

E-ISSN : 2541-2019
P-ISSN : 2541-044X

Sinkron

INFORMATICS ENGINEERING JOURNALS & RESEARCH

Volume 3 | Number 2 | April 2019

Published by :

POLITEKNIK
GANESHA
Medan

Credit to Reviewer

Muhammad Andri Budiman

Universitas Sumatera Utara

Dian Rachmawati

Universitas Sumatera Utara

Dedy Hartama

STIKOM Tunas Bangsa

Jani Kusanti

Universitas Surakarta

Dicky Apdillah

AMIK Global Intelcom

Ida Bagus Irawan Purnama

Politeknik Negeri Bali

Muhammad Khoiruddin Harahap

Politeknik Ganesha

Nurul Khairina

Universitas Medan Area

Oman Somantri

Politeknik Harapan Bersama Tegal

Syahrul Mauluddin

Universitas Komputer Indonesia

Addin Aditya

STIKI Malang

Anjar Wanto

STIKOM Tunas Bangsa

TABLE OF CONTENTS

<u>Decision Support System For Selecting Bali Tourist Attractions Using The PROMETHEE Method</u>	1-5
<i>Eva Zuraidah</i>	
<u>Employee Performance Assessment for Promotion with the Topsis Method in Senayan Apartments Jakarta</u>	6-11
<i>Sunarti</i>	
<u>Naïve Bayes Algorithm For Sentiment Analysis Windows Phone Store Application Reviews</u>	13-19
<i>Normah Normah</i>	
<u>Monitoring patient health based on medical records using fuzzy logic method</u>	20-31
<i>Ari Rizki Pratama, Delano Ariesagita Hutagalung, Wali Siregar, Hendra Sihombing</i>	
<u>Tunagrahita Student Learning Expert System with Backward Chaining Method at YKDW 01 Tangerang School</u>	32-38
<i>Rachmat Hidayat, Haryanto Haryanto, Pipin Sapinah</i>	
<u>Data Acquisition Prototype Chamber of Mechanical Seals Test Plant API-682 Using NI MY-RIO</u>	39-44
<i>Adhitya Sumardi, Noval Lilansa, Afaf Fadhil Rifai, Fachri Iman, M. Nursyam, Yunita Indah Sari</i>	
<u>The User Personalization with KNN for Recommender System</u>	45-48
<i>Arie Satia Dharma</i>	
<u>Sentiments Analysis for Governor of East Java 2018 in Twitter</u>	49-55
<i>Ghulam Asrofi Buntoro</i>	
<u>The RPTRA Geographic Information System Application in Central Jakarta City Using the Dijkstra Algorithm Based on Android</u>	56-60
<i>Danur Sugiharja, Omar Pahlevi, Reni Widyastuti</i>	

<u>Diabetes Mellitus Diagnosis Expert System With Web-Based Forward Chaining</u>	61-67
<i>Rusdiansyah Rusdiansyah, Santoso Setiawan, Mohammad Badrul</i>	
<u>Online Student Admission Application at SMK Al-Basyariah Bojong Gede</u>	61-66
<i>Dinda Ayu Muthia, Andini Ramadhani, Adi Kurniawan, Raka Irfansyah</i>	
<u>Digital Forensics Investigation on Proxmox Server Virtualization Using SNI 27037:2014</u>	67-72
<i>Didik Sudyana, Reza Tanujiwa Putra, Soni Soni</i>	
<u>Telegram Bot Implementation in Academic Information Services with The Forward Chaining Method</u>	73-78
<i>Rianto Rianto, Alam Rahmatulloh, Teguh Anugrah Firmansah</i>	
<u>Development of Belajar Astronomi: an Astronomy Learning Application for Kids</u>	78-88
<i>Riza Miftah Muharram, Ade Surya Budiman</i>	
<u>Interactive Animation Design of Hijaiyah Letters in Early Age Children at Al-Hidayah Kindergarten Bekasi</u>	89-96
<i>Rika Dharmawati, Henny Destiana</i>	
<u>Implementation of Information System in Submitting Employees' Annual Leave at PT. Tesco Indomaritim</u>	97-103
<i>Arif Nurwidayat, Bibit Sudarsono, Kharisma Pratiwi, Marita Dwi Havity</i>	
<u>Business Intelligence Implementation To Analyze Perfect Store Data Using the OLAP Method</u>	103-111
<i>Afik Maulana, Dewi Ayu Nur Wulandari</i>	
<u>Generative Adversarial Networks Time Series Models to Forecast Medicine Daily Sales in Hospital</u>	112-118
<i>Amir Mahmud Husein, Muhammad Arsyah, Sutrisno Sinaga, Hendra Syahputra</i>	

