

Web Based Fixed Asset Management Information System Using the Waterfall Method (Case Study: National University)

Listrina Turnip¹, Agung Triayudi^{*2},Ira Diana Solihati³

Universitas Nasional, Jl. Sawo Manila, RT.14/RW.3, Ps. Minggu, Kec. Ps. Minggu, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12520

Email: ¹listrina2310@gmail.com, ^{2*}agungtriayudi@civitas.unas.ac.id, ³iradiana2803@gmail.com

ARTICLE INFO

A B S T R A C T

Asset Management is one of important keys in institutions. Therefore, Article history: Received: 04/04/2020 each asset that is owned must be optimally, effectively and efficiently Revised: 20/04/2020 managed in order to give proper advantages to Institutions. The Accepted: 30/05/2020 National University is the oldest private University in Jakarta. The National university has a lot of assets to support its operational such as computers, air conditioning, vehicles, laboratory equipment and etcetera. Currently the asset management systems at National University is still using Microsoft excel. it causes the process of the Keywords: asset Recording, asset maintenance and asset Report at national university are less Optimal. it takes longer time to trace the data of the Information System, Asset Management, assets. To overcome the issue, an Information system is needed. This Research Uses waterfall method. This information system (of fixed Web, asset management) is created using PHP programming language and Waterfall using MYSQL as the database. The presence of this website-based (fixed assets management) information systems hopefully can **author's correspondence:* agungtriayudi@civitas.unas.ac.id facilitate the general administration officer to work more effective and efficient in managing the assets.

> Copyright © 2020 Jurnal Mantik. All rights reserved.

1. Introduction

Asset management is the process of managing the assets of a company or organization that is important in every financial policy, expenditure and management decision making. Every organization or company will use assets to support its business and operational activities. Asset management can be done by recording assets, bookkeeping, reporting and also the use of assets according to company needs so as to provide benefits for the company in carrying out organizational activities (Hasan, 2019). Therefore, every asset in the company / organization must be used optimally.

In the rapid development of technology in the 4.0 era, it makes us to continue to innovate in technological progress (Ariawan, Triayudi, & Sholihati, 2020). The positive impact of information technology is to provide convenience and speed in obtaining information, delivering information and making it easier to complete tasks or work (Mudiar & Hidayat, 2019). Information systems are used in maximizing data processing into valuable information and used to achieve its objectives. There are three main requirements related to information that is timely, relevant and accurate (Yunita & Devitra, 2017).

Asset management systems are used to carry out administrative control in the management and data collection of goods (Ridwan, Muhammad, & Ramadhani, 2017). The form of optimizing asset management is monitoring assets. Monitoring is carried out not only by recording the asset register but also concerning asset valuation. (Astriyani, Putri, & Widianingsih, 2020). Asset valuation is influenced by the acquisition value, the useful life and also the depreciation value. Physically, assets can be monitored by maintaining assets to maintain the quality and function of the assets owned. Asset maintenance is an activity carried out in an organized manner to ensure the assets that are operated with the best conditions at the lowest cost (Yaakub & Devitra, 2017).

National University has so many assets to support its operational activities such as computers, air conditioners, vehicles, laboratory equipment, etc. Currently the asset management system at the National University is still manually using Microsoft Excel. This causes the process of recording assets, maintaining assets and asset reports at the National University to be not optimal. Manually recorded records also result in searching or tracing asset data for a long time. In addition, interrelated data is not mutually integrated so that duplication of data from repeated input. The absence of an asset management information system also results in limited information to those who make requests for asset acquisition.

Therefore, there needs to be a computerized system to help these problems. Web-based asset management information system is expected to provide convenience, speed, and effectiveness for users in processing data assets.

Limitations in this study are:

- a. Case study research in the National University General Administration Bureau
- b. The system does not discuss the purchasing process and budget funds.

2. Literature Review

2.1. Understanding Information Systems

Information systems are "a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization" (Laudon & Laudon, 2012). In another sense stating "Information system is a system within an organization that meets the needs of processing daily transactions that support the managerial function of the organization's operations with the strategic activities of an organization to be able to provide certain outsiders with the necessary reports" (Sutabri , 2012).

