Administrative Archiving Management Information System Through SITATA in Pascasarjana IAIN Palangka Raya

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Abstract: Based on the author's result of observations, Pascasarjana Institut Agama Islam Negeri (IAIN) Palangka Raya faced problems in the management of archiving administrative documents, namely inadequate archive space and taking too long time to look for a document in a particular case. So the author designed and built an information system named Administrative Information System (literally Sistem Informasi Ketatausahaan (SITATA)) in order to overcome these administrative archiving management problems. This research aims to explain the design and implementation of SITATA. The method used in this study is the waterfall technique. This information system, which was designed with code using PHP as the programming language and MySQL as the database, it could be accessed offline via the local host web server XAMPP. This information system can add, edit, delete, save, search, recap, and print archived documents. The results obtained from the implementation of this information system are that it makes it easier for Pascasarjana IAIN Palangka Raya in managing letter archiving although it still needs further improvement.

Keywords: information system, administrative archiving management

Abstrak: Berdasarkan hasil obervasi penulis, Pascasarjana Institut Agama Islam Negeri (IAIN) Palangka Raya menghadapi permasalahan dalam manajemen pengarsipan dokumen administrasinya, yakni ruang arsip yang kurang memadai dan membutuhkan waktu yang lama jika ingin mencari suatu dokumen dalam hal tertentu. Sehingga penulis merancang dan membangun Sistem Informasi Ketatausahaan (SITATA) dalam rangka mengatasi permasalahan manajemen pengarsipan administrasi tersebut. Penelitian ini bertujuan untuk memaparkan desain dan implementasi SITATA. Metode yang digunakan dalam studi ini adalah waterfall teknik. Sistem informasi yang dirancang dengan penulisan coding menggunakan PHP sebagai bahasa pemograman dan MySQL sebagai database ini dapat diakses secara luring melalui web server local host XAMPP. Sistem informasi ini dapat menambah, mengedit, menghapus, menyimpan, mencari, merekap, hingga mencetak dokumen surat yang telah diarsipkan. Hasil yang diperoleh dari implementasi sistem informasi ini yaitu memudahkan Pascasarjana IAIN Palangka Raya dalam mengelola pengarsipan surat walaupun masih perlu peningkatan lebih lanjut.

Kata kunci: sistem informasi, manajemen pengarsipan administrasi

INTRODUCTION

Digital transformation in the education realm has insinuated the involvement of sustainable management in order to adapt to the changes forced by new technologies (Abad-Segura et al., 2020). With the fast pace and transformations going on without education process, information management educational institution is part of principal functions and responsibilities (Asio et al., 2022). An information system is one of the systems that every private and state university must have, where every process carried out will always be connected to the information system which underpin higher education (Pratama et al., 2020).

Numerous studies have shown the great potential and effectivity of the education management information system on different occasions. For instance, in terms of application, the full optimalisation of education management information system in learning, the institution's move will improve the quality of education, including the upgrading of teachers and students (Kuswara et al., 2021). In line with that, the implementation in library showed strongly recommendation to utilize education management information system especially in fast-changing environment, it performed fast browsing of data and accurate information report (Anggoro & Hidayat, 2020; Chilonga, 2019).

In schools, it showed that implementation education management information system contributed significantly and increased the teachers and employees' performance even though most likely it will face several constraints, for instance network disruption, common understanding among staffs, and input error (Kuswantoro et al., 2022; Viveiros et al., 2018). In some occurrence, a good information system is not fully utilized its features adroitly. As in the case of SIMAK, an academic and student management information system owned by Institut Agama Islam Negeri (IAIN) Palangka Raya do not avail its stunning features to maximalise the function (Pamungkas et al., 2021).

Higher education as part of institution is also could be separated from this usefulness issue. Higher education must look forward to implement comprehensive education management solutions (Asio et al., 2022). The multifaceted and complex work environment such university have to integrate education management information system as a way of producing relevant, organized, and structure information (Martins et al., 2019). Amount of studies have revealed the satisfaction of information system in supporting services and activities in higher education (Barus & Pangruruk, 2021; Kinanti et al., 2021).

However, Pascasarjana IAIN Palangka Raya as part of higher education unit face ineffective and inefficient administrative archiving management. It indicates several constraints, such as lack room to storage documents and taking time too long to look for certain documents. (Maulina, 2022). Therefore, the authors build an administrative archiving management information system named *Sistem Informasi Ketatausahaan* (abbreviated SITATA) to solve the problem. This study is attempting to show the design and implementation of SITATA.

