, this complicates the performance of the admin especially if the new admin will be very difficult to learn jobs and their descriptions.

Based on the above background, the writer tries to do an analysis and study in the logistics division of PT Patriot Medika Nusantara, which is poured in the form of scientific work entitled "Prototype Application for Operation Equipment Delivery at PT Patriot Medika Nusantara".

II. RESEARCH METHOD

The research method used in making this study uses data collection methods, design concepts, and SWOT analysis. Data collection conducted in this study using the interview and interview methods, data and information obtained from the interview method and is done through direct questioning with stakeholders, namely Ms. Pipik as the part responsible for production activities in this factory. Next, make observations by going directly to the research site at PT Patriot Medika Nusantara.

The data and things needed in the making of the Prototype Application for the Delivery of Operating Tools at PT Patriot Medika Nusantara that will be made have been obtained from the observation method. The next step is to conduct a literature study by searching for the data needed as reference and reference material, the data is obtained from references of journal articles that have been published previously and which have been included in the literature review. In addition to literature review, data collection is also carried out by means of literature study, data obtained through literature study is material that is used as reference material and references from various sources.

After the data collection method has been completed, then what will be done is the design concept stage using UML (Unified Modeling Language). Below is an elaboration of the design method using a UML system that runs like:

a) Use Case Diagram of the Current System

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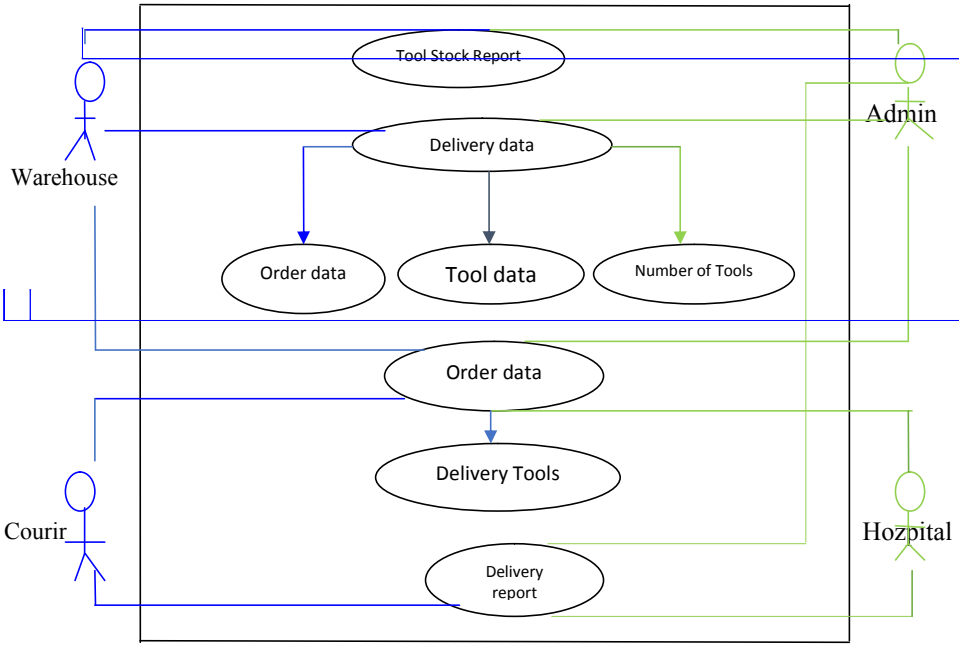

Figure 1 Use Case Running System
(Source from Visual Paradigm Community Edition)

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Use Case Diagram illustrates the habits of system activities that are running at the moment there is an explanation as follows:

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Table 1. Function of Use Case Running System

No	Use Case	Actor	Screenplay
1.	Tool Stock Report	Warehouse	Make a check of the stock of equipment in the warehouse
2.	Tool Stock Report	Admin	Check warehouse reports
3.	Order Data	Warehouse	Prepare orders from the admin, with the requested specifications
4.	Order Data	Admin	Make requests to exit goods to the warehouse
5.	Delivery Data	Admin	Admin makes data delivery of goods
6.	Delivery Data	Warehouse	Receive delivery data

7.	Delivery Data	Courier	Take data and tools to be sent to the destination that is the hospital
8.	Delivery Report	Hospital	Receive tools and signatures on shipping reports
9.	Delivery Report	Courier	Receive a report from the hospital then give it to the admin
10.	Delivery Report	Admin	Receive delivery reports to be processed as reports