2.2. Definition of Asset Management

Assets are wealth and resources that are owned and can be utilized by an organization. The classification of assets according to their existence is tangible and intangible assets. According to (Hery, 2015) "Fixed assets (fixed assets) are the equipment or property of an organization or company that is used for operations that are physically visible and have a long-term nature (useful life)". Examples of fixed assets are office equipment, machinery, land, factories, buildings, electronic and computer equipment, vehicles, furniture and others. Fixed assets also have depreciation values. The method of depreciation of fixed assets has several variations, one of which is the straight-line method. The straight-line depreciation method is a method of depreciating property, plant and equipment that contributes equally or evenly to the end of its useful life or economic life.

While asset management is an activity of planning, monitoring and organizing in using, repairing, maintaining and buying and eliminating assets physically to maximize services and reduce costs and risks in managing tangible and intangible assets with or without technology in carrying out operational activities.

2.3 PHP Programming Language

PHP (Hypertext Preprocessor) is an open source programming language used by programmers in creating a website (Oktasari & Kurniadi, 2019). PHP is needed to make a web portal attractive, user friendly, responsive and dynamic. PHP is used to access databases such as MySQL and run on a webserver.

2.4 MySQL database

MySQL is a database that connects php scripts using the same query and escaps character commands as php (Muhammad Sadeli, 2014). MySQL is a development of the SQL language (Structure Query Language) which is used for the interaction of program scripts with database servers for data processing. (Sriwahyuni, Oktoria & Dewi, 2019)

2.5 Black Box Testing

One of the activities that need to be done in the process of making a system or application is Testing. Testing a system or application must be done to determine whether every function on the system is running well or there are still bugs or errors. One type of system testing is Black-box testing. Black box testing can be done by the user, programmer or tester by defining a list of system input processes and testing the methods and functions that run on the system (Hidayat & Muttaqin, 2018). The Black Box Testing process is based on test parameters and indicators in the system. In this case tools are needed to collect data called the User Acceptance Test (UAT). This UAT contains a list of functions in the system which are then tested according to the expected results, whether it has been successful or not. (Setiyani, 2019).

3. Research methods

3.1 Method of collecting data

The stages of data collection in this study are:

a. Observation

Observe directly and collect data and information from the General Administration Bureau, and learn firsthand the process of asset management at the National University.

b. Interview

Conduct question and answer directly with the General Administration Bureau to find out data and information needs

c. Literature review

Study and understand theories and previous research related to asset management through books, journals, and websites in order to be a reference and guide in solving problems in research.

3.2 Systems Development Method

In this research, the system development method or model used is the waterfall method. There are several stages to this method, namely:

a. Requirements Analysis

In the initial stages, the process is identifying the needs and expectations and analyzing the system that is being used to obtain solutions to problems.

b. System Design and Design

This stage is the process of making the flow, process, and appearance of a system or application. At this stage, the system design will be built using the Unifield Modeling Language (UML) as a system modeling and using Entity Relationship Diagrams (ERD) for modeling data structures and relationships between data.

c. Implementation

This stage is programming or designing information systems according to the results of the design at the system design and design stages.

d. System Testing

The process of testing or testing the system uses the black box testing method, if the output does not match or there is still an error then repairs are made until the results are as expected.

e. System Installation and Maintenance

At this stage, applications that have been developed are installed for normal use and perform system maintenance.

4. Results and Discussion

4.1 Current Systems Analysis

Analysis of the existing system or which is being used, that is, the Admin does all the asset management in the building, room and floor. Starting from the submission of asset expenditure, recording data on assets, the process of maintaining an asset and reporting data on assets. Submission of assets can be done by the general administration department or from the faculty, after the submission is completed the approval will then wait for the assets to be received. When an asset has been purchased, it will be recorded by the BAU admin. Then the existing assets will be inspected and maintained periodically.