METHOD

This study is using waterfall method. Waterfall method is a software development methodology that proposes a systematic and sequential approach to software that starts at the system progress level throughout analysis, design, code and testing, implementation, and maintenance. In analysis step, it contains basic design of the information system that will be created in accordance with the initial goals of it.

Apart from that, this system analysis includes old and new systems, so that information system needs can be developed and get better problem solving. Flowchart needs to describe the sequence of processes in detail and the relationship between an instruction and other processes in a program using certain symbols. In line with that, data flow diagram and database dictionary describe the system functions, while entity-relationship diagram to describe the data stored (Sommerville, 2011).

In design step, this stage is of designing the analysis design been made in the previous stage. At this stage the following design will be created: designing structure, database, admin interface, and page menus. After that, it is moving to code and testing step, coding writing will be used PHP as the programming language and MySQL as the database.

This study will used Blackbox technique to test features that has been designed. Blackbox test is a testing technique which focuses on functionality factors and software specifications (Wahyudi, 2019). After testing, the results will be realized as a unit program. Lastly, maintenance, it involves correcting errors that were not discovered in the early stages of cycle, improving the implementation of system units and improving system services as new discovered requirements.

RESULTS

The Design of SITATA

SITATA coding writing was using Notepad++ application while the programming language was using PHP and MySQL as its database storage. SITATA media or server worked as an offline access information system. By using XAMPP application, user could manage the database in local host without connected to internet. Here is the flowchart of SITATA as shown in the following picture:
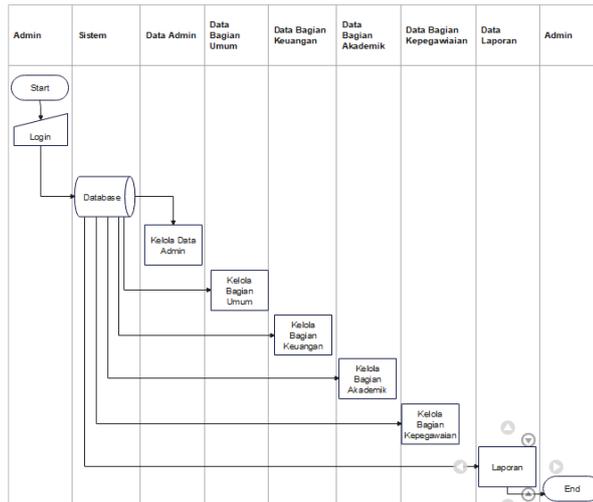
Picture 1. Flowchart of SITATA

The flowchart above is captured general new system that implemented into SITATA. By this system, this information system could provide into several affair categories in particular: general affairs, finance affairs, academic affairs, and employment affairs. This information system is designed into several functions such as adding, editing, deleting, saving, searching, recapping, and printing the data. The printing system had been computerized to print the data by periodic in order to ease the archiving.

Process and data flow design is involved in SITATA application design that has been modeled into data flow diagram. Information system documentation is encountering a process of reducing the overall data flow to a more detailed level as shown in diagram below:
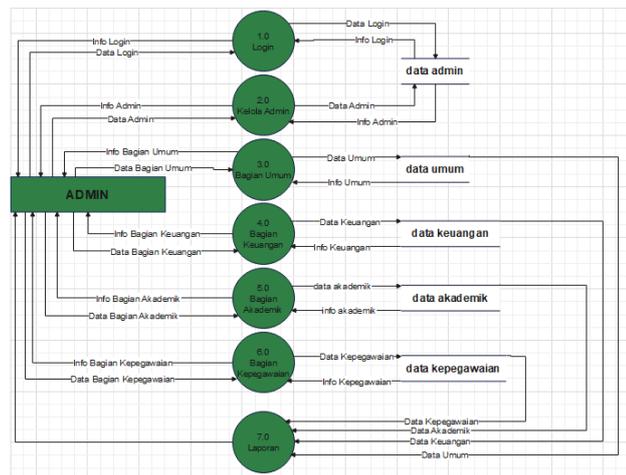
Picture 2. Data Flow Diagram of SITATA

