



Designing a mobile-based infaq application markazul quran wassunnah foundation (MQS)Kuantan Singingi

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Article Info	Abstract
<p><i>Article history</i></p> <p>Received : Sep 16, 2023 Revised : Oct 21, 2023 Accepted : Nov 22, 2023</p> <p><i>Keywords:</i></p> <p>Community engagement; Donation management; Infaq application; Markazul Quran Wassunnah; Transparent funding.</p>	<p><i>The Android-based Infaq application for the Markazul Quran Wassunnah foundation is an innovative solution to support the management and collection of infaq and donations for the Markazul Quran Wassunnah foundation efficiently and transparently. This application is designed to make it easier for users to contribute to the Markazul Quran Wassunnah foundation, as well as to enable the managers of the Markazul Quran Wassunnah foundation to better manage funding sources. The application's main features include real-time processing of infaq, alms, zakat, and notifications, ensuring that the collected infaq is used appropriately according to the objectives determined by the management of the Markazul Quran Wassunnah foundation. This application is expected to increase community participation in supporting the development of the Markazul Quran Wassunnah foundation and encourage the use of technology for religious purposes and social benefits.</i></p>

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1. Introduction

If Our young generation is far from the Koran then it can be ascertained that technology which they can be proud of be the destroyer of their future [1], The Markazul Quran Wassunah Foundation (MQS) is a foundation that operates in the field of non-formal education for memorizing the Koran. At this time the Markazul Quran Wassunah Foundation (MQS) has started to move into non-formal education, namely Tahfiz Quran and Tahsin Quran activities, in the near future the Markazul Quran Wassunah Foundation (MQS) will open formal education such as Markazul Quran Wasunnah Middle School under the auspices of the Department. Education, and a focus on Arabic, Tahfiz Quran and Hadith, this program is a form of achieving the vision of Realizing a Quranic Golden Generation with a national and global perspective in 2030

Suitable software languages are crucial to tackling the ever-increasing complexity of software engineering processes and software products. They model, specify, and test products, describe processes and interactions with services and serve many other purposes[2]. The application of information technology today is not intended only for organizations, but also for individual needs. For organizations, information technology can be used to achieve competitive advantage, Meanwhile, for individuals, technology can be used to achieve personal excellence, including to seek Work [3]. This technology uses a set of computers to process data, a network system to connect one computer to

another computer according to needs, and telecommunications technology is used so that data can be distributed and accessed globally[4]The role of technology is very important for the Markazul Quran Wassunah Foundation (MQS) Kuantan Singingi because during the construction period of this school, support from the Muslim community was very important. The Markazul Quran Wassunah Foundation (MQS) wants to invite people to invest in provisions for the afterlife. By spending wealth in His way, a servant does not need to worry about lack of sustenance. Because Allah has promised to provide sustenance if the servant donates. In fact, people who spend their wealth in the way of Allah are analogized in Surah Al-Baqarah verse 261 to the situation of a farmer who sows seeds until they grow abundantly. Allah SWT says,

مَثَلُ الَّذِينَ يُنْفِقُونَ أَمْوَالَهُمْ فِي سَبِيلِ اللَّهِ كَمَثَلِ حَبَّةٍ أَنْبَتَتْ سَبْعَ سَنَابِلٍ فِي كُلِّ سَنَابِلَةٍ مِائَةٌ حَبَّةٌ ۗ وَاللَّهُ يُضَاعِفُ لِمَنْ يَشَاءُ ۗ وَاللَّهُ وَاسِعٌ عَلِيمٌ

Infaq according to language comes from the words anfaqa-yunfiqu-infaqan which means donate. Meanwhile, according to the term, it is giving something to people other things, whether in the form of property or anything else [5].Form Statement of Financial Accounting Standards (PSAK) 109 concerning Accounting for Zakat and Infaq/Alms says that infaq or alms is a voluntary donation, good whether or not the need is decided by the infaq/alms donor [6],[7],[8].In Faq's needs we need an application design using Android. Android is an operating system for Linux-based smartphones.One of the advantages Android compared to other smartphone operating systems is that Android is open source code so people can customize features that aren't already in the operating system android according to their wishes[9]. With the title Zakat Management Information System Design. at the Cibis Park Mosque Zakat Amil Agency [10] The aim of this research is to make things easier in processing data from input data of zakat payers and recipients.So the difference with relevant research is that the research I made was not only infaq but also alms, endowments and zakat. To make it easier for Muslims all over the world to give infaq, a mobile-based infaq application is needed. By looking at the display of the infaq application, Muslims can very easily choose the menu according to their infaq, the researchers created the research title "Designing a Mobile-Based Infaq Application at the Markazul Quran Wassunnah Kuantan Singingi Foundation."

2. Research Methods

This research builds a system to provide facilities for administration (processing section) to input data, make data changes and delete input data. There is also a report feature for users and a zakat calculator facility for property zakat and professional zakat [11],[12],[13].