4.2 Proposed System Design

The researcher carries out the Analysis phase of the proposed system to provide solutions and also solutions to the existing or currently in use system. The proposed system design is illustrated by activity diagrams, class diagrams and usecase diagrams.

a. Use Case Diagrams

Use case diagrams on the National University's fixed asset management information system as follows:

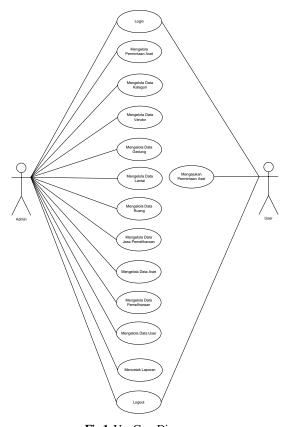


Fig 1. Use Case Diagrams

In Figure 1. It can be seen that the design system created has 2 actors namely admin and user. Admin can run the system by logging in, managing asset request data, managing category data, managing vendor data, managing building data, managing floor data, managing room data, managing asset data, managing maintenance data, managing user data, printing reports, and logging out. Users can log in, make asset requests, and log out.

b. Activity Diagram

Following is the presentation of activity diagrams on the design of the National University's fixed asset management information system. Activity diagram of the asset master input can be seen in Figure 2. Input of asset data can be done by the admin after a successful login.

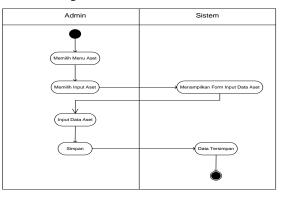
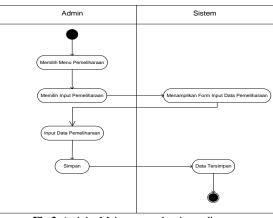


Fig 2. Activity Diagram of asset data input

Activity diagram of asset maintenance data input can be seen in Figure 3. Input of asset maintenance data can be done by the admin after successfully logging in.



 ${\bf Fig}~{\bf 3.}$ Activity Maintenance data input diagram

Activity diagram of building master input can be seen in Figure 4. Input of building master data can be done by the admin after successfully logging in.

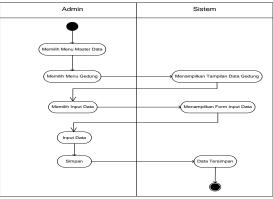


Fig 4. Activity Diagram of building master data input

Activity diagram input master data categories can be seen in Figure 5. Input of asset category data can be done by the admin after a successful login.

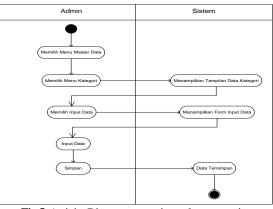


Fig 5. Activity Diagram master input data categories

Activity diagram for inputting asset demand data can be seen in Figure 6.

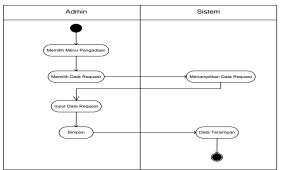
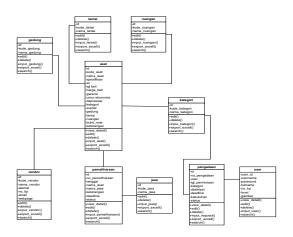


Fig 6. Activity Diagram of the input of asset request data

c. Class Diagram

Class diagrams created on this system can be seen in Figure 7.



4.3 Implementation results

The results of implementation in this study are a web-based information system using the PHP programming language and using a MySQL database. Below this is the display of the system that has been built.

Fig 7. Class Diagram



Fig 8. Display login page

In Figure 8. It is a login page, where users will enter their username and password to enter the main system page.

	III SISTEMIN	FORMASI MANA	JEMEN ASET - U	NIVERSITAS N	ASIONAL								61 .00
Defined			1010								-		_
hant.			18				_7	۶		4	6.		
Propriet			~							terefore.			
Tentime			0	1									
-			2										
Norles													
						Pen	belian Ase	t Tahunan					
											~		
	- The		na i	Mar.	Apr.	~	ibelian Ase	м	-	be t	OH	Ker	Des
	Telus 274 275	34 1		Mar 1	Ap. 1				Ap. 3	be 1		Nor 2	Das 0
	2014	1		4	1	94 2	Jan 1	M I	3	0.	0	1	0
	2014 2016	1	1	8 2	1	946 2	Jan 1 0	M 8 8	3	0	0 2	3 1	0 0
	2014 2016 2010	1	1 2 8	8 2	1	5%ai 0 0 0	Jan 1 2	M 8 8	3 1 0	8. 0. 0.	0 2	3 1 8	0 0 0
-	2014 2015 2016 2010	1	1 2 2 2	0 2 0 0	8	94 0 0 0 0	2m 1 2 2	M 8 8	3 1 0	0 0 0	0 2	3 1 0 0	0 0 0 0

Fig 9. Main Page Display

In Figure 9. Is the main page of the system where there are dashboard menus, assets, procurement, vendors, master data, admin, and reports.