(Source: Assignment on a Content Management System Based Website)

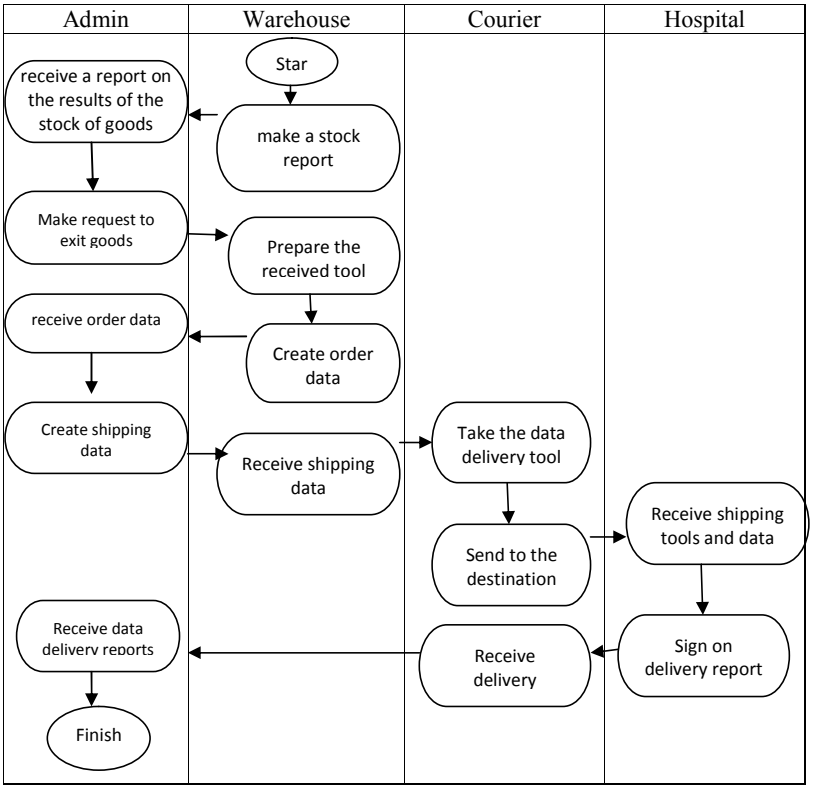

Figure 2 Activity Diagram of the Running System

Activity diagram in Figure 2 the running process activity diagram system is used to explain the process flow from processing Inventory data:

a) 1 (One) Initial Node, object that starts14 (Fourteen) Action State of the system that reflects the execution of an action.
b) 4 (Four) Vertical Swimlane, Actors who have actions are admin, warehouse, courier and hospital.
c) 1 (One) Final State, object terminated.

In addition to the data collection method and the design concept method, the next step is in this method the researcher analyzes the existing system, which uses the PIECES analysis method which is carried out to assess the system running on the company based on performance, information, economy, control, efficiency, and service. Following are the results of the PIECES analysis that has been carried out as follows:

Table 2. SWOT Analysis

NO	TYPES OF ANALYSIS	WEAKNESSING SYSTEMS ARE RUNNING
1	*Performance*	Goods report management system is still using manual systems, causing errors in processing data on the warehouse.
2	*Information*	The system takes a lot of time, the information conveyed is less accurate and late in submitting reports of goods to the warehouse.
3	*Economi*	In the long run the costs needed will be quite large because it costs to buy paper and stationery.
4	Control (Control or Security)	The lack of optimal data security exists in storing report data.
5	*Effiency*	The system requires quite a long time in making the results of the inventory report and shipping reports.
6	*Service*	Delay in service due to recording and searching report data in the warehouse is done manually with data that is piled up, so it takes a long time to obtain the desired data.