<u>The Implementation of IDA* Algorithm to Translate Words From Indonesian Language Into Sundanese</u>	119-124
<i>Aninda Muliani Harahap, David Arnold Sibuea, Ray Cefri, Ruth Stepane</i>	
<u>The Application Of The Luftman Method Toward The Alignment Of Business Strategies And IT In Kelapa Dua Sub-district West Jakarta</u>	125-132
<i>Rani Irma Handayani, Frisma Handayanna, Fitri Ratna Sari</i>	
<u>Load Balance Design of Google Cloud Compute Engine VPS with Round Robin Method in PT. Lintas Data Indonesia</u>	147-153
<i>Desmulyati Desmulyati, Muhammad Rizki Perdana Putra</i>	
<u>Multi-criteria for Selection of SmartPhone Brands Product using AHP-TOPSIS Method</u>	154-160
<i>Akmaludin Akmaludin, Mohammad Badrul</i>	
<u>Implementation of Sobel Method Based Edge Detection for Flower Image Segmentation</u>	161-166
<i>Asmaidi Asmaidi, Darma Setiawan Putra, Muharratul Mina Risky, Fitria Ulfa R</i>	
<u>Designing a Railway Ticket Ordering Information System at PT Hotel Murah Travelindo Jakarta With Waterfall Method</u>	167-174
<i>Anggi Oktaviani, Melan Susanti, Dahlia Sarkawi, Tiara Adriani</i>	
<u>Color-based Segmentation of Batik Using the L*a*b Color Space</u>	175-179
<i>Anita Sindar RM Sinaga</i>	
<u>Property Sales Data Processing Information System (SiPendar)</u>	180-185
<i>Suparni suparni, Lilyani Asri Utami, Elsa Dwi Selviana</i>	
<u>Application of Simple Additive Weighting Method to Determine Outstanding School Principals</u>	186-192
<i>Febri Haswan</i>	
<u>The Implementation Concept Of "Learning Style Inventory" David Kolb Based PHP On STMIK Nusa Mandiri</u>	193-199
<i>Rino Ramadan</i>	

<u>Light Control Design by Using Social Media Telegram Applications Based on Internet Of Things (IOT)</u>	200-204
<i>Rudi Arif Candra, Dirja Nur Ilham, Hardisal Hardisal, Sriwahyuni Sriwahyuni</i>	
<u>Expert System Identification Of Learning Patterns The VARK Method</u>	205-211
<i>Linda Marlinda, Dwiki Saputra, Wahyu Indrarti</i>	
<u>Designing Number Learning Applications and Early Childhood Mathematics Calculations</u>	212-217
<i>Nofri Wandu Al Hafiz, Helpi Nopriandi</i>	
<u>Application of Apriori Algorithms to Determine Associations in Outdoor Sports Equipment Stores</u>	218-222
<i>Eni Irfiani</i>	
<u>Diagnosis of Tuberculosis By Artificial Neural Network Algorithm</u>	223-228
<i>Amrin Amrin</i>	
<u>Analysis and Design of Data Mart Decision Support Systems at PT Marlindo Tirta Nusantara</u>	133-140
<i>Budi Sudradjat</i>	
<u>Helpdesk System At PT Himalaya Everest Jaya Jakarta</u>	229-236
<i>Embun Fajar Wati, Dedi Maryadi</i>	
<u>E-Voting Optimization For Head Of Community Unit (RW) Election with WAPT Testing</u>	237-241
<i>Samudi Samudi, Herlambang Brawijaya, Slamet Widodo</i>	
<u>XP Model for Information Systems Recording Academic Data</u>	242-248
<i>Suhar Janti, Ghofar Taufik, Ishak Komarudin</i>	
<u>The Development of Student Grades Information System at SDIT Using Waterfall Model</u>	249-159
<i>Adjat Sudradjat</i>	