The flowchart above is captured general new system that implemented into SITATA. By this system, this information system could provide into several affair categories in particular: general affairs, finance affairs, academic affairs, and employment. The enactment data which using MySQL is divided into these

processes; database server which will be used for the information system database will then be called and then displayed on the information system page. The following is SITATA database display for data storage:
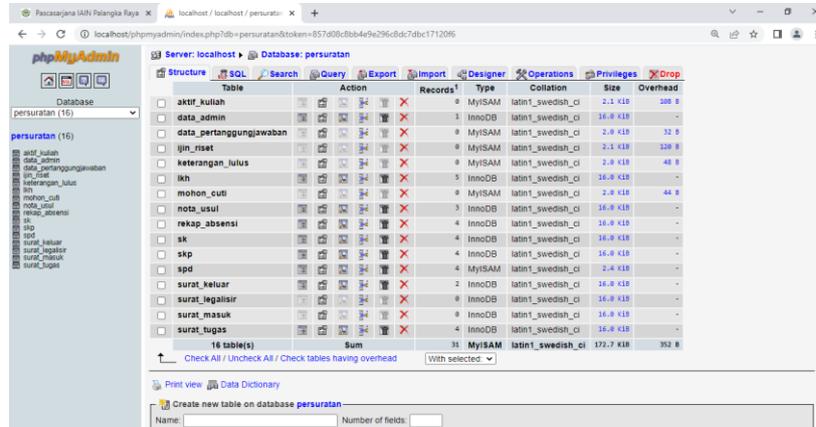

Picture 3. Database of SITATA

The Implementation of SITATA

This information system is served into four administrative affairs, namely: general affair, finance affair, academic affair, and employment affair. Each affair is divided into several administrative mailing archive categories. General affair consists of incoming mail, outgoing mail, decree, assignment letter, and official travel letter. Finance affair contains funds disbursement letter and financial accountability letter. Academic affair comprises active student letter, research permit letter, graduation letter, legalization, and leave letter. Employment affair includes employee daily work sheet, absenteeism recap, and employee performance targets.

The users must login in and fill password. Then, users may choose any affairs menu accordingly. After that users fill the document information, such as number, date, subject, and additional detail, after that upload the scanned document. Here is the interface of SITATA that had been implemented as presented in the following pictures:
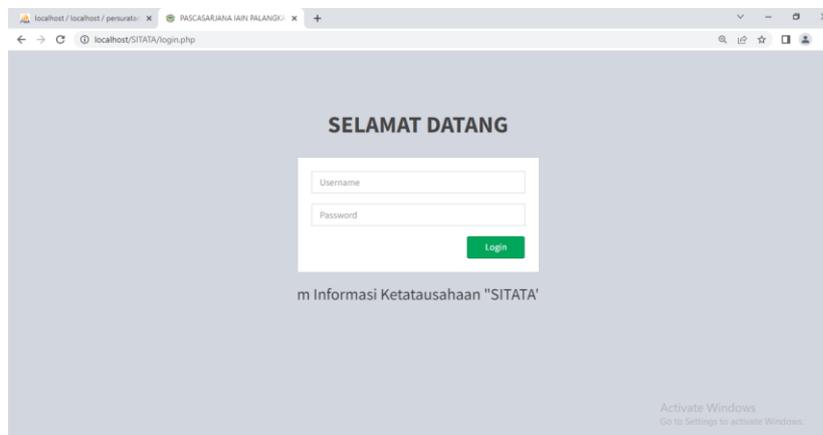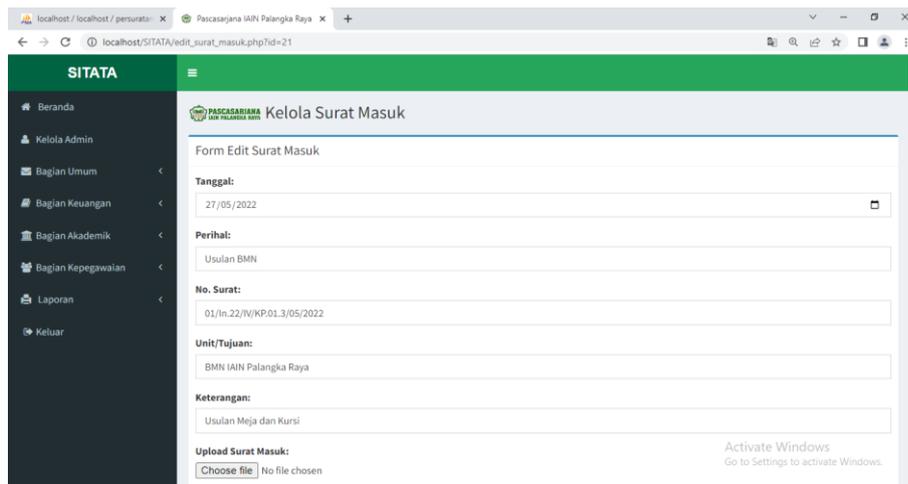