(Source: Assignment on a Content Management System Based Website)

III. Literature Review

The benefits of Literature review are to identify gaps, avoid re-creation, identify methods that have been done and continue previous research. Some Literature Reviews in this study include:

a) Research conducted by Khozin Yuliana, Saryani, Nur Azizah entitled "The Design of Web-Based Goods Delivery Recapitulation". In this research explains about a recapitulation information system of sending and receiving production goods to companies so that they can be accessed on computers and have been web-based to help workers be more effective.

b) Research made by Qurotul Aini, Desy Apriani and Alfiah Khoirunisa entitled "Optimization of Report Assignment Management Information on a Content Management System Based Website". In this research, explaining about a system was made to maximize the way to organize student assignment reports for time management efficiency, therefore this learning method can be applied as management education in higher education. [2]

c) Research conducted by Soleh, Wahyu Hidayat and Fitri Widya Rustanti Syang entitled "Analysis of Human Resource Management Information Systems in the Recruitment, Demotion and Mutation Process at Company 1 ". In this study describes a system for taking action and making decisions on employees who are performing or those who are not performing quickly and accurately. [3]

d) Research conducted by Euis Siti Nur Aisyah, Abdul Hayat, Rivka Farizi, Ahmad Ajie Sajidin entitled "Design and Build Point of Sale Bus Ticket Applications at Company 2". In this study describes a system that can be used to manage data on consumables properly to be able to obtain information accurately, quickly, precisely and informative for the purposes of future information regarding the amount of used goods stored in warehouses [4]

e) Research conducted by Ruli Supriati and Astri Wulan Sari entitled "The Application of Consumable Goods Data Collection Systems to Improve the Quality of Stock Goods at Company 3 ". In this study describes a system that can be used to manage consumable data data properly to be able to obtain information accurately, quickly, precisely and informative for the purposes of future information regarding the amount of used goods stored in warehouses. [5]

f) Research conducted by Qurotul Aini, Untung Rahardja, Abdul Hamid Arribathi, Nuke Puji Lestari Santosoyang entitled "The Application of Cloud Accounting in Supporting the Effectiveness of Balance Sheet Reports in Higher Education". In this research explains about a Cloud accounting system is the use of cloud as an online accounting storage. With the use of cloud accounting in journal.id online software, income and expenditure data have been inputted properly, so that the balance sheet data is accurate and fast. [6]

IV. RESULTS AND DISCUSSION

The result Obtained from the research method is then made the Prototype of the Operating Equipment Delivery Application at Company will be used to support the delivery report that have been processed by the admin by the leadership. This prototype is in the form of ideas taken from problems that arise at Company. This prototype is also designed so that the delivery report data can be effective. Can make it easier for the warehouse to manage the results of the stock of equipment anywhere and anytime, Below is a description of the design method using the proposed UML system:

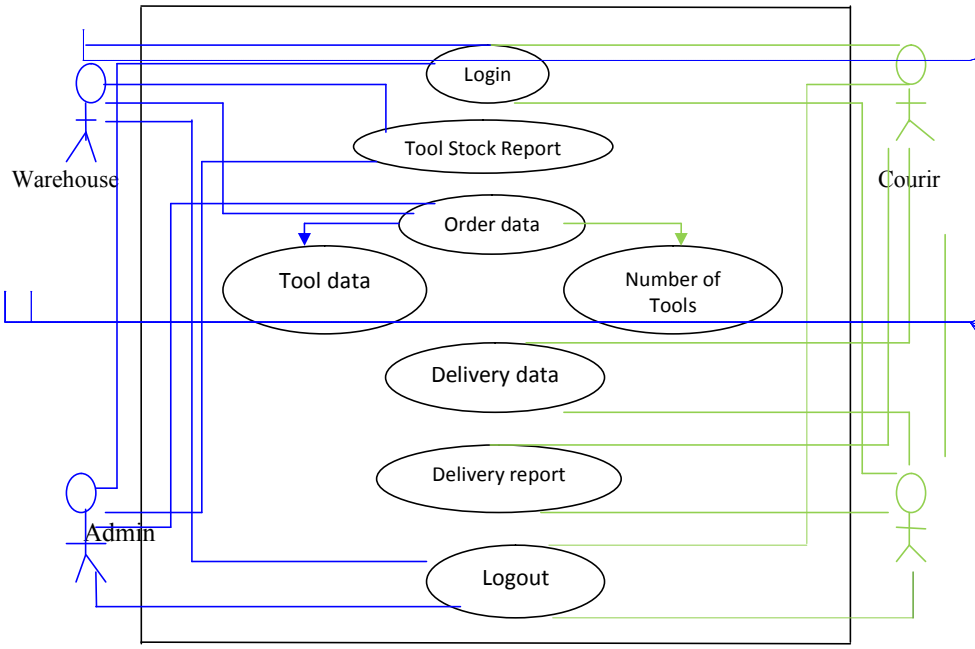

Figure 4 Use Case Diagram of the proposed system

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In figure 3 the process of Prototype Process Application Analysis of Inventory Information System Goods at PT Patriot Medika Nusantara which is being proposed, consists of:

a) There is 1 system covering the process of running activities
b) There are 4 actors in the process of ongoing activities, namely warehouse, admin, courier and hospital.
c) 6 use case activities by actors.