[Implementation Of Webqual 4.0 For Measuring The Quality Of Baznas.Go.Id Website For User Satisfaction](#) 260-264

Acma Nurhadi, Norma Yunita, Anna Mukhayaroh, Ahmad Sahirudin

[Machine Learning for Handoffs Classification Based on Effective Communication History](#) 265-267

Anita Ira Agustina Simbolon, Maria Pujiastuti, Indra Kelana Jaya, Kerista Tarigan, Marzuki Sinambela

[A prototype for IoT based Rice Field Irrigation System](#) 260-265

Muhamad Fuat Asnawi, Fitri Syukriasari

[Comparison of Naïve Bayes Algorithm, C4.5 and Random Forest for Classification in Determining Sentiment for Ojek Online Service](#) 266-274

Hermanto Hermanto, Sandra Jamu Kuryanti, Siti Nur Khasanah

[E-Inventory Information System at PT. Resik Nyaman Sejahtera](#) 275-279

Yudi Yudi, Karlana Indriani, Kresna Ramanda

[TOGAF ADM to Improve The Promotion of Farm Edu-Tourism in Pondok Rangon Area](#) 280-287

Tri Retna Sari, Eva Rahmawati, Hani Harafani

[Case Study : Development of POSYANDU \(Pos Pelayanan Terpadu\) Information System](#) 288-292

Slamet Wiyono, Dega Surono Wibowo, M. Yusuf Bachtiar

[The Comparison of Methods for Generating Prime Numbers between The Sieve of Eratosthenes, Atkins, and Sundaram](#) 293-298

Muhammad Khoiruddin Harahap, Nurul Khairina

Property Sales Data Processing Information System (SiPendar)

Suparni¹

Universitas Bina Sarana Informatika
Jl. Kamal Raya No. 18, Ringroad Barat,
Cengkareng.

Suparni.spn@bsi.ac.id

Lilyani Asri Utami²

STMIK Nusa Mandiri
Jl. Damai No. 8 Warung Jati Barat (Margasatwa),
Jakarta Selatan

lilyani.lau@nusamandiri.ac.id

Elsa Dwi Selviana³

STMIK Nusa Mandiri
Jl. Damai No. 8 Warung Jati Barat (Margasatwa)
Jakarta Selatan

Elsadwi45@gmail.com

Abstract— PT. Pratama Mega Konstruksindo is one of the companies engaged in Property, especially Housing. One of the fields that requires technological progress is one of them is the property sector, the rapid development in the property sector is currently urging property service companies to meet the demands of the wider community. Implementation of work related to housing sales. In managing the data, this company still uses a manual system, starting from the recording and calculation aspects so that its performance has not been effective. At PT Pratama Mega Konstruksindo this still manages data using Ms Excel. As well as down payment, cash payments and consumer data are recorded using Ms Excel. This can cause errors in recording transactions, data security that is not guaranteed confidentiality, ineffective employees at work because it requires more time to input and make sales reports and even loss of data. Therefore, PT. Pratama Mega Konstruksindo requires a system that can solve the problem. This data processing system is designed web-based using the PHP and MySql programming languages as data storage databases. With the existence of this website, it can help processing sales data more effectively and efficiently, reports can be printed in realtime and data security can be maintained

Keywords : Information System, Data Processing, Property

I. INTRODUCTION

In this information and globalization era every single person and organization will be encouraged to always find new things and try as much as possible with the technology they have to respond and answer and provide direction on the problems faced, especially in various jobs that have been done manually. This technological advancement encourages companies to be able to utilize new technology in accordance with what is needed by the company. Making a web-based sales data processing information system using php and MySQL which aims to help facilitate the user and admin in systematically recording. PT. Pratama Mega Konstruksindo is one of the companies

engaged in Property, especially Housing. One of the fields that requires technological progress is one of them is the property sector, the rapid development in the property sector is currently urging property service companies to meet the demands of the wider community. With the increasing public demand for property needs, property prices are currently increasing. In managing the data, this company still uses a manual system, starting from the recording and calculation aspects so that its performance has not been effective. At PT Pratama Mega Konstruksindo this still manages data using Microsoft Excel. Likewise with the down payment, cash payments and consumer data are recorded using Microsoft Excel.

