



## ACTIVITY MANAGEMENT INFORMATION SYSTEM FOR DIGITALIZATION REPORTING TOWARD SOCIETY 5.0 ERA

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### *Abstract*

This research was motivated by the problem at a one of Mosque which currently does not have an information system in managing mosque activities. The number of activities in a Mosque that have not been well organized and manual data processing makes it difficult for mosque administrators to process data and takes a long time. To overcome this problem, a management system is needed that can be easily accessed by mosque administrators and provide precise and accurate information about the activities of Mosque to the community. The purpose of the system to be created is to make it easier for mosque administrators to manage data on mosque activities and make it easier for the public to find information. And for users who apply for donations or activities do not need to come directly to the mosque because they can apply through the system.

**Keywords:** Codeigniter, finance, mosque, information system, waterfall

## INTRODUCTION

With the development of technology that is growing rapidly now makes it easier for users around the world. However, its implementation is still not fully utilized optimally by several agencies in managing their data, one of which is the Mosque at centre of Java.

In carrying out data collection and application for activity permits is still done manually, because the process is still by the way the applicant for activities comes to the Mosque office with an application letter for an activity permit to be submitted and received by mosque officers. After the application letter was received, the mosque superintendent recorded the activity on the information board. With the application flow that is considered less flexible and the presentation of information less effective, a system is needed that helps the management in managing activity data and makes it easier to apply for activity permits without having to come directly to the mosque (Ransi et al., 2017)(Ambo & Hati, 2019).

The purpose of this study is to create a Web-Based Financial Management and Activities Information System at the mosque that can be used by administrators to facilitate users in submitting requests for activities. This research is supported by several studies that have been conducted previously by researchers, including a study entitled “Web-Based Information System to Manage Licensing Data of Jeneponto Police Station of South Sulawesi Police” in 2017 by Natalis Ransi, La Surimi, et al were able to collect requests for permits and notification of opinions from the community. The information system built is web-based so that the use of this information system is expected to be easier to implement or develop for further needs(Suarni et al., 2020).

The second research is Research from Alizi Ahmad in 2018 entitled “Design of a Web-Based Cash Overview Information System at the Miftahul Huda Mosque in Tangerang City” aimed at trying to design a web-based information system. The method in designing and making this application uses the waterfall method and data collection techniques using observation, interview and literature study methods. This application is developed using PHP and JavaScript programming languages, HTML markup languages, CSS and MySQL as its database server. Then with this system, it is expected to make it easier for mosque administrators to manage an overview or summary of cash management and make it easier for worshippers and donors to find out transparent mosque cash information and can be accessed anytime and anywhere(Purnasari et al., 2022)(Imawan et al., 2023).

Judging from the results of the literature review above, it can be concluded that previous research used methods or techniques, research objects and diverse results. However, there are some similarities in making the system, namely to make it easier for administrators to submit activities. In this system using the CodeIgniter framework with a MySQL database. The purpose of the system to be created is to facilitate management in carrying out activity management. As well as making it easier for pilgrims to see activity information. With the submission of activities carried out in this system, the user does not have to come directly to the mosque.

## **METHOD**

The method used in making the Financial Management and Activities Information System is the waterfall method(Imawan et al., 2023)(Najihuddin et al., 2021). The reason for using this method is because the waterfall method approaches systematically and sequentially in building a system. The following are the steps in the waterfall method:

### **1. System Analysis**

At this stage the author collects data related to the contents of the financial management information system and the activities created, the definition of the required system, the explanation, and the purpose of the system obtained in consultation with system users. The analysis was carried out using interview methods and literature studies. Analysis of financial management information system needs and activities is carried out by considering several aspects, namely functional needs (activities or services formed by the system), non-functional needs (operational environment), user needs, and information needs(Ali & Ali, 2016)(Rahmawati et al., 2021).

### **2. System Design**

After the analysis stage has been carried out, the next stage is the design draft. The design design is made based on the results of the needs analysis that has been obtained, starting from how the input, process to the results obtained. In this study, the design to be made is the design of Entity Relationship Diagram (ERD), Database, Activity Diagram and interface design (system display)(Hartatik & Putri Ayu, 2020).