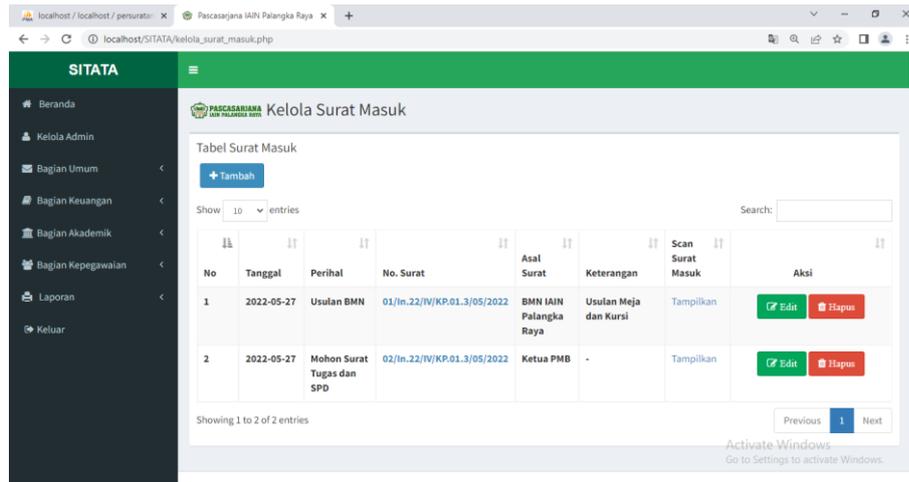**Picture 4.** Interface of SITATA Login Page
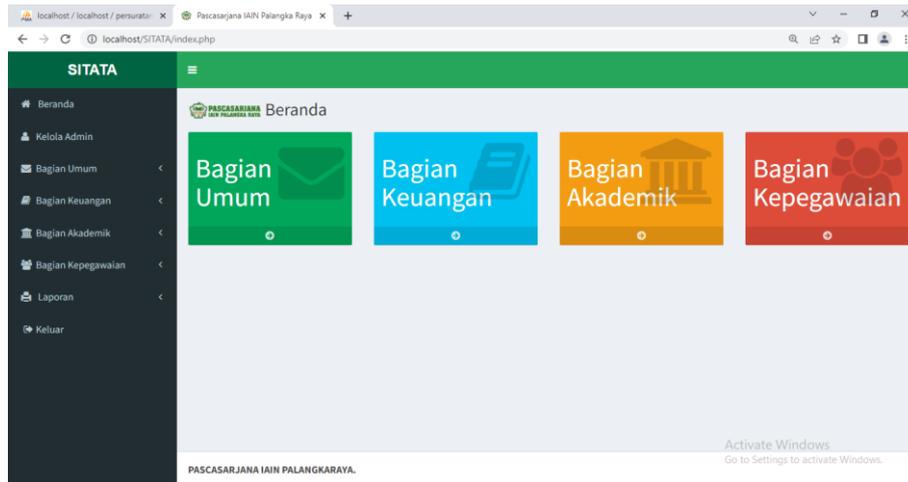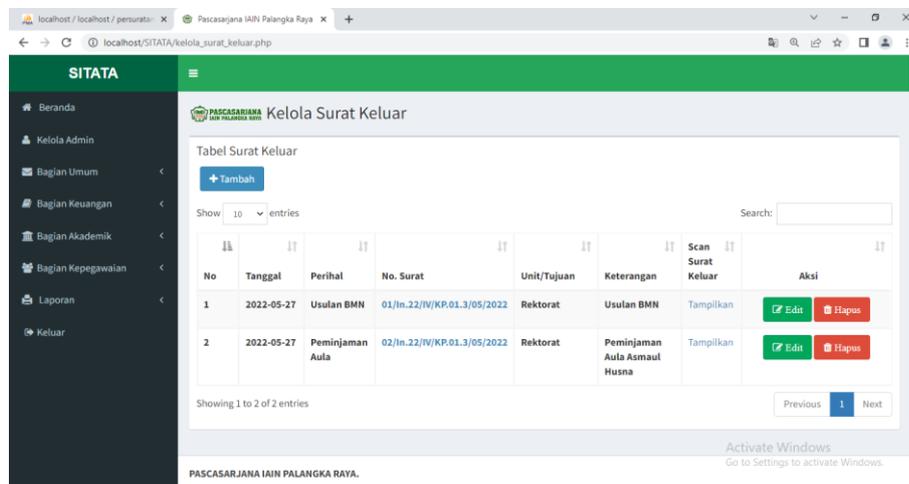
Picture 5. Interface of SITATA Main Menu
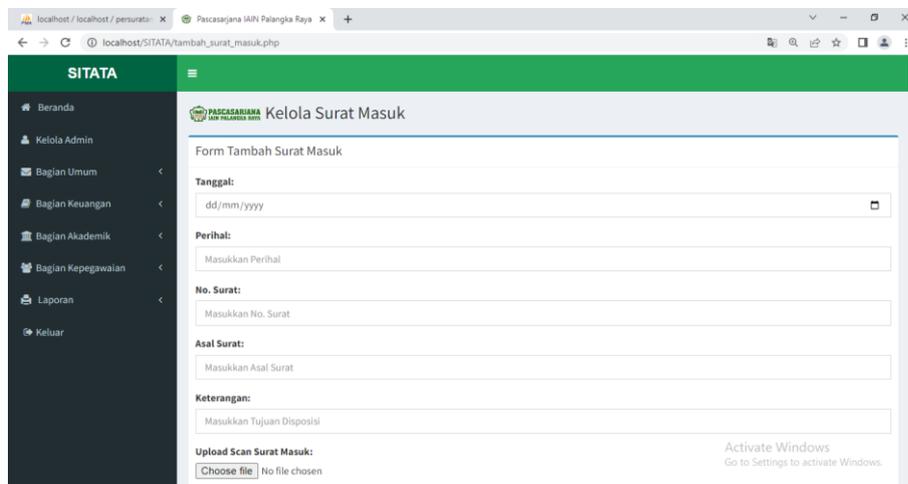
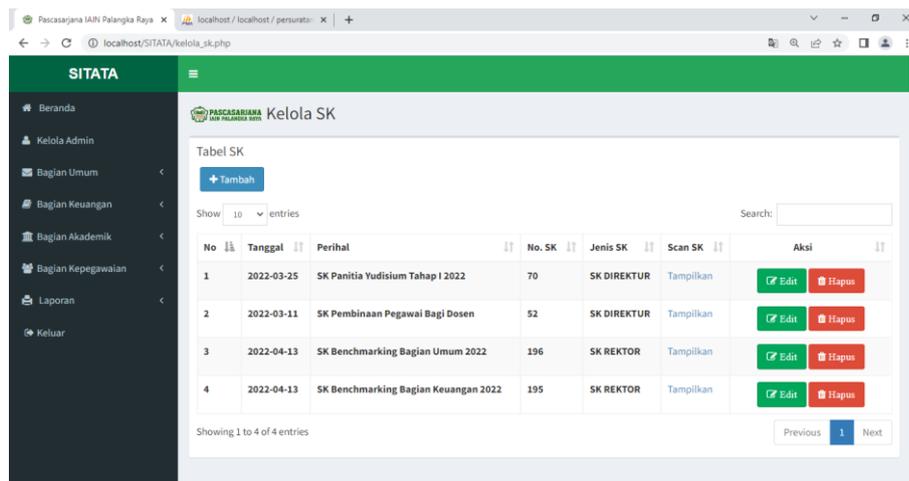**Picture 6.** Interface of SITATA Data Adding

