E-Inventory Information System at PT. Resik Nyaman Sejahtera

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Abstract— PT. Resik Nyaman Sejahtera is a company engaged in cleaning services that serve cleanliness in apartment / hotels, restaurants, hospitals, universities, schools, supermarkets, villas, factories, offices / offices, government offices or private national and other places. Constraints faced by PT. Resik Nyaman Sejahtera in carrying out existing projects is still using the manual process in collecting inventory / stock of goods that goes in and out of the warehouse so that it is difficult to find data and control the entry and exit of inventory / stock in the warehouse for ongoing and existing projects finished. The intranet web-based e-inventory application is made to overcome and minimize the problem. Applications that are designed or developed consist of the process of recording data on goods, goods entering and leaving the warehouse, inventory, and inventory reports. The method for developing the system uses the waterfall method. This research produces an e-inventory application system that makes it easy for warehouse staff and administrators to manage and control inventory in the warehouse..

Keywords— Information System, E-Inventory.

I. INTRODUCTION

Rapid technological developments from time to time make work done by humans in general can be solved quickly. Technology is one of the tools that are often used in human activities, especially in business to help the project run effectively and efficiently. Rapid technological developments have an influence from personal and organizational work methods, especially in the business world, technology can foster business development because technology can cut significant expenditure (Hendini, 2016). Computer technology that is growing and relatively cheap makes more companies and agencies use it (Mulyana, 2013).

PT. Resik Nyaman Sejahtera is a company engaged in cleaning / cleaning services. Constraints faced by PT. Resik Nyaman Sejahtera in carrying out existing projects is still using the manual process in collecting inventory / stock of goods that goes in and out of the warehouse so that it is difficult to find data and control the entry and exit of inventory / stock in the warehouse for ongoing and existing projects finished.

II. LITERATURE REVIEW

Waterfall model according to Pressman in Cahya (2017: 134): The waterfall method or often called the waterfall method is often called the classic life cycle, where it describes a systematic and sequential approach to software development, starting with the specification of user requirements and then going through the planning stages, modeling (construction), construction (construction), and submission system to customer (deployment), which ends with support for the complete software produced.

Rosa and Shalahuddin (2013: 133) explain that "UML (Unified modeling language) is one standard language that is widely used in the industrial world to define requirements, make analysis & design, and describe architecture in object-oriented programming".

Rangkuti in Haryani (2017: 157) explained that:
Inventory (Inventory) is an asset that includes goods belonging to a company with the intention of being sold within a certain business period to meet the demand of consumers or customers at all times. Then it can be concluded that Inventory is assets owned by the company, both for sale and for use by the company.

III. PROPOSED METHOD

In conducting this research made in the design plan using object oriented programming. Whereas to develop the system using the waterfall method. According to Yulianto and Wahdini (2018: 81) explained that "Waterfall models are a classic model that is very systematic and very sequential in building an application. The waterfall model itself is a linear sequential model or often also called the "classical life cycle". "

1. Analysis of System Requirements
   In this process the author makes an analysis of the system that is currently running, making the writer can improve the process that occurs. Will make the writer also in creating an e-inventory application system.

2. Design
   The technique used to design the program is using structured programming techniques and databases using ERD or Entity Relationship Diagram.

3. Code Making
   Determine the programming language used and determine whether the program created includes structured or object-based programming. The inventory system that will be built is a web-based system that uses the programming languages PHP, HTML, CSS and JavaScript. This e-inventory system includes structured programming.

4. Testing
   Testing or testing carried out to verify the application made is in accordance with the design and all functions that can be used properly without any errors. In testing, the author uses the black box testing method.

5. Support
   To support the system design this time and later development needs to support the use of software and hardware. The software specifications used in the system design this time are XAMP 1.7.7 with the PHP 5.3.8 version as a webserver application, for software using Adobe Dreamweaver CS6, Adobe Photoshop CS6, Enterprise Architec, Windows 7 as the operating system.