Program design

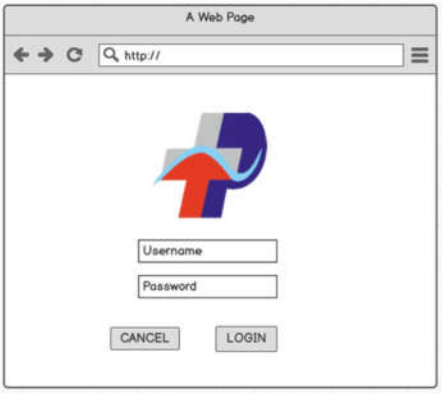


Figure 5 Login Page

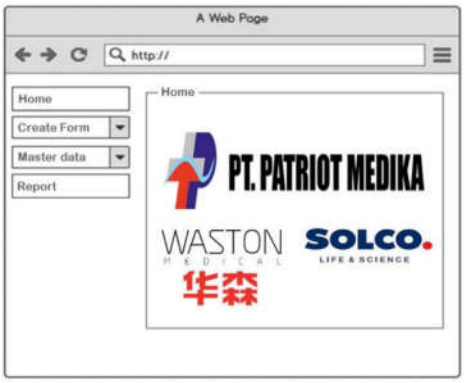
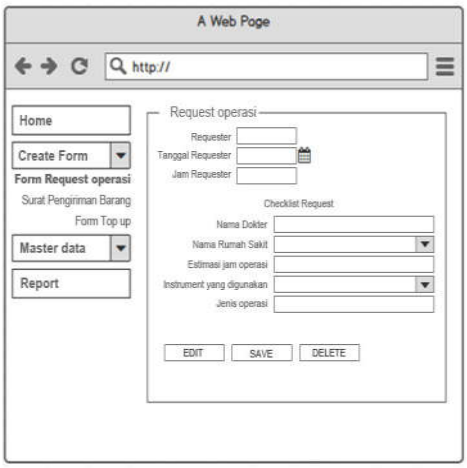
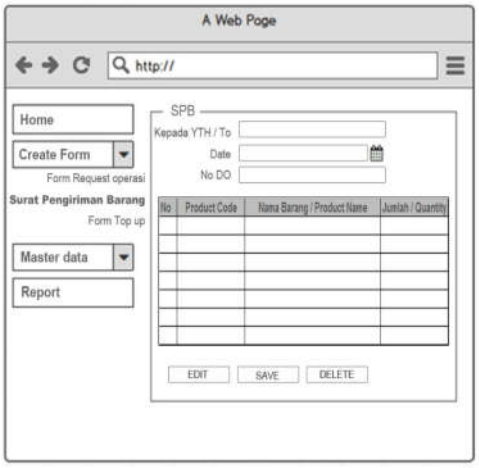