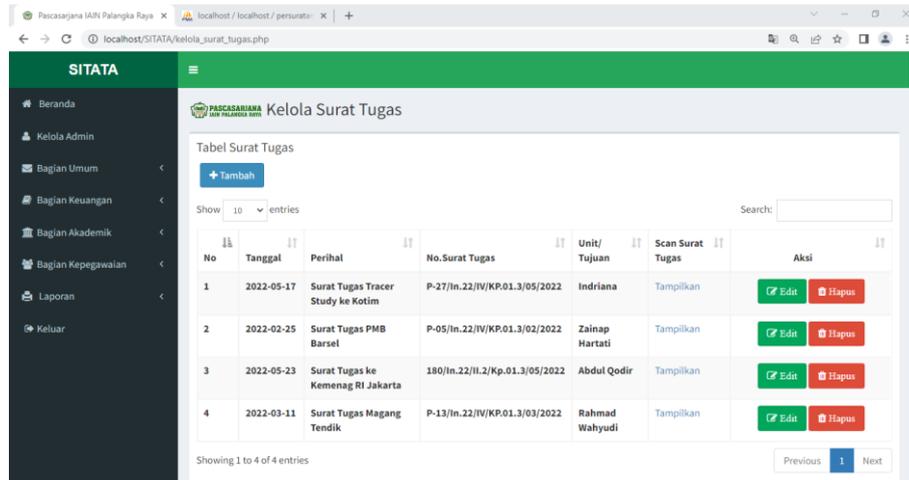**Picture 7.** Interface of SITATA Data Added