### **3. Coding and Testing**

The implementation stage is the stage where the results of software design are translated into a language that can be understood by the computer. The construction of this system uses PHP programming language because this programming language supports web-based applications. The resulting database is stored in a MySQL database application. After implementation, system testing was carried out using one of the methods from the Black Box, namely Equivalence Partitioning. Equivalence Partitioning is a Black Box Testing method that divides the input domain of a program into classes of data, from which test cases can be derived. In this test it must be assured that the same input will produce the same response(Amarudin & Sofiandri, 2018)(Pefriand et al., 2023)(Hartatik, 2022).

## RESULTS AND DISCUSSION

The implementation of this system design consists of three actors, namely users, administrators and management division. The following is the implementation in each page in Figure 1.

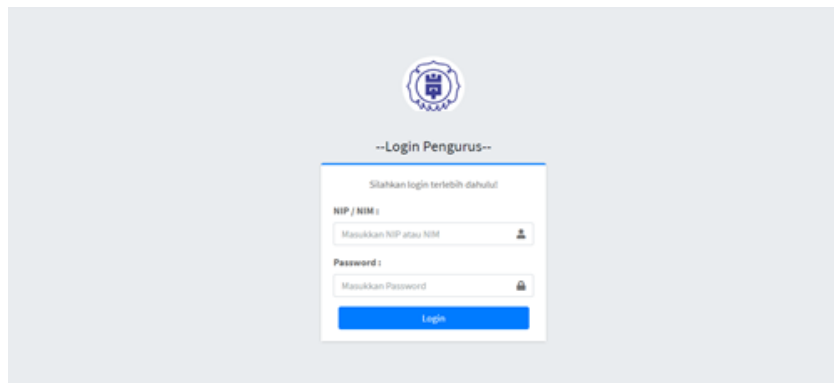


Figure 1. Admin Login Page

Activity Data is data which contains a list of activities that have been inputted by the management. This data contains the name of the activity, description of the activity, date and time of the activity. Activity Data can be seen in figure 2 and Figure 3.