IV. RESULT AND DISCUSSION

Software Requirements Analysis
Administration and warehouse as the main actors in A
Administration page:
A1. The administrator can log in with the user that was created
A2. The administrator can change the login password
A3. Administrators can manage users
A4. Administrators can manage service master data
A5. Administrators can manage master customer data
A6. Administrators can manage master supplier data
A7. Administrators can manage project data
A8. Administrators can send goods requests
A9. Administrators can manage goods orders
A10. Administrators can manage project reports
A11. Administrators can manage request reports
A12. Administrators can manage order reports

B. Warehouse Page:
B1. The warehouse can log in with the user that was created
B2. Warehouse can change login password
B3. Warehouse can manage item master data
B4. Warehouse can manage goods out
B5. Warehouse can manage incoming goods
B6. Warehouse can manage reports of stock items
B7. Warehouse can manage goods reports out
B8. Warehouse can manage incoming goods reports

V. CONCLUSION AND SUGGESTION

The results of the research and discussion about the E-Inventory Information System at PT. Resik Nyaman Sejahtera, then conclusions can be drawn:

1. With the design of the system and the proposed program, it can facilitate the author to design the application and make it easier for readers to be able to see an overview of the application system built by the author.

2. The process of analyzing software needs is done to find out what software is needed by the user so that what is designed can be used as needed.

3. With the testing or testing of an e-inventory application based on this intranet web, we can find out the shortcomings so that improvements and system development can be done.

4. With this application system, the warehouse can facilitate inventory management in the company's warehouse.

VI. FIGURES AND TABLES

The technique used to design programs is to use structured programming techniques, using case diagrams, activity diagrams, component diagrams and placement diagrams.
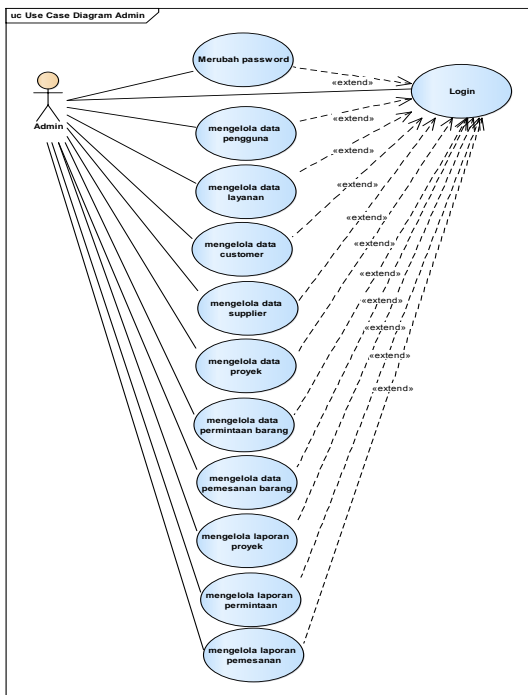
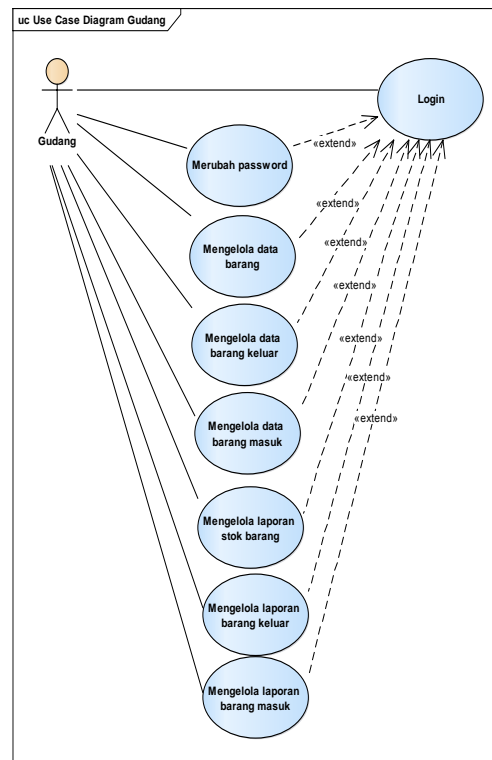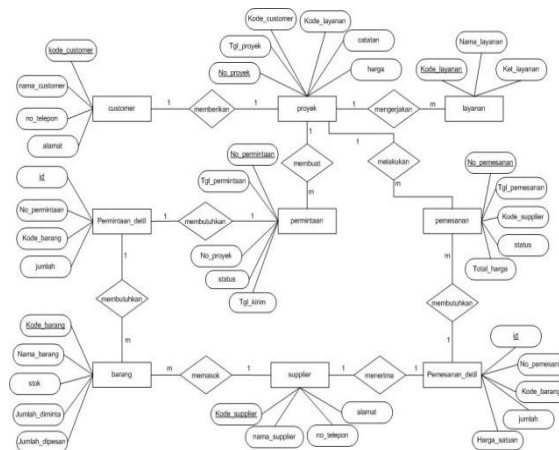a. Use Case Admin Chart