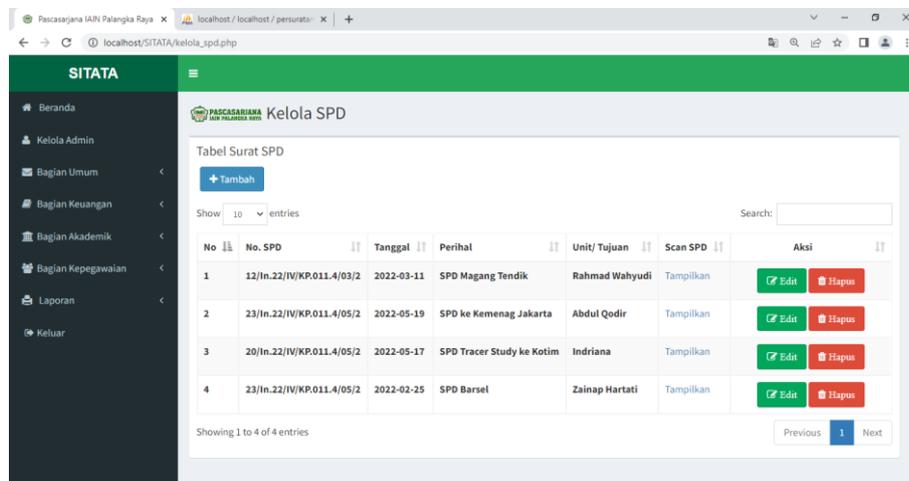**Picture 8.** Interface of SITATA Incoming Mail Archive

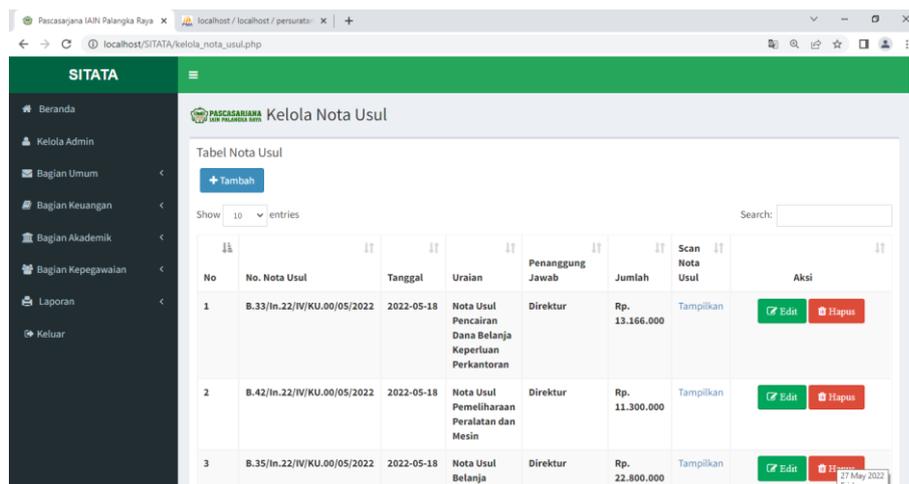**Picture 9.** Interface of SITATA Outgoing Mail Archive