This can cause errors in recording transactions, data security that is not guaranteed confidentiality, ineffective employees at work because it requires more time to input and make sales reports even the possibility of data loss.

In a previous study, the system used by companies in handling the recording and sale of home products was still done manually so that it hampered the company's performance. With the proposed proposal system can solve these problems while providing information on home sales quickly. The use of this new system works so that proper and fast handling can be carried out in the home sales process so that it can help smooth the operations of the company and simultaneously improve customer service. The resulting report is in the form of home data reports, home buyer reports (Devitra, 2017).

While the field of trade is one of the business sectors that has a rapid development, competition in this field requires the efficiency and effectiveness of the work of the traders properly and quickly. The existence of computers in the field of trade with its application that supports trade for growing is also increasingly easier in the cycle of trade and services. Kedai Pesisir is a shop with a trading business that is engaged in the sale of various needs of fishermen and various household needs, the transaction process is carried out almost every day, this shop experiences problems namely in the process of processing data on sales of goods still completely manual (Eka Puspitasari, 2015).

Base on the various problems that occur, the authors make the authors make a research with the title of information system data processing property sales, especially web-based housing at PT Pratama Mega Konstruksindo Depok

II. LITERATURE REVIEW

A. Information System

Information system is a system within an organization that brings together the needs of daily transaction management, supports operations, is managerial, and strategic activities of an organization and provides outsiders with reports needed (Hutahaean, 2015).

B. E-Business

E-business is a business activity that is carried out automatically by utilizing electronic technology such as computers and the internet. E-business allows a company to deal with internal and external data processing systems more efficiently and flexibly (Ayus, 2015).

C. UML (Unified Modeling Language)

According to Windu Gata (2013) UML is a standard specification language used to document, specify and build software. UML is a methodology in developing object oriented systems and is also a tool to support system development

The tools used in designing objects based on UML include: Use case diagrams, Activity diagrams, Class Diagrams, and Sequence Diagrams

III. PROPOSED METHOD

Based on the problems that have been described, the purpose of this research is how to design an information system or build an information system for data processing of property sales in this case devoted to home sales to solve existing solutions at PT Pratama Mega Konstruksindo. In building this system, the author uses the Waterfall method (R.A Sukanto, 2013). The stages in the waterfall method are:

A. Software Requirements Analysis

At this stage, the first step is done by the writer analyzing the business processes that are running in building this system. In the system to be built there are 2 access rights, namely the user and admin. Users here are marketing, on user access rights, users can input consumer data, make consumer transactions with available home units, print booking fee receipts and advance payments from consumers and users can manage user accounts such as changing username and password. In admin access rights have more access rights than users, admin can input consumer data, delete transactions that have been done by the user if there is an error, admin can view transactions and print reports on transactions carried out by each user, admin can input, change and delete the availability of home units on the form unit, the admin can input, change and delete user accounts.

B. Design

At this stage what is done is to create a database design where the process for determining the content and arrangement of data needed to support system design, besides that the author also uses ERD diagrams (Entity Relationship Diagrams) and LRS (Logical Record Structure), as well as relationships between these components where the author uses UML diagrams (Unified Modeling Language), as for programs created using Object-Based Programming (OOP), which consists of usecase diagrams, sequence diagrams, activity diagrams, and class diagrams. For database design using ERD (Entity Relation Diagram) to be more easily implemented into the making of program code.

