

Al-Hijrah Mosque's Website-Based Management Information System for Events and Donations

Tommy Satrio Wichaksono^{*1}, Erina Dwi Noviandri², Teuku Maulana Iqbal Khairy¹, Afri Yudha¹, Andi Susilo¹

¹Department of Information Technology, Faculty of Engineering, Darma Persada University, East Jakarta 13450, Jakarta, Indonesia

*e-mail: tommysatrio36@gmail.com¹

Abstract

This study aims to design and develop a website-based information system to manage activities and donations at the Al-Hijrah Mosque. Previously, information was communicated through direct conversations or short messages, which proved ineffective for data retrieval, updates, and transparency. The system was developed using the Laravel framework, PHP, and MySQL database, applying the Model-View-Controller (MVC) pattern. System testing was conducted using the Black Box approach to evaluate overall functionality. The results indicate that the developed website successfully provides a public platform featuring announcements, activity schedules, donation progress, and verification statuses, while concurrently offering an administrative panel for comprehensive data management. This digital transformation effectively assists the mosque's administrators in managing activities and verifying donations more transparently and efficiently, thereby increasing congregational trust.

Keywords: Information System, Website, Mosque Management, Digital Branding, Donation, Laravel, MySQL, MVC Pattern.

1. INTRODUCTION

The rapid development of information technology requires social and religious institutions to adapt their methods of community service. Mosques function not only as places of worship but also as centers for social activities, education, and aid management. Practically, information regarding mosque activities is often disseminated through direct conversations, posters, or short messages. While these methods remain useful, they are less effective when data needs to be retrieved, regularly updated, or transparently accounted for. Similarly, in donation programs, congregants require clear information regarding ongoing programs, funding targets, and the verification status of their submitted donations.

Currently, the Al-Hijrah Mosque RW 52 lacks a centralized digital media platform, making it difficult for the wider community to access the mosque's profile and activities. Activity information is not thoroughly documented within an easily accessible platform [1], and donation confirmations require strict verification to ensure that reports remain accurate and reliable. Administrators also necessitate a streamlined panel to manage website content, including profiles, activities, galleries, and donations.

An information system is a combination of people, data, procedures, software, and hardware working together to process data into useful information [2]. For institutions like mosques, websites can serve as a digital information hub where agendas, donation reports, photo documentation, and general questions can be systematically presented [3]. Therefore, this research aims to analyze the information and data management needs of the Al-Hijrah Mosque, design a website-based system supporting activity and donation management [4], and construct public and administrative features utilizing Laravel [6], PHP [7], MySQL [8], Blade, CSS, and JavaScript [9]. The integration of a MySQL relational database with Laravel's Model-View-

Controller (MVC) architecture ensures that system development is highly organized, securely structured, and scalable [3],[5].

2. METHODOLOGY

The data collection methods utilized in this study included observation to understand the required information and system flow [2], and literature study focusing on official documentation for Laravel, PHP, MySQL, and relevant web technologies [6]-[9]. Additionally, project document analysis was conducted to review routes, controllers, models, migrations, and views [10], followed by functional testing on both public and administrative interfaces.



Figure 1. Requirements gathering and consultation session with the mosque management.

The website was designed as an information system with two primary interfaces: a public page and an admin panel. The public page is utilized by congregants to obtain information easily, whereas the admin panel is restricted to authorized administrators for data management. A critical process designed within the system is donation confirmation. The workflow initiates when a donor selects an active program, fills out the required form, and uploads proof of transfer. The system then generates a pending transaction with a unique code. Once validated, the administrator verifies the transaction, which subsequently updates the total collected amount and donor count; otherwise, the transaction can be rejected.

The database was structured to store essential data systematically according to business processes, avoiding isolated tables [10]. The primary relationships established dictate that one activity can possess multiple photos, one donation program can have numerous transactions, and a single transaction is verified by an administrator.

3. RESULT AND DISCUSSION

The implementation results demonstrate that the Al-Hijrah Mosque website possesses all the primary features required to fulfill the initial objectives. The application was successfully built utilizing Laravel as the backend framework, Blade for view templates, MySQL as the database, and CSS alongside JavaScript to enhance the frontend user experience.



Figure 2. Handover and demonstration of the website-based information system

On the public side, the website effectively displays the mosque's information, activity lists, photo galleries, routine schedules, FAQs, contact pages, and donation reports.

