Utilization of Desktop (Mobile) Applications Borrowing Laboratory Equipment at the IKesT Muhammadiyah Palembang Integrated Laboratory

1Paray Theo Lonando, 2M.Vikram Nursalam

Information Systems Department, Information Systems Undergraduate Study Program, Faculty of Science and Technology, IKesT Muhammadiyah Palembang, Palembang

*Email: theo.blue89@gmail.com; pikamm8@gmail.com

Abstract

Pemanfaatan information technology segala bidang adalah sebuah keharusan untuk membantu dalam kegiatan operasionalnya dalam pengolahan data secara cepat dan tepat. Setiap laboratorium kesehatan IKesT Muhammadiyah Palembang memiliki aset berupa barang ataupun peralatan guna mendukung kegiatan praktikum dan proses belajar sistem laboratorium. Disetiap semester perkuliahan akan diadakan kegiatan praktikum untuk beberapa mata kuliah dan akan selalu melibatkan asisten laboratorium untuk mempersiapkan dan mengajari praktikum. dimana proses peminjamanannya masih manual. Aplikasi adalah suatu subkelas perangkat lunak komputer yang memanfaatkan kemampuan komputer langsung untuk melakukan suatu tugas yang diinginkan pengguna. penulis akan membangun sebuah sistem peminjaman barang dan peralatan pada Unit Pengelolah laboratorium IKesT Muhammadiyah Palembang menggunakan aplikasi Desktop dengan menggunakan Laravel 8

Kunci : Informasi, sistem, aplikasi, Laravel8,Sistem Informasi

Abstract

Utilization of information technology in all fields is a must to assist in operational activities in processing data quickly and precisely. Each IKesT Muhammadiyah Palembang health laboratory has assets in the form of goods or equipment to support practicum activities and the learning process of the laboratory system. In every semester of lectures there will be practicum activities for several subjects and will always involve laboratory assistants to prepare and teach practicum. where the borrowing process is still manual. Application is a subclass of computer software that directly utilizes computer capabilities to perform a task desired by the user. the author will build a system for borrowing goods and equipment at the Muhammadiyah Palembang IKesT Laboratory Management Unit using a Desktop application using Laravel 8

Key : Information, system, application, Laravel8, Information System

INTRODUCTION

In the industrial era 4.0, the use of information technology in all fields is a must to assist in operational activities in processing data quickly and precisely. The existence of a computer is very important in the current era of technological advancement. The computer was originally used to perform calculations, but now the computer has become a multifunctional tool. According to Robert H. Blissmer, a computer is an electronic device capable of performing several tasks, namely receiving
input, processing input according to the instructions given, storing commands and the results of their processing, and providing output in the form of information. (Mustopa, 2018)

Applications are programs that determine information processing activities needed to complete specific tasks from computer users. The desktop is the page that is located at the very front of the Windows operating system. When turning on the computer, the main page that is encountered after the boot process is complete is the desktop (M. Sofjan 1, 2015)

Each IKesT Muhammadiyah Palembang health laboratory has assets in the form of goods or equipment to support practicum activities and the learning process of health laboratory assistants. In every semester of lectures there will be practicum activities for several subjects and will always involve laboratory assistants to prepare and teach practicum. With practicum, laboratory assistants will usually prepare everything related to practicum, and one of them is preparing equipment. Sometimes the goods or equipment that is lacking or not suitable for use, with this the assistant will borrow the goods in the laboratory management unit where the health laboratory goods are supplied. Because they still use the manual system for the benefit of borrowing and borrowing, namely by writing a statement if they are going to borrow, it will prolong and complicate the borrowing process and not to mention if the borrowed item is not returned according to the agreement, it will be detrimental to the borrowing of the item. Due to the length of the borrowing process due to the process of writing and searching for goods available or not the author will build a system for borrowing goods and equipment in the IKesT Muhammadiyah Palembang laboratory management unit using Laravel 8, where a desktop-based application for borrowing laboratory items will be made so that it speeds up the process of accelerating borrowing and the data entered will be stored neatly in the data store

METHOD
In this study the authors used the waterfall method in their approach. The definition of the waterfall method is a sequence during the sequential software development process, where progress will continue to flow downward through the planning, modeling, implementation and testing processes. (Solekhah et al., 2017)

RESULTS
In this study interview techniques were used to collect data for making applications, there were 10 questions for respondents, namely borrowing tools and labs at the Muhammadiyah Palembang IKesT Lab:
1. What application systems do you need?
2. Why do you need that application system
3. What Problems Are Currently Experienced By The Lab Regarding Inventory Parts
4. Why Can Things Like That Happen?
5. What is the process for the current lab provision system?
6. What are the system requirements? Web or Desktop Based?
7. Who are the users of the lab application system that will be made
8. What features are needed in the application system?
9. Is registration required to become a lab member in the application?
10. Is a Report Required in the Application?

The following are the answers given by the management of the Muhammadiyah Palembang IKesT Lab
1. SIM application to make it easier for students to practice laboratory, borrow practicum tools and materials, carry out research, and database inventory of laboratory tools and materials.
2. To facilitate the process of drilling, database, and borrowing.
3. Existing tools and materials cannot be properly controlled because there is no database to detect them.
4. Availability of supplies of materials and tools.
5. Because there is no system that controls it.
6. Manuals. The loan process is done manually using a loan form, and the database process is still manual.
8. Laboratory staff, students, and lecturers. As well as external users.
10. Yes, at least nim or nbm.

The results of the interview will be applied using the waterfall method in the stages of making the application and it can be found that the need to use a lab application is needed so that it can facilitate students in borrowing tools and labs at the IKesT Muhammadiyah Palembang Lab.

PEMBAHASAN

Based on the results of interviews and analysis of the waterfall method, an application in the form of a mobile desktop version will be made which in making this application will be prioritized for borrowing tools and laboratory rooms for the Muhammadiyah Palembang IKesT Lab for students to the lab.

The following are the results of making applications in the IKesT Muhammadiyah Palembang laboratory.

Conclusion

This lab application is very useful and makes it easy to use, especially for students and also the community at IKesT Muhammadiyah Palembang, which before this application, borrowing was still manual, namely by recording in a book. By using the right method for making this application, lending can be done technologically, namely online.
REFRENSE