2.1. Method of collecting data

To prepare this research, related data is needed according to the title, namely application design. In collecting data, the author did as an explanation following : Literature review,Field study and Study of literature

2.2. System Development Methodology

In designing this application use The waterfall model SDLC method is a development stage method that has 5 characteristics stages, namely planning, analysis, design, program coding, maintenance. So each These phases must be carried out sequentially and cannot be random [14]. The following describes the process in outline regarding the stages waterfall model SDLC stages:

- a. Analysis:
 - 1) Problem identification, namely identifying problems that can be solved can be in previous data collection activities.
 - 2) Proposed problem solving, namely proposing a solution to the problem which has been previously identified
 - 3) Requirment software, namely analyzing needs software
- b. Design

The next stage is design, at this stage the author start modeling based on the results of the analysis.design determine how an application accomplishes what it needs to do finish. At this stage, a model of the application is created

3. Results and Discussion

3.1. Use Case Diagram

A use case is a series/description of a group that is interrelated and forms a regular system that is carried out or supervised by an actor. Use cases are used to shape the behavior of objects in a mode and are realized by a collaborator, generally use cases are depicted by an ellipse with a solid line, usually containing a name. Use cases describe system processes (system requirements from the user's perspective). In general, use cae is: a pattern of system behavior and a sequence of related transactions carried out by actors[15],[16],[17] This Use Case Diagram is used to show the processes carried out by users in the system. For further details, please see the image below.

Admin users can manage all incoming data

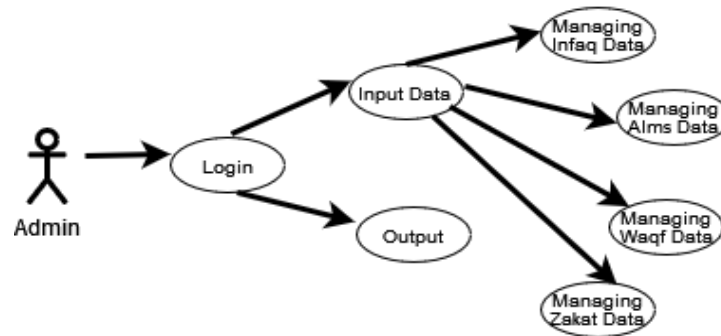


Figure 1. Use Case Diagram Admin

Definition of User Satisfaction according to various Experts vary greatly regarding the definition of satisfaction proposed users [18]. Users can log in with their username and password so they can give alms according to their sincerity. The use of use cases is an important step in the software development process that focuses on user needs, helping to increase the chances of success and end-user satisfaction. Users can also log in and can choose whether for infaq, for alms, for zakat and for zakat according to the wishes of the user.

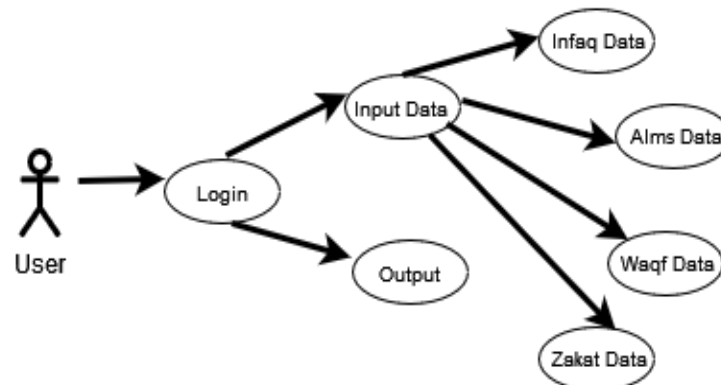


Figure 2. Use Case Diagram Us

3.2. Class Diagram

ERD, or Entity-Relationship Diagram, is a form of visualization used to describe the structure and relationships between entities in a system or database.ERD helps in designing and modeling the way

data is organized in an application or system [19],[20]. The use of Entity-Relationship Diagrams (ERD) has several advantages in the database design and development process. Thus, the use of ERD is an important step in designing an effective and efficient database. This helps the development team to have a clear vision of how data will be stored, accessed, and managed in a system.