1.00	Test.			
Non locus	heatana			
Specifical	Searthan			
Sensi Number	bearmana -			
Tanggal divi	Serge Set			
Harga Sol	Parpathil			
Garanai	Pik Sawa			
Unior Ekonomie	- Private Dansmin -			
Depress/Perlane	Departed			
Relegent	- Fib. Grapsi -			
Hedar	- NA Verder-			
	Line (being	Landal - Millianda -	harger - Piti Nanger-	
Bark Persetor	(TRANSPORT In the phone			
References				

In Figure 10. Is the display of the asset data input form on the asset menu.

 C (D) (ocalheat(3)/amau 	nas/ampunas/adminy/input-periel/harsar	470	4 R 6 1 1
E SETEN NFORMALI MANAJEMEN	KAGET - UNIVERSITALI MAGNOMAL		<u>\$7</u> and
Input Data Pemelikaraan Juaritangeur Iner			
Na Perekkanan	P-0322		
Senggal Permittaan	Segriteman		
Note Acat	(- Fill Agent -		
Numa Ananti			
Destryet			
Barrie Joss	(-7st.au-		
Keleningen Keludutan			
Danking	Terapit Deaths		
Tatus	Diet		
ther	1000 C		
	Star Cont		
Contractor and a second			Table Constraints (and
E:	a 11 Main	tenance Data Innu	t Manu

Fig 11. Maintenance Data Input Menu

In Figure 11. It is a display of the maintenance data input form in the maintenance menu

	NAJEMEN KIET- UNVERSITAS NASIONAL	\$7 m
Data Kategori Isan Honor Properties		
	N Australia	
-	Magel (s. est)	
-	a National American State	
	E = =	

Fig 12. Category Data Input Menu

In Figure 12. It is a display of the category data input form on the master data menu

gl. Permintaan		Ketsport	Deskripei	Kebutuhan	deatline	statu
2020-05-04 2020-05-04 2020-05-24	admin admin	AC RAK BESI ALAT LABORATORIUM	AG 1 PK DAK PENYIMPANAN ARSIP 18 UNIT KOMPUTER	RUANG SENDETARIST FTNI BIRO ADARNISTRASI UMUM LAB FTNI SI	2020-05-04 2020-05-04 2020-06-02	DRAFT DRAFT DRAFT
2020-00-11	admin	ALAT LABORATORNAM	1 SHITLAPTOP	DOMEN	2020-06-01	DRAFT
	pt. Perminteen 2020-05-04 2020-05-10 2020-05-24	Permintaux User 2020-05-04 admm 2020-05-04 admm 2020-05-04 admm 2020-05-04 admm	J. Permittasan User Kategori 2020-05-04 somm AC 2020-05-04 somm BAK DSD 2020-05-04 somm BAK DSD 2020-05-04 somm BAK DSD 2020-05-04 somm BAK TLABORATORISAN 2020-05-04 somm ALAT LABORATORISAN	Bit Perministaan User Keingerit Deskriged 3000-05-0 exmm Ad2 Ad3 1 SH Ad3 1 SH 3000-05-0 exmm Bad LEGs Ad4 1 SH Ad4 1 SH 3000-05-0 exmm Bad LEGs Ad4 1 SH Ad4 1 SH 3000-05-1 exmm Bad LEGs Ad4 1 SH T SH 3000-05-1 exmm Ad4 1 CARDAT/SHAM T SH T SH T SH	Description Description Relationary 3005:00-00 amm Au2 Ap1 19K Description Description	Ap Provincing Dear (a) Contractor Dear (a) (b) Dear (b) (b) Dear (b) (b) Dear (b) (b) Dear (b) (b) Dear (b) Dear (b) <thdear (b)<="" th=""></thdear>