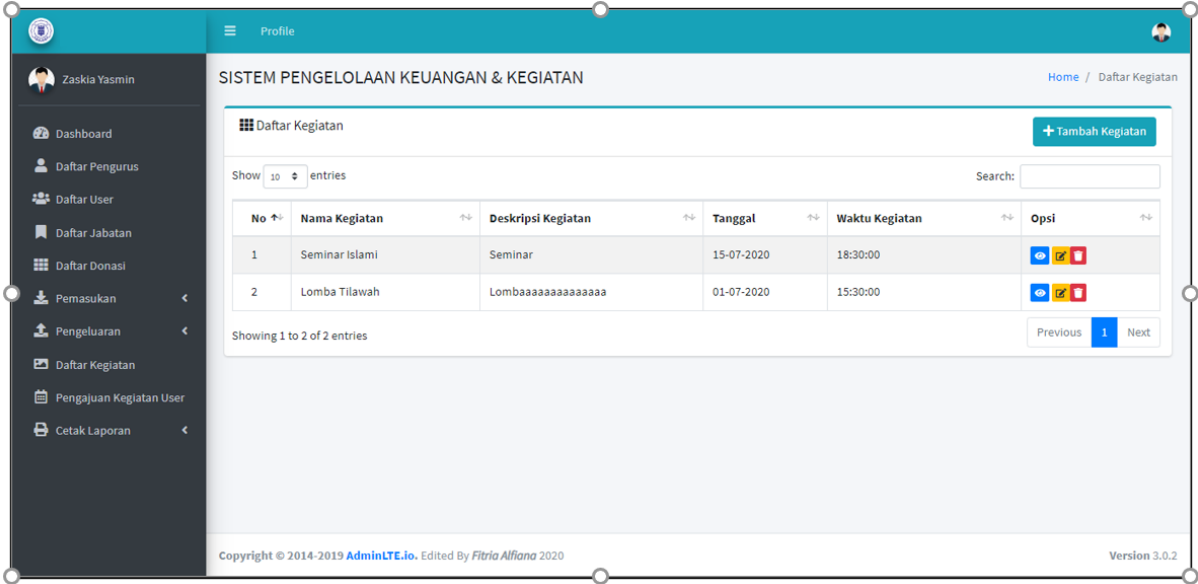


Figure 2. List Of Activities

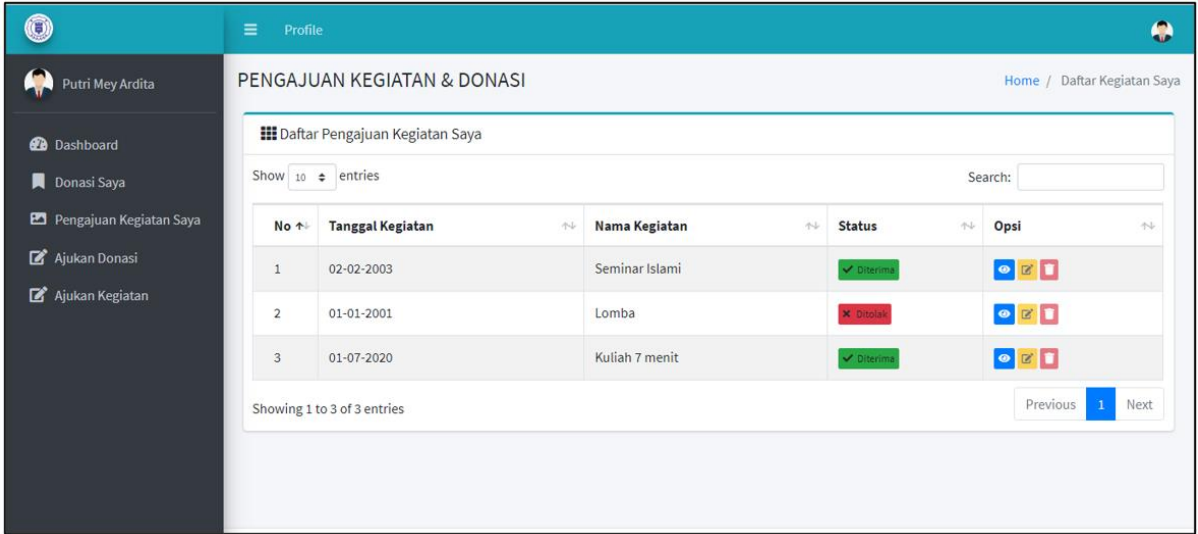


Figure 3. My To-Do List

This section of the donation list page contains data on the list of activities that have been submitted by the user where this page contains the date of the activity, the name of the activity and the status of the activity. Here users can also edit, view activity details and delete activities that have been submitted and can be seen at Figure 4.

The screenshot shows a web application interface for requesting an activity. The page is titled "PENGAJUAN KEGIATAN & DONASI" and features a sidebar with navigation options like "Dashboard", "Donasi Saya", "Pengajuan Kegiatan Saya", "Ajukan Donasi", and "Ajukan Kegiatan". The main content area is a "Form Input Data Kegiatan" with the following fields:
 

- Nama Kegiatan:** Input field with placeholder "Masukkan Nama Kegiatan".
- Pengisi Kegiatan:** Input field with placeholder "Masukkan Pengisi Kegiatan".
- Deskripsi Kegiatan:** Input field with placeholder "Masukkan Deskripsi Kegiatan".
- Tanggal Kegiatan:** Date picker with placeholder "dd/mm/yyyy".
- Waktu:** Time picker with placeholder "--:--".
- Instansi Asal:** Input field with placeholder "Masukkan Instansi Asal".
- Surat Permohonan:** File upload field with a "Choose File" button and placeholder "No file chosen". A note below states: "\*) Masukkan Surat dalam format gambar png, jpg atau jpeg".