Picture 10. Interface of SITATA Decree Archive

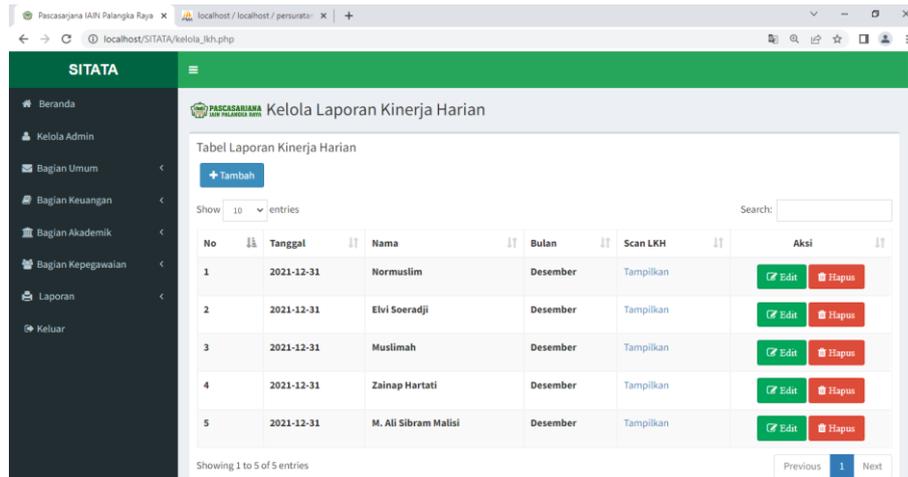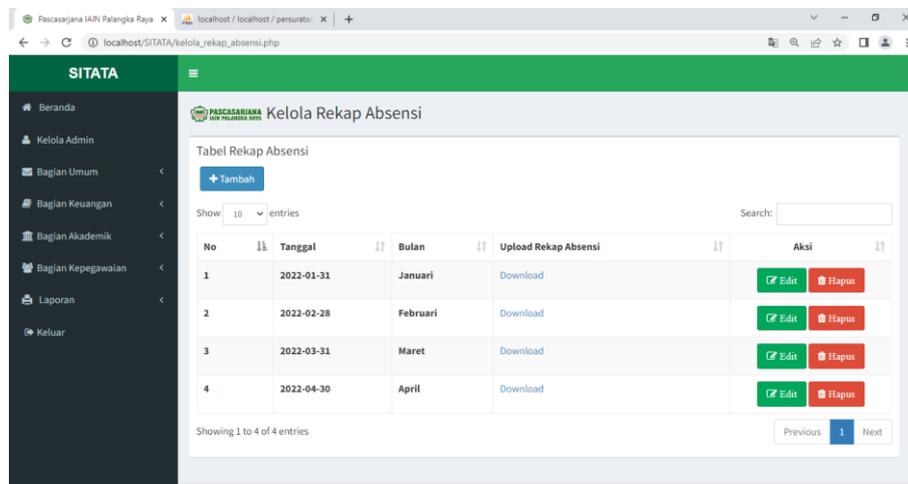**Picture 11.** Interface of SITATA Assignment Letter Archive

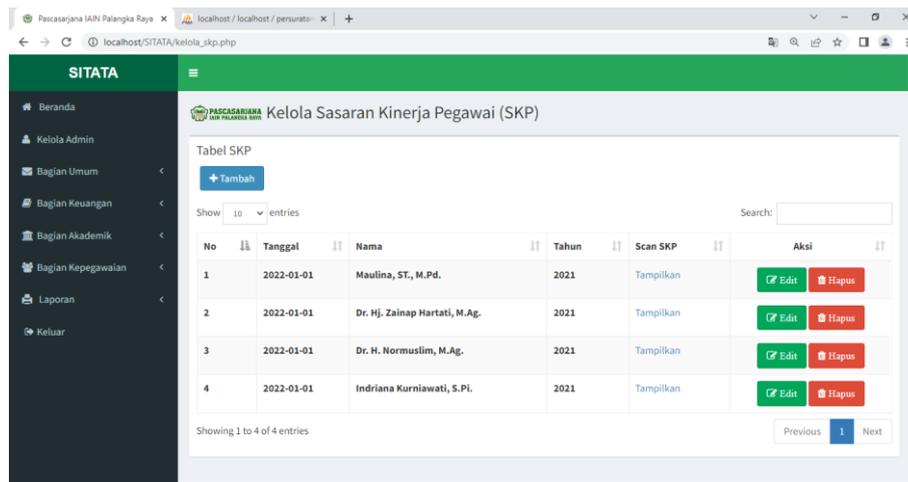**Picture 12.** Interface of SITATA Official Order Letter Archive