Fig 13. Asset Procurement Requests Report

In Figure 13 Is a display report on the demand for asset procurement

iampai Tanggal :							
No. pemeliharzan	Tgl. Permintaan	Kode Asset	Nama Assot	nama Jasa	keterangan	deadline	status
	2020-05-01	ACD/FAN-001	AC PANASONIC	JASA PERAMATAN/ PERBAIKAN AC	PEKERJIKAN RUTIN	2020-05-02	DRAFT
PH00001	2023-05-14	Total	LENOVO G4503-2837	JADA PERANATAN / PERBAIKAN	LCD RETAK	2020-05-21	DRAFT

Fig 14. Asset Maintenance Report

In Figure 14. Is a view of the Asset Maintenance report

				UNP	VERSITAS	NASION	IAL				
tuta Auet Terger: 294-200											
	Kode Asset	Nama Asset	Senifikasi	Serial Number	Kategori	1		Lokasi	Keterangan	Vendor	Garan
**	NUCE PEOPLE	Name Asset	Steams	senal number	weight	Gedung	Lantai	Reargan			Garan
1	AP-LEN-000	LENOVO G4503-2837	LEGAUZATION GET GENUIE	0374567853F5F5	KOMPUTER	SEDUNG 1	UANTAJ 2	RUANG KELAS 1 101			1 tehun
2)	CD-HP-001	PC HP XTU 150-030Y	MONITOR LCD	M3409W0AQ11231E	KOMPUTER	SEDUNG 3	LANTA) 3	LABORATORIUM FTKI 1	KONDIS: BAIK	PT RCCA TOWOLOGI	1 tahur
3)	PC3-HP0-001	PC HP PAVILUN 263W	RAM DOR3 4 G8, HDD 500 G8	16	KOMPUTER	SECUING 5	LANTAL 3	LABORATORIUM FTRI 1	KONDISI BAIK	PT RCCA TEXNOLOGI	1 teitu
43	RI-EPS-001	PRINTER EPSON LO 2190	NEW MODELS	8HF8VDSE4U74	KOMPUTER	GEDUNG 1	UNTAI 1	LABORATORIUM FTKI 1	KONDISI BAH	PT RCOA TEXNOLOGI	Tidek
5	CD-PAN-001	AC PANASONIC	MERK PANASONIC TYPE CS-RS9URP WITH	ACONSFERIOPS22	AC.	GEDUNG 2	LANTAL 2	RUANGAN BIRO ADMINISTRASI UMUM	KONDISI BAIR	SINAR ELEKTRONIK	1 tahu

Fig 15. Asset Data Report

In Figure 15. Is a display of data asset reports from export excell results

4.4 System Testing

@ • S

The results of testing using the blackbox method can be seen in table 1.

		Table 1		
Test Case	Test Scenarios	Testing Results Table Expected results	The results obtained	Conclusion
Login	Enter the correct username & password.	The system will show the main page.	The system shows the main page.	[√] Received
	Incorrect username & password input	The system prevents access.	The system prevents access.	[√] Received []Rejected
	Only input one of the username or password	The system will prevent login access by displaying the message "please fill out this field".	The system will prevent login access by displaying the message "please fill out this field".	[√] Received [] Rejected
Main course	Select the asset menu	The system will show menu choices: asset data, asset input.	The system shows menu choices: asset data, asset input.	[√] Received []Rejected
	Select the procurement menu	The system will show menu choices: procurement data, input requests	The system shows the menu options: procurement data, input requests	[√] Received [] Rejected