 At the bottom of the form, there is a blue "Simpan" button and a red "Reset" button. The user's profile "Putri Mey Ardita" is visible in the top left corner.

Figure 4. Request An Activity

For the activity application page, users can submit what activities will be proposed to be carried out at the Mosque. On this page users are required to fill in the name of the activity, filler of the activity, description of the activity, date of activity, time, institution of origin, and letter requesting activities.

The testing table of the Financial Management Information System and Activities of Mosque was carried out by testing the BlackBox method. Based on the test design, the results of the financial management information system test and activities can be seen in the table below.

Table 1. System Test Design

No.	Tested Functionality	Scenario	Indicators	Status
1.	Admins <i>sign in</i>	The management accesses the <i>home</i> page of the mosque, then presses the <i>Login</i> button – <i>Management Login</i> . Then the administrator enters the NIP/NIM and <i>password</i>	The system goes to the <i>admin dashboard</i> page.	Succeed
2.	<i>User registers</i>	<i>Users</i> access the <i>home</i> page of mosque, then press the Registration button. Then the <i>user</i> fills in his data in the <i>registration form</i>	The system saves user registration data and enters the <i>user login</i> page.	Succeed
3.	<i>User login</i>	User accesses the <i>home</i> page of mosque, then presses the	The system goes to the <i>user dashboard</i> page.	Succeed

		<i>Login</i> button – User <i>Login</i> . Then the administrator enters the <i>email</i> and <i>password</i> .		
4.	View a list of activities	The administrator selects the activity list menu.	The system displays a list of activities.	Succeed
5.	Add activity data	The administrator presses the add activity button on the activity list page.	The system displays an activity <i>input form</i> and saves the activity data into a <i>database</i> .	Succeed
6.	View activity details	The admin presses the details button on the activity list page.	The system displays detailed activity data.	Succeed
7.	Edit activity data	The administrator presses the edit button on the activity list page.	The system displays an <i>edit form</i> and <i>updates</i> the data in the <i>database</i> .	Succeed
8.	Delete activity data	The admin presses the delete button on the activity list page.	The system displays a data delete confirmation and deletes the data on the <i>database</i> .	Succeed
9.	Display a list of <i>user</i> activities	The administrator selects the user activity submission menu.	The system displays a list of activities submitted by the <i>user</i> .	Succeed
10.	View details of <i>user</i> activity	The administrator presses the details button on the <i>user's</i> to-do list page.	The system displays detailed <i>user</i> activity data.	Succeed
11.	Verify <i>user</i> activity	The administrator presses the verification button on the <i>user's</i> activity list page.	The system displays a <i>verification form</i> and updates the status of data activities in the <i>database</i> .	Succeed
12.	Propose an activity	<i>User</i> selects the submit activity menu.	The system displays an <i>activity input form</i> and saves the data into <i>the database</i> .	Succeed
13.	View a list of	<i>User</i> selects the activity	The system displays a	Succeed

	proposed activities	submission menu	list of activity submissions.	
14.	View activity submission details	<i>The user</i> presses the details button on the activity submission list page.	The system displays detailed activity data.	Succeed
15.	Edit an activity submission	<b>User</b> presses the edit button on the activity submission list page.	The system displays <i>an edit form</i> and <i>updates</i> the data in the <i>database</i> .	Succeed
16.	Delete an activity submission	<i>The user</i> presses the delete button on the activity submission list page.	The system displays a delete confirmation and deletes the data on the <i>database</i> .	Succeed
17.	View your list of activities	Worshippers choose the activity menu on the <i>home</i> page of the mosque.	The system displays a list of activities.	Succeed

## CONCLUSION

With this information system, it is expected to help administrators and users more easily submit requests for activities. This system can only be used within the scope of the mosque. This system can manage activity data, can propose activities, can verify activities that have been submitted by users and is able to display a list of activities if pilgrims or users want to see what activities are taking place. After testing, the performance management information system can run well in accordance with its functionality.

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