Figure 1. Use Case Diagram Admin

b. Use Case Diagram Warehouse

Figure 2. Use Case Diagram Warehouse

c. Database, presented using ERD (Entity Relationship Diagram).

Source : Author own finding

Figure 3. *ERD E-Inventory*
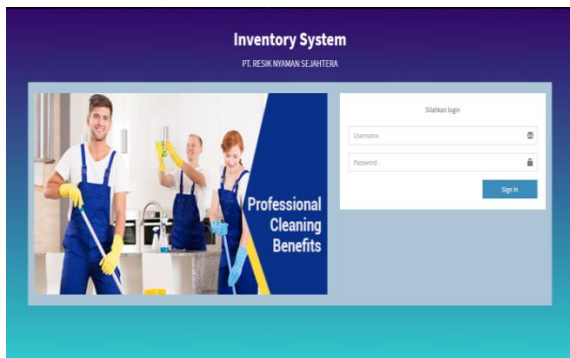
d. *Logical Record Structure*
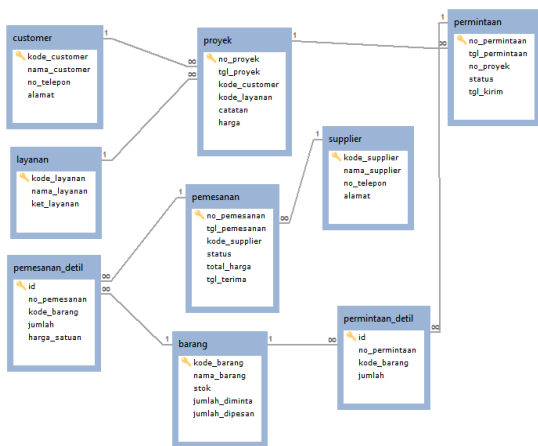
Figure 4. *Logical Record Structure e-inventory*

Source : Author own finding

g. User Interface and Implementation

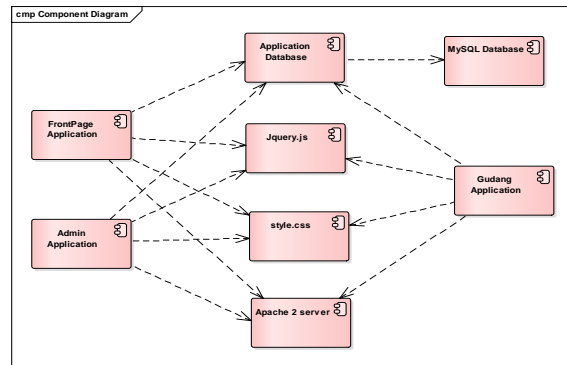Source : Author own finding
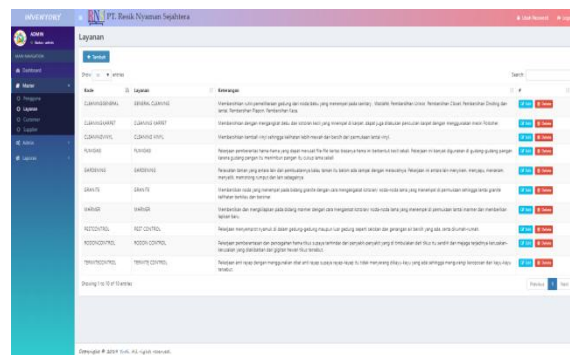
Figure 7. User Login