Jurnal Mantik is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

Choose the maintenance menu Select the vendor menu Select the master data menu Choose the admin menu Select the report menu	The system will show menu choices: maintenance data, maintenance input. The system will show menu choices: vendor, vendor input. The system will display menu options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports, maintenance reports, master	The system shows menu options: maintenance data, maintenance input. The system shows menu options: vendor, vendor input. The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	 [✓] Received [] Rejected [✓] Received [] Rejected [✓] Received [] Rejected [✓] Received [] Rejected
Select the vendor menu Select the master data menu Choose the admin menu Select the report menu	 maintenance input. The system will show menu choices: vendor, vendor input. The system will display menu options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports, 	maintenance input. The system shows menu options: vendor, vendor input. The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	[] Rejected [✓] Received [] Rejected [✓] Received [] Rejected [✓] Received [] Rejected
menu Select the master data menu Choose the admin menu Select the report menu	The system will show menu choices: vendor, vendor input. The system will display menu options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	The system shows menu options: vendor, vendor input. The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	 [✓] Received [] Rejected [✓] Received [] Rejected [✓] Received [] Rejected
menu Select the master data menu Choose the admin menu Select the report menu	choices: vendor, vendor input. The system will display menu options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	options: vendor, vendor input. The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	Received []Rejected [✓] Received []Rejected [✓] Received []Rejected
Select the master data menu Choose the admin menu Select the report menu	The system will display menu options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	input. The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	[] Rejected [✓] Received [] Rejected [✓] Received [] Rejected
menu Choose the admin menu Select the report menu	options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	The system shows menu choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	 [✓] Received [] Rejected [✓] Received [] Rejected
menu Choose the admin menu Select the report menu	options: category, building, floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	choices: categories, buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	Received [] Rejected [√] Received [] Rejected
Choose the admin menu Select the report menu	floor, room, service. The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	buildings, floors, rooms, services. The system shows menu options: admin, admin input The system shows the	[] Rejected [√] Received [] Rejected
menu Select the report menu	The system will show menu options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	services. The system shows menu options: admin, admin input The system shows the	[√] Received []Rejected
menu Select the report menu	options: admin, admin input The system will display menu options: asset data reports, procurement request reports,	options: admin, admin input The system shows the	Received []Rejected
Select the report menu	The system will display menu options: asset data reports, procurement request reports,	input The system shows the	[] Rejected
menu	options: asset data reports, procurement request reports,	The system shows the	
	procurement request reports,	menu options for asset data	[✓] Received
		reports, procurement	[] Rejected
	-	request reports,	[]Rejected
	data reports.	maintenance reports,	
		master data reports.	
Click Input Data	The system will show the input	The system shows the data	[✓]
	data form.	input form.	Received
			[] Rejected
Click Details	The system will show detailed	The system will show	[1]
	asset data.	detailed asset data.	Received
			[] Rejected
Click Edit, Click	Data will be changed.	Data changed.	[∫]10j0000 [√]
Delete		0	Received
			[] Rejected
Click export excel	Will show the results of data	Will show the results of	[] Rejected [√]
caes esport ester			Received
	export in exter totili.	Gata export in excel 10111	
Click soorth	The guident shows the date	The data sought was formal	[] Rejected
Check search			[√] Passived
	sought.	successiuny.	Received
Clinitation (D)		The sector 1 of 1 of	[] Rejected
Click Input Data	•	•	[∕]
	data form.	input form.	Received
			[] Rejected
Click Details	The system will show detailed	The system will show	[✓]
	procurement data	detailed procurement data	Received
			[] Rejected
Click Edit, Click	Data will be changed.	Data changed.	[✔]
Delete			Received
			[] Rejected
Click Export Excel	Will show the results of data	Will show the results of	[•]
*		data export in excel form	Received
	L	1	[] Rejected
Click Search	The system shows the data	The data sought was found	[] Rejected [√]
	-	U	Received
	oougin	successiony	[] Rejected
Click Input Data	The system will show the input	The system shows the data	[] Kejecieu [√]
Chek Input Data	•	•	
	uata 101111.	mput tottil.	Received
Clials Details	The gratem	The crusters	[] Rejected
CIICK Details	•	•	[✓]
	maintenance data	detailed maintenance data	Received
	S		[] Rejected
Click Edit, Click	Data will be changed.	Data changed.	[✓]
Delete			Received
			[] Rejected
Click Export Excel	Will show the results of data	Will show the results of	[•]
	export in excel form	data export in excel form	Received
	-	-	[] Rejected
Click Search	The system shows the data	The data sought was found	[√]
	-		Received
	Joagin	successionly	[] Rejected
Click Input Data	The system will show the input	The system shows the data	0
CHER INPUT Data	•		[√] Passived
	uata 101111.	mput ionn.	Received
OLLER OLL		Detector 1	[] Rejected
Click Edit, Click	Data will be changed.	Data changed.	[√]
Delete			Received
	Delete Click export excel Click search Click Input Data Click Details Click Edit, Click Delete Click Export Excel Click Input Data Click Details Click Edit, Click Delete Click Edit, Click Delete	Click Edit, Click DeleteData will be changed.Click export excelWill show the results of data export in excel form.Click searchThe system shows the data sought.Click Input DataThe system will show the input data form.Click DetailsThe system will show detailed procurement dataClick Edit, Click DeleteData will be changed.Click Export ExcelWill show the results of data export in excel formClick SearchThe system shows the data soughtClick Input DataThe system shows the data soughtClick Edit, ClickThe system shows the data soughtClick SearchThe system shows the data soughtClick Laput DataThe system will show detailed maintenance dataClick Edit, Click DeleteData will be changed.Click Edit, Click DeleteData will be changed.Click Export ExcelWill show the results of data export in excel formClick Export ExcelWill show the results of data export in excel formClick Export ExcelWill show the results of data export in excel formClick SearchThe system shows the data soughtClick Input DataThe system shows the data soughtClick Input DataThe system will show the input data form.	Click Edit, Click DeleteData will be changed.Data changed.Click export excelWill show the results of data export in excel form.Will show the results of data export in excel form.Click searchThe system shows the data sought.The data sought was found successfully.Click Input DataThe system will show the input data form.The system shows the data input form.Click DetailsThe system will show detailed procurement dataThe system will show detailed procurement dataClick Edit, Click DeleteData will be changed.Data changed.Click Export ExcelWill show the results of data export in excel formWill show the results of data export in excel formClick SearchThe system shows the data soughtThe system shows the data input form.Click Liput DataThe system will show the input data form.The system shows the data sought was found successfullyClick Liput DataThe system will show the input data form.The system shows the data sought form.Click Liput DataThe system will show the input data form.The system shows the data since studyClick Liput DataData will be changed.Data changed.Click Export ExcelWill show the results of data export in excel formData changed.Click Export ExcelData will be changed.Data changed.Click Export ExcelWill show the results of data export in excel formWill show the results of data export in excel formClick SearchThe system shows the data soughtThe data sou