Figure 6 Dashboard Page



Gambar 7 Halaman *Request Operasi*



Gambar 8 Halaman Surat Pengriman Baran

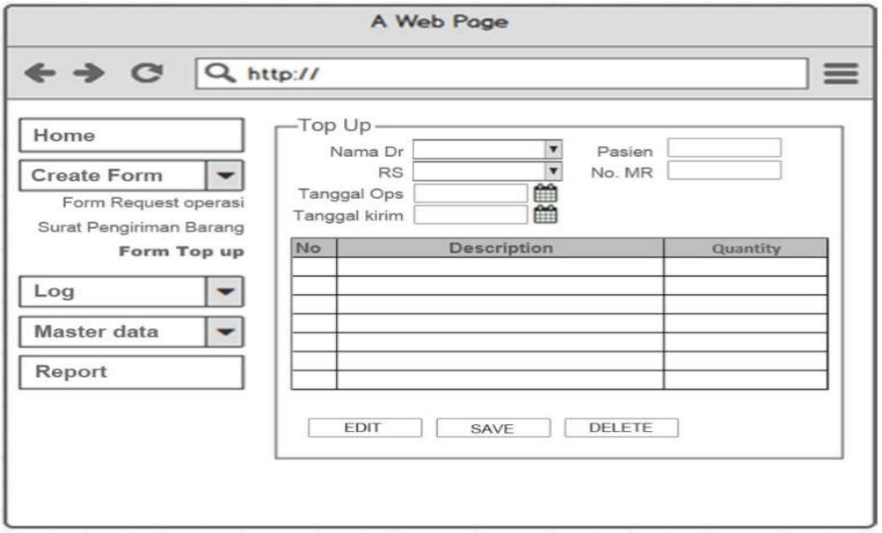


Figure 9 Prototype Form Top page

V. CONCLUSION

Based on the results and discussion as well as the results of the analysis and design carried out, regarding the Prototype of the Application for Operating Equipment Delivery at PT Patriot Medika Nusantara the conclusions are as follows:

a) Making the Operational Request form, the Top Up form, the Goods Delivery Letter that is currently still in a manual way, there is no database to store old data if needed again. While many companies out there already use applications on the delivery system.

b) This application provides a lot of convenience so that the admin's performance in the logistics division is more productivity at work. In order to compete closely with companies engaged in their fields.

c) The benefits of what the author examines in the place where the researcher conducts an analysis increases interest in learning, deepens knowledge, and makes a system that can make it easier for workers to do their jobs.

VI. SUGGESTIONS

Suggestions for the development of Prototype Application for Operating Equipment Delivery at PT Patriot Medika Nusantara Indonesiaagar to be better, among others:

a) With some limitations and there are still many limitations in this study, it is expected that more in analyzing research on checking the quality of goods produced by the method that has been planned, especially in the development of this research.

b) 2. The need for further development to create a system that will run later in accordance with research. And gives a good impression to the users or parties who run it.

REFERENCES

[1] Aini, Qurotul, Untung Rahardja, Abdul Hamid Arribathi, Nuke Puji Lestari Santoso. (2019). Penerapan Cloud Accounting Dalam Menunjang Efektivitas Laporan NeracaPada Perguruan Tinggi. CESS (Journal of Computer Engineering System and Science)Vol. 4 No. 1 Januari

[2] Aisyah, Euis Siti Nur, Abdul Hayat, Rivka Farizi, Ahmad Ajie Sajidin. (2019). Rancang Bangun Aplikasi Point Of Sale Tiket Bus Pada PT. Primajasa Perdanaraya utama. JURNAL OF INNOVATION AND FUTURE TECHNOLOGY (IFTECH).

[3] Rahardja, U., Aini, Q., Apriani, D., & Khoirunisa, A. (2019). Optimalisasi Informasi Manajemen Laporan Assignment Pada Website Berbasis Content Management System. Technomedia Journal, 3(2), 213-223. https://doi.org/https://doi.org/10.33050/tmj.v3i2.616

[4] Rahardja, U., Moein, A., & Lutfiani, N. (2018). Leadership, Competency, Working Motivation and Performance of High Private Education Lecturer with Institution Accreditation B: Area Kopertis IV Banten Province. *Man India*, *97*(24), 179-192.

[5] Rahardja, U., Handayani, I., & Elinda, B. D. (2019). Viewboard Jadwal Persiapan Sidang Pada Sistem PESSTA+ Menggunakan YII Framework di Perguruan Tinggi. *CSRID (Computer Science Research and Its Development Journal)*, *10*(3), 171-179.

[6] Rahayu, S., Azizah, N., & Ferlyawan, R. (2018). IMPLEMENTASI SISTEM INFORMASI PADA E-RECRUITMENT CALON KARYAWAN. *SENSI Journal*, *4*(2), 141-152.

[7] Soleh, O., Hidayat, W., & Rustanti S, F. (2019). Analisa Sistem Informasi Manajemen Sumber Daya Manusia Pada Proses Rekrutmen, Demosi dan Mutasi di PT. Yasunli Abadi Utama Plastik. Technomedia Journal, 3(2), 146-156. https://doi.org/https://doi.org/10.33050/tmj.v3i2.634

[8] Supriati, R., & Sari, A. (2019). Aplikasi Sistem Pendataan Barang Habis Pakai Guna Meningkatkan Kualitas Stok Barang Pada PT. Angkasa Pura II Tangerang. Jurnal Sistem Informasi Dan Informatika, 2(2), 13-28.

[9] Yuliana, Khozin, Saryani, Nur Azizah. 2019 “Perancangan Rekapitulasi Pengiriman Barang Berbasis Web”. JURNAL SISFOTEK GLOBAL