Picture 13. Interface of SITATA Funds Disbursement Letter Archive
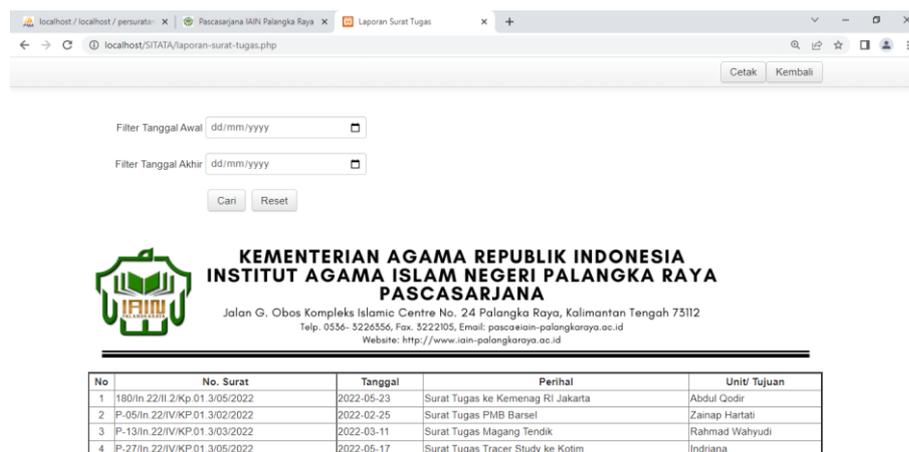
Picture 14. Interface of SITATA Employee Daily Work Sheet Archive

Picture 15. Interface of SITATA Absenteeism Recap Archive

Picture 16. Interface of SITATA of Employee Performance Targets Archive

Picture 17. Interface of SITATA Print Section

DISCUSSION

This information system is designed to process, present, and report documents per periodic in order to search and print the documents easier. Document data storage is utilized as system database and the interface is designed in such a way that it is easier for users to use the application. Therefore, the aim of improving administrative management quality in Pascasarjana IAIN Palangka Raya can be fulfilled. It needs to be trained to all staffs in the unit.

SITATA is designed into short-term plan, mid-term plan, and long-term plan. This information system now is in short-term plan. It started with building the team, finding stakeholder support, and handling trial-error. This project actually had been launched on May 30, 2022. Moreover, this information system had been monitored and evaluated on July 8, 2022 by Risdiyati, M.Pd. from National Civil Service Agency (literally *Badan Kepegawaian Negara* (BKN)) Regional VIII Banjarmasin. SITATA was presented by Maulina on July 14, 2022 as part of her action project as civil servants, this project was assessed by H. Achmad Nidjam, S.IP., M.M. from BKN.

The mid-term plan of this project is adding several features that supporting administrative archiving management in Pascasarjana IAIN Palangka Raya. Adding features is filtered from the trial-error that the team handling. Even so, the authors will evaluate this information system by doing survey. The reliability, responsiveness, assurance, accountability, and tangible of this information system need to be surveyed in order to revamp its accessibility. Meanwhile, online access is the main target for the authors in the long-term plan. While, adding features will keep ongoing in the long-term plan as well as maintaining it.

The authors hope in the future that this SITATA information system will utilize by all *civitas academika* in IAIN Palangka Raya not only in Pascasarjana but also other faculties and units. Thus, the authors expect SITATA will ease the archiving administrative management in IAIN Palangka Raya. To provide broad benefits to public, this information system needs support from the internal stakeholder by

allocating funds and the authors also widely opened support through cooperation who wants to fund SITATA.

CONCLUSION

This information system named SITATA was designed with code using PHP as the programming language and MySQL as the database, it could be accessed offline via the local host web server XAMPP. This information system is designed to archive documents that divided into several affairs, namely: general affair, finance affair, academic affair, and employment affair. SITATA can add, edit, delete, save, search, recap, and print archived documents. The obtained result from the implementation of this information system is that it makes easier for Pascasarjana IAIN Palangka Raya in managing administrative document archiving although it still needs further improvement.

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