e. Component Diagram

Figure 8. Service Admin

Source : Author own finding

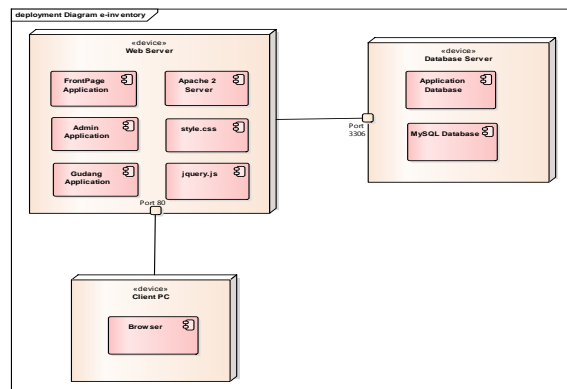**Figure 9.** *Component Diagram*

f. Deployment Diagram

Figure 10. *Deployment Diagram*

Source : Author own finding
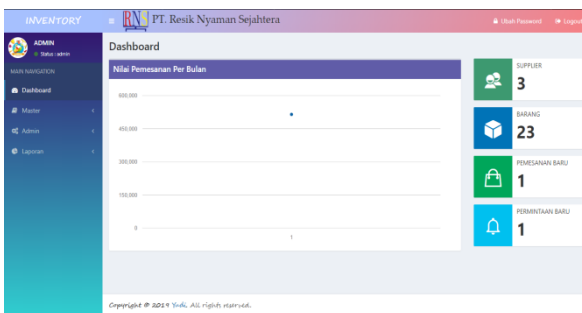
Figure 11. Report Stock

Figure 12. *Dashboard* Admin & Warehouse
Source : Author own finding

I. ACKNOWLEDGMENT

Thank God, finally the research was completed. Hopefully this research is useful for those who read. Thank you for your cooperation with PT. Resik Nyaman Sejahtera is willing to take the time for this research and thank you for your help and direction. and all parties that we cannot mention one by one.

REFERENCES

Cahya, D. (2017). Perancangan Sistem Informasi Koperasi Simpan Pinjam Studi. *Ilmu Pengetahuan Dan Teknologi Komputer*, *3*(1), 133–138.

Haryani. (2017). Implemenentasi Sistem Informasi Pengelolaan Inventory Fixed Asset Pada Pt. Ark Logistics Dan Transport. *Perspektif*, *15*(2), 155–163. Retrieved from http://ejournal.bsi.ac.id/ejurnal/index.php/perspektif/article/view/2044/1628

Hendini, A. (2016). Pemodelan Uml Sistem Informasi Monitoring Penjualan Dan Stok Barang Barang (Studi Kasus: Distro Zhezha Pontianak). *Jurnal Khatulistiwa Informatika*, *IV*(2), 107–116. Retrieved from https://ejournal.bsi.ac.id/ejurnal/index.php/khatulistiwa/article/viewFile/1262/1027

Kuncoro, D. W., Purnama, bambang eka, & Wardati, indah uly. (2015). Sistem Kasir Dan Pendataan Stok Barang Pada Tata Distro Pacitan. *Sentra Penelitian Engineering Dan Edukasi*, *7*(1), 40–46. Retrieved from https://ejournal.bsi.ac.id/ejurnal/index.php/Bianglala/article/view/579/470

Mulyana, H. (2013). Perancangan Aplikasi Pemeriksaan IP Address Aktif Pada Jaringan Komputer Dengan Metode Pengujian Black Box. *Techno Nusa Mandiri*, *X*(1).

Rosa, A., & Shalahuddin, M. (2016). *Rekayasa Perangkat Lunak*. Banudng: Informatika.