C. Code Generation

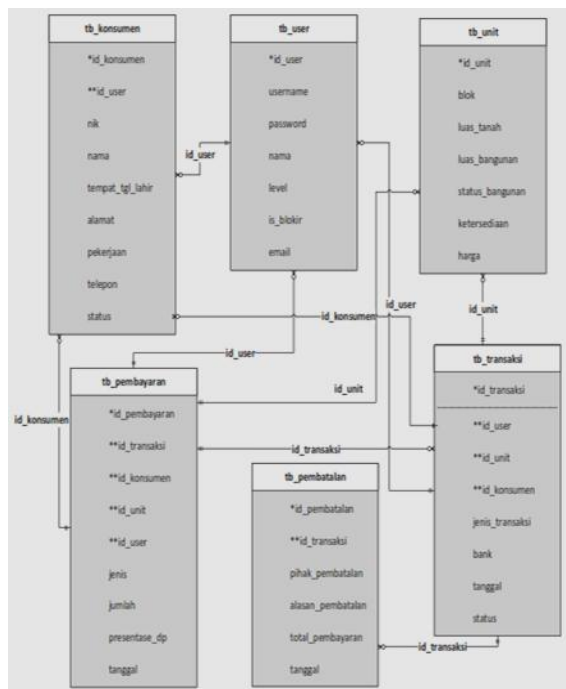


Figure 4. LRS Property Sales Data Processing Information System

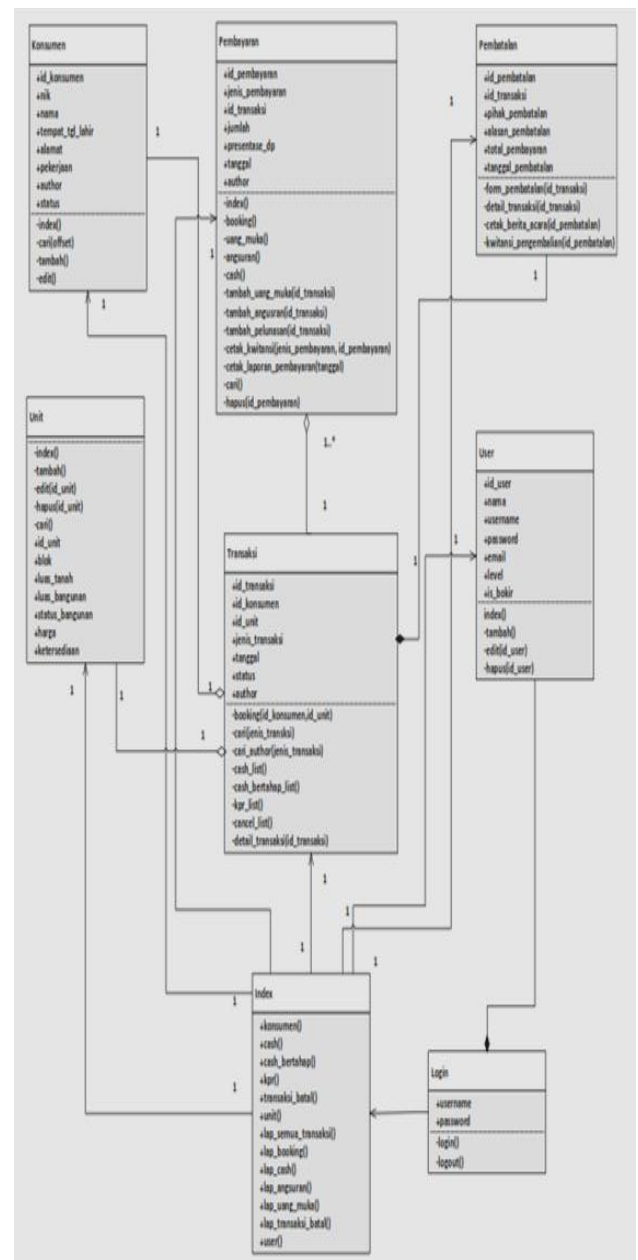


Figure 5. Class Information System Data Processing Diagram for Property Sales

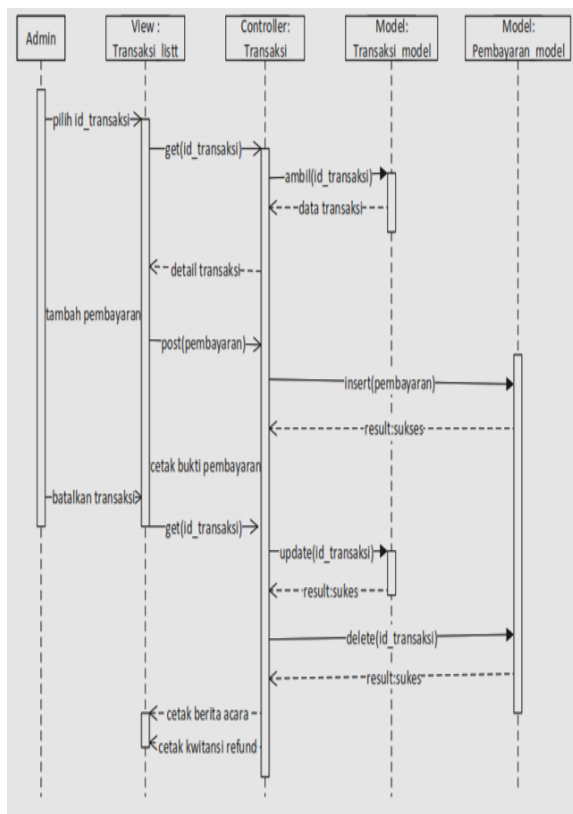


Figure 6. Sequence of Property Sales Data Processing Information System Diagram

B. User Interface Design of Property Sales Data Processing Information System

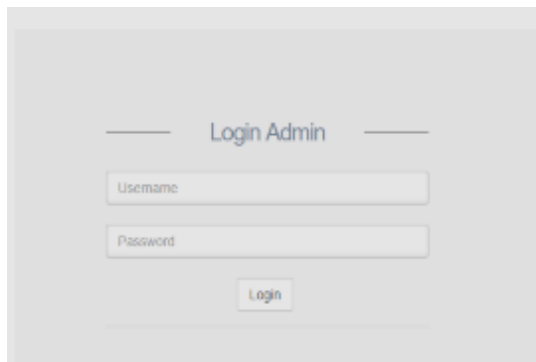


Figure 7. Display of Login Pages

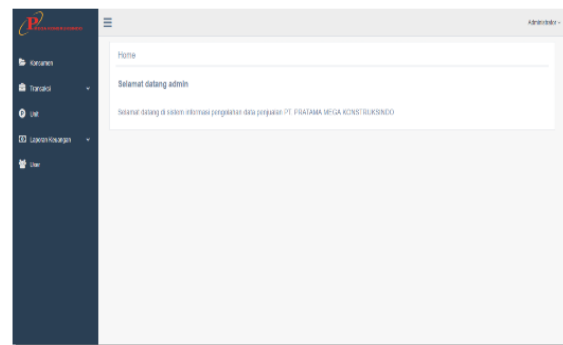


Figure 8. Display of the Main Menu Page

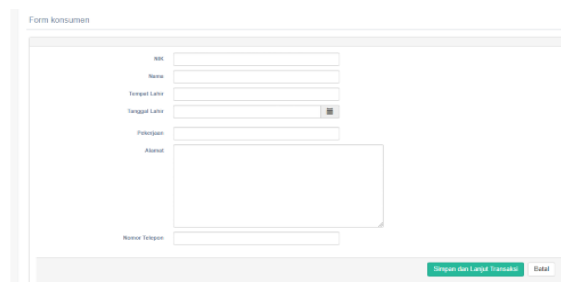


Figure 9. Display the Consumer Form

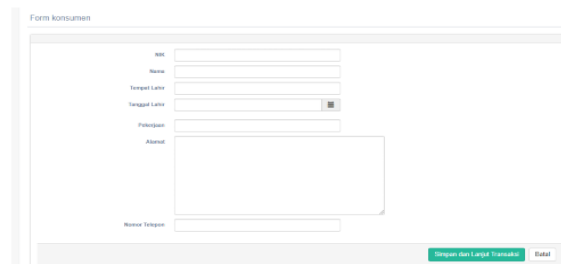


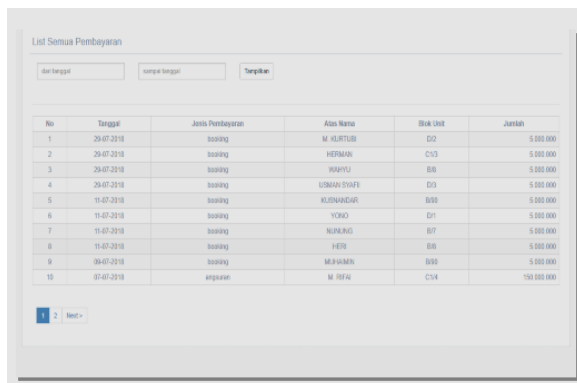
Figure 10. Display of Transaction Form

Data Unit Rumah

No	Block	Luas Tanahm2	Luas Bangunanh2	Status Bangunan	Ketersediaan	Harga	
1	B00	75	45	-	terjual	300.000.000	
2	B01	80	45	-	terjual	350.000.000	
3	B07	72	36	-	terjual	280.000.000	
4	A45	90	80	-	terjual	700.000.000	
5	A614	100	70	-	terjual	140.000.000	
6	C15	75	45	-	terjual	450.000.000	
7	C24	80	54	-	terjual	380.000.000	
8	C23	90	36	-	terjual	500.000.000	
9	D11	72	36	-	terjual	320.000.000	
10	D12	72	36	-	terjual	400.000.000	

Tambah