BY NO **Jurnal Mantik** is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

	Click Export Excel	Will show the results of data	Will show the results of	[✔]
		export in excel form	data export in excel form	Received
				[] Rejected
	Click search	The system shows the data	The data sought was found	آ¥ا ُ
		sought	successfully	Received
				[] Rejected
Menu Master	Click Input Data	The system will show the input	The system shows the data	[]10j0000 [√]
Data	enen input Dum	data form.	input form.	Received
Categories,		cutu Iomi.	input form.	[] Rejected
Buildings,	Click Edit, Click	Data will be changed.	Data changed.	[]10jeeaa [√]
Floors,	Delete	Data will be challged.	Data changed.	Received
Spaces,	Delete			[] Rejected
Spaces, Services	Click Export Excel	Will show the results of data	Will show the results of	[] Rejected [√]
Services	Click Export Excel	export in excel form	data export in excel form	Received
		export in excertorini	data export in excertoini	[] Rejected
	Click Search	The crystem shows the date	The data accept was found	•
	Click Search	The system shows the data	The data sought was found	[√] Dereieral
		sought	successfully.	Received
A.1. * X4				[] Rejected
Admin Menu	Click Input Data	The system will show the input	The system shows the data	[✓]
		data form.	input form.	Received
	0" 1 D 1		T	[] Rejected
	Click Details	The system will show admin	The system will show	[•]
		data details.	admin data details	Received
	~			[] Rejected
	Click Edit, Click	Data will be changed.	Data changed.	[•]
	Delete			Received
				[] Rejected
	Click Search	The system shows the data	The data sought was found	[•]
		sought	successfully.	Received
				[] Rejected
Report Menu	Asset Data Report	Will show export data excell	Shows export data excell	[✓]
				Received
				[] Rejected
	Procurement Data	Showing pdf printouts	Showing pdf printouts	[✔]
	Report			Received
				[] Rejected
	Data Maintenance	Showing pdf printouts	Showing pdf printouts	[•]
	Reports			Received
				[] Rejected
	Vendor Data	Showing pdf printouts	Showing pdf printouts	[✔]
				Received
				[] Rejected
	Category Data	Showing pdf printouts	Showing pdf printouts	[•]
			-	Received
				[] Rejected
	Building Data	Showing pdf printouts	Showing pdf printouts	[1]
	U			Received
				[] Rejected
	Floor Data	Showing pdf printouts	Showing pdf printouts	[]10jeeuu [√]
				Received
				Kelecieo
	Room Data	Showing pdf printouts	Showing ndf printouts	[] Rejected
	Room Data	Showing pdf printouts	Showing pdf printouts	[] Rejected [√] Received