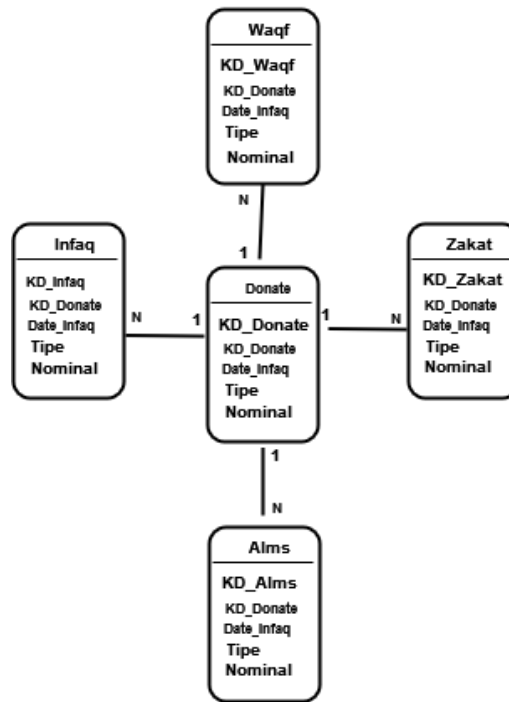


Figure 3. Entity Relationship Diagram

3.3. Design Interface

The interface display is a new system display that is used to log in for admins and users.

a. Login Page Display

Login system (login, also commonly called log in, log on, sign on, sign on, sign in, sign in) is the process of accessing a computer by entering the identity of the account user and password to get access rights to use computer resources Objective [21],22]. This page is used by admins who manage the application and users as donors, both alms and infaq

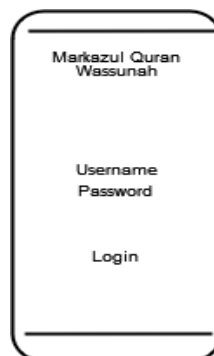


Figure 4. Login Page

b. Admin Dashboard View

From the several conference management that have been mentioned, there are several considerations regarding the problems found, and we want to provide information related to existing scientific conferences and to bring together the organizing committee with scientific conference participants with the considerations required by the admin of several conference management systems that have been mentioned. [23].The following is a display of the Administrator Dashboard

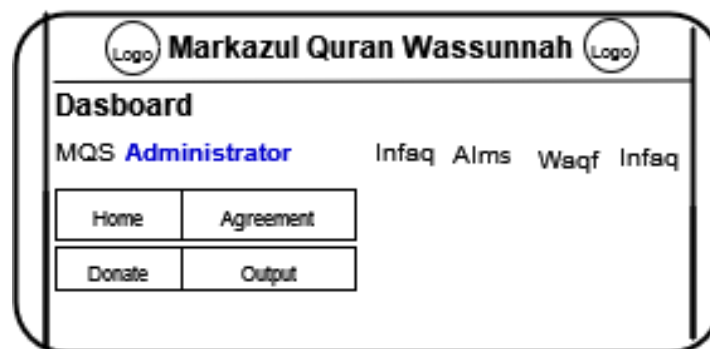


Figure 5. Adminstrator Dashboard Page

Designing an interface can use several methods, one of which is the Human Centered Design (HCD) method. HCD is used to build an information system to produce an interface [24]. in similar research, research carry out development of previously existing website-based zakat applications. Expected with the development of a website-based zakat application at BAZNAS Bogor City, this can make things easier community in paying zakat online without being limited by distance and time, data reports on givers and Zakat recipients become more open and effective and BAZNAS Bogor City can improve further service to the community.[25] Good design of zakat, infaq, alms and waqf applications at the Markazul Quran Wassunnah Foundation will include these aspects to ensure that the application design can function optimally, provide added value for users, and fulfill the ethical and religious principles applied in the context. collection and distribution of zakat and infaq. The following is a display of the User Dashboard

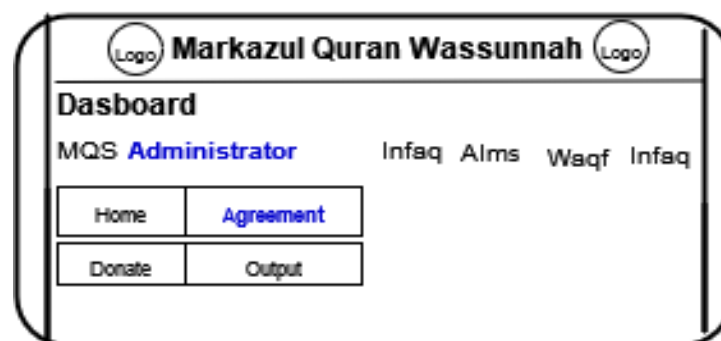


Figure 6. User Dashboard Page

4. Conclusions

Ease of Access: The mobile-based infaq application provides easy access for users to infaq anytime and anywhere. This allows more people to contribute to charity, considering that most people have mobile devices, **Transparency and Accountability:** This application is designed to increase transparency and accountability in the use of infaq funds. a summary display of the application's objectives and how users can participate in infaq, alms, waqf and zakat activities. Announcements about charitable

projects or programs that need support. in this application design, it is easier for donors to choose what they will give, be it zakat, alms, endowments and infaq, these are already available in the Android-based application design. The subsequent development process will involve technical implementation, testing, and continuous iteration to ensure the application functions as expected and provides added value for users. With further feedback and support, this application can continue to be improved and expanded to include additional features that may be needed.

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