Figure 11. Display of List Units



No	Tanggal	Jenis Pembayaran	Atas Nama	Blok Unit	Jumlah
1	25-07-2018	bayang	M. KURTULUS	D2	5.000.000
2	25-07-2018	bayang	HERMAN	C13	5.000.000
3	25-07-2018	bayang	WENYU	B6	5.000.000
4	25-07-2018	bayang	USMAN SHAFI	D3	5.000.000
5	11-07-2018	bayang	KURNIAWATI	B6B	5.000.000
6	11-07-2018	bayang	YONGI	D1	5.000.000
7	11-07-2018	bayang	WIKANG	B7	5.000.000
8	11-07-2018	bayang	HERI	B6	5.000.000
9	06-07-2018	bayang	MURAHAN	B6B	5.000.000
10	07-07-2018	angsuran	M. RIZAL	C14	100.000.000

Figure 13. Display Payment List

V. CONCLUSION AND SUGGESTION

Conclusions that can be drawn from making information systems are property sales data processing, especially houses at PT. Pratama Mega Kontruksindo is as follows:

1. By relying on information system technology, the administrative process at PT. Pratama Mega Kontruksindo is done more effectively and efficiently, because all administrative parts are integrated with each other.
2. With the implementation of administrative information system technology can improve work productivity, and minimize information errors that existed before.
3. Object-oriented programming can easily be used to build an information system, because existing programs can be developed by adding the necessary classes.