5. Conclusion

Based on the results of implementation and testing, a conclusion can be made that the web-based fixed asset management information system can simplify work, provide convenience in recording, tracking, reporting and monitoring of assets. The system development using the waterfall method successfully produces the system as expected. Suggestions for further research are expected to be developed more broadly into systems that can be integrated with other information systems and can also be developed into programming

6 Reference

[1] Ariawan, M. D., Triayudi, A., & Sholihati, I. D. (2020, Januari). Perancangan User Interface Design dan User Experience Mobile. Jurnal Media Informatika Budidarma, 4(1), 160-166.

EY NO Jurnal Mantik is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

- [2] Astriyani, E., Putri, F. N., & Widianingsih, N. E. (2020, Februari). Desain Sistem Informasi Monitoring Aset Pada PT.Arbunco Wira Pandega. Journal Sensi, 6(1), 87-99.
- [3] Hasan, W. A. (2019, April). Sistem Pengelolaan Aset Tetap Pada Sekretariat Daerah Kabupaten Buton. Jurnal Ilmiah Akuntansi Manajemen, 2(1), 27-38.
- [4] Hery. (2015). Pengantar Akuntansi (Comprehensive Edition ed.). Jakarta: Grasindo.
- [5] Hidayat, T., & Muttaqin, M. (2018, April 2018). Pengujian Sistem Informasi Pendaftaran dan Pembayaran Wisuda Online menggunakan Black Box Testing dengan Metode Equivalence. Jurnal Teknik Informatika UNIS, 6(1), 25-29.
- [6] Laudon, K. C., & Laudon, J. P. (2012). Management Information Systems: Managing The Digital Firm. United States of America: Pearson Prentice Hall.
- [7] Mudiar, W., & Hidayat, U. (2019). Sistem Informasi Manajemen Asset Berbasis Web Pada Perbanas Institute. Information Management For Educators And Professionals, Vol. 4(1), 41 - 50.
- [8] Oktasari, A. J., & Kurniadi, D. (2019, Desember). Perancangan sistem Informasi ManajemenKegiatan Mahasiswa Berbasis Web. Jurnal Vokasional Teknik Elektronika dan Informatika, 7(4), 149-157.
- [9] Ridwan, M., Muhammad, & Ramadhani, S. (2017, Desember). Rancangan Sistem Informasi Manajemen Aset di PT. Sentral Tukang Indonesia. Jurnal CoreIT, 3(2), 47-53.
- [10] Riyanto, J. (2019, Maret). Rancang Bangun Sistem Informasi Manajemen Aset pada Universitas Pamulang Berbasis Web. Jurnal Informatika Universitas Pamulang, 4(1), 9-15.
- [11] Setiyani, L. (2019, April). Pengujian Sistem Informasi Inventory Pada Perusahaan Distributor Farmasi Menggunakan Metode Black Box Testing. Jurnal Ilmu Komputer dan Teknologi Informasi, 4(1), 20-27.
- [12] Sriwahyuni, T., Oktoria, & Dewi, P. I. (2019, Maret). Pengembangan Sistem Informasi Manajemen Pariwisata Berbasis Web (Studi Kasus : Kabupaten Pesisir Selatan). Jurnal Teknologi Informasi dan Pendidikan, 12(1), 93-100.
- [13] Sutabri, T. (2012). Konsep Sistem Informasi. Yogyakarta: Penerbit ANDI.
- [14] Yaakub, S., & Devitra, J. (2017, September). Analisis Pemodelan Sistem Informasi Manajemen Aset Berbasis Web Pada Politeknik Jambi. Jurnal Manajemen Sistem Informasi, 2(3), 610-628.
- [15] Yunita, I., & Devitra, J. (2017, Maret). Analisis dan Perancangan Sistem Informasi Manajemen Aset Pada SMK Negeri 4 Kota Jambi. Jurnal Manajemen Sistem Informasi, 2(1), 278-294.