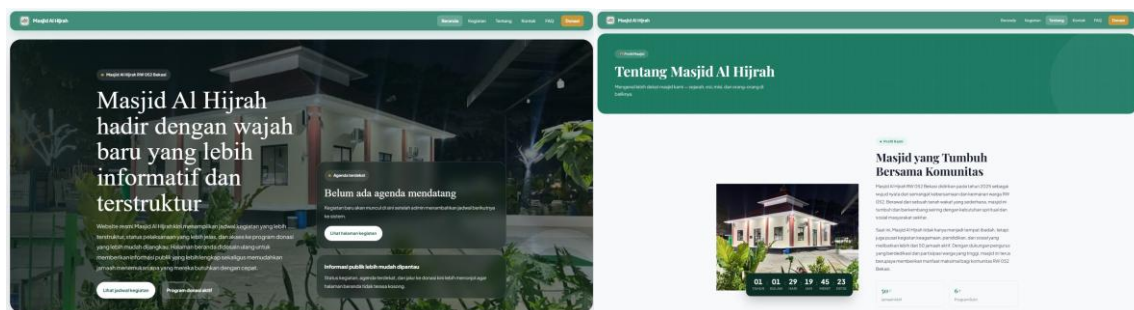


Figure 3. The public homepage interface of the Al-Hijrah Mosque website

Conversely, the administrative side provides secure login features and comprehensive management tools. The activity feature allows administrators to record agendas based on name, date, time, description, and execution status, ensuring transparent communication with the congregation. The gallery feature automatically retrieves and manages photos linked to activities, incorporating logical deletion to prevent storage overload.

The donation feature directly facilitates financial transparency; each program displays its target, collected amount, active status, and donor count. When a congregant submits a confirmation, the system creates a unique transaction code, and the administrator must verify it before the nominal amount is added to the total, effectively preventing unverified data alterations.

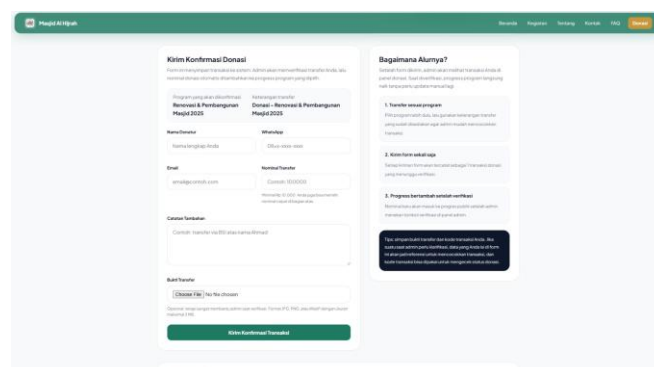


Figure 4. The donation confirmation form interface, providing a straightforward transaction submission process for congregants.

Furthermore, the website settings feature allows administrators to effortlessly update announcements, WhatsApp numbers, QRIS codes, and schedules without altering the source code. System testing was executed utilizing the Black Box approach, focusing on ensuring that the user-facing functions operate correctly according to the provided inputs [3]. The results of this functional testing are summarized in Table 1.

No	Scenario	Expected Result	Status
1	Opening the homepage	Displays activity summary, statistics, and information.	Successful
2	Searching for activities via keywords	Activity list filters according to the input keywords.	Successful
3	Submitting a donation form	System saves pending transaction and generates a code.	Successful
4	Checking transaction status	System displays status if code and email match.	Successful
5	Admin login with valid credentials	Admin is directed to the management panel.	Successful
6	Admin adds a new activity	Data is saved and appears on the activity list.	Successful
7	Admin uploads activity photos	Photos are saved and displayed in details or gallery.	Successful
8	Admin verifies a donation	Transaction status changes and progress is updated.	Successful
9	Admin updates website settings	Announcements, contacts, QRIS, or schedules update.	Successful

Table 1. System Testing Results

The developed system presents several key advantages: information is centralized within a single platform, unique transaction codes empower donors to track their contributions independently, mandatory admin verification ensures accurate reporting, and database migrations allow for highly traceable future development. However, the system possesses limitations, including the absence of an automated payment gateway, reliance on SMTP for email notifications, basic administrative access rights lacking detailed role separation, and the lack of dedicated PDF or Excel export features for donation reports.

4. CONCLUSION

The Al-Hijrah Mosque RW 52 website was successfully designed and implemented as an effective media platform for information and branding, allowing congregants and the wider community to easily access the mosque's profile and activities. The system centrally manages documentation, streamlining the organization and updating of information. Furthermore, the

donation management features actively facilitate transparent recording and verification of financial contributions. For future development, it is highly recommended to integrate an automated payment gateway or virtual account system to update payment statuses instantly. Additionally, incorporating PDF or Excel export functionalities for archival purposes [10], implementing specific administrative roles (e.g., activity admin, donation admin) [4], and adding automated WhatsApp or email notifications will further optimize the system's operational efficiency.

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