4. With the making of home sales data processing, the information needed is more maximal than when still using spreadsheet files (excel).

Suggestions in developing information systems for data processing of home sales at PT. Pratama Mega Kontruksindo, among others:

1. The company can develop the system further by making a home sales data processing application to make it more accessible
2. For further research, this information system can be developed with other methods and programming languages.

VI. REFERENCES

- Ayus, M. (2015). Pengertian E-Bisnis Logistik. Retrieved from <https://www.kompasiana.com/alansharyhasan/561b7b76f19273cb098b4567/pengertian-ebisnis-logistik> accessed on 11 March 2019
- Devitra, J. (2017). Analisis Dan Perancangan Sistem Informasi Penjualan Rumah Berbasis Web Pada Pt . Mitra Hasri Hap, 2(3).
- Eka Puspitasari, S. I. (2015). Sistem Informasi Penjualan Pada Kedai Pesisir Mina Bahari Desa Worawari, 7(2), 25–29.
- Hutahaean, J. (2015). *Konsep Sistem Informasi*. Yogyakarta: Deepublish.
- R.A Sukamto, M. S. (2013). *Rekayasa Perangkat Lunak terstruktur dan Berorientasi Objek*. Bandung: Informatika Bandung.
- Windu Gata, G. gata. (2013). *Sukses Membangun Aplikasi Penjualan dengan Java*. Jakarta: Elex Media Komputindo.