



DESIGN OF ZAKAT PAYMENT APPLICATION AT BAITUZZAKAH FOUNDATION BASED ON ANDROID

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Abstrak: Belum adanya perangkat lunak pembayaran zakat, membuat perhitungan zakat pada Yayasan Baituzzakah menjadi kurang optimal. Tujuan utama riset yang penulis lakukan adalah merancang aplikasi pembayaran zakat pada Yayasan Baituzzakah berbasis mobile dalam hal ini memakai android dimana nantinya aplikasi ini dapat bermanfaat bagi para karyawan Yayasan Baituzzakah untuk mempermudah membayarkan zakat profesi dan zakat fitrah. Aplikasi yang nantinya akan dibuat bisa juga dipergunakan ketika orang dari luar yayasan ingin membayar zakat pada Yayasan Baituzzakah. Metode penelitian yang digunakan untuk merancang aplikasi pembayaran zakat berbasis android adalah menggunakan wawancara, pengamatan atau observasi dan studi kepustakaan untuk memperoleh data yang lebih rinci. Data yang telah didapatkan, selanjutnya akan di lakukan proses desain aplikasi menggunakan flowchart dan pseudocode. Hasil dari proses desain, akan dilanjutkan dengan tahap pengkodean dengan menggunakan bahasa pemrograman java. Aplikasi yang telah dirancang dapat memberikan solusi kepada karyawan Yayasan Baituzzakah dalam menghitung dan membayarkan zakatnya, terutama zakat profesi dan zakat fitrah.

Kata kunci: Aplikasi, Zakat, Yayasan, Android

Abstract: *The absence of zakat payment software has made zakat calculations at the Baituzzakah Foundation less than optimal. The main purpose of the research that the authors did was to design a mobile-based zakat payment application for the Baituzzakah Foundation, in this case using Android, where later this application can be useful for employees of the Baituzzakah Foundation to make it easier to pay professional zakat and zakat fitrah. The application that will be made can also be used when people from outside the foundation want to pay zakat to the Baituzzakah Foundation. The research method used to design an android-based zakat payment application is to use interviews, observations or observations and literature studies to obtain more detailed data. The data that has been obtained, will then be carried out by the application design process using flowcharts and pseudocode. The results of the design process will be followed by the coding stage using the Java programming language. The application that has been designed can provide a solution to Baituzzakah Foundation employees in calculating and paying their zakat, especially professional zakat and zakat fitrah.*

Keywords: Application, Zakat, Foundation, Android



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I. INTRODUCTION

Today's increasingly sophisticated developments make the use of an application mandatory for all computer users. Before the existence of cell phones (mobile phones), computer users usually used desktop and web-based applications as tools that made it easier for them to do their jobs. Now, in an era where all smartphones are used, it requires application developers to design and build mobile-based applications. Of the various types of mobile operating systems that exist, Android is the prima donna and is very popular among mobile-based application developers. Android is a type of operating system or operating system for Linux-based mobile devices that includes an operating system, middleware and applications [1]. Among the several advantages of Android compared to other operating systems on mobile phones or smartphones, namely Android is of the open source code type which is very helpful and pampers makers and designers in developing and creating new applications or items which will later suit their needs. Several ways that can be done to accommodate requests for user needs when sending information such as office needs, entertainment or worship to get closer and always remember the creator is to build a rule system for transferring information that is fast, practical and easy, namely by using an Android smartphone-based device. which can provide the needs for work and worship as well as tithe with an application that will be used on an Android-based smartphone.

There are various types of zakat that we can carry out, one of which is professional zakat and zakat fitrah. Zakat for work or profession is by removing some of the assets from the payment, commission or salary of a profession or job. Zakat must be issued if it reaches certain conditions, namely one nishab and accompanied by the intention in the heart to give zakat because of Allah. Zakat al-fitr or zakat for the soul is zakat that must and must be carried out by Muslims, be it men, women, big or small, free or slave, young and old, on the first day of the month of Ramadan until before the preacher ascends the pulpit during the Eid al-Fitr prayer. Based on the results of interviews with the head of the Baituzzakah Foundation, several problems were found in paying zakat fitrah and professional zakat, including when employees and people outside the Baituzzakah Foundation's environment wanted to pay their zakat, they often did not have time to visit the Baituzzakah Foundation because their operating hours coincided with office hours. In addition, the problem faced by the Baituzzakah Foundation is that the calculation of professional zakat and fitrah is still manual, forcing the Baituzzakah Foundation to input data on people who pay zakat one by one so that there is a long queue when zakat payments take place. The existence of technology that is growing rapidly and advanced authors wish to solve the above problems. The purpose of this research is to make an application for calculating and paying zakat profession and zakat fitrah which makes it easier for employees and other people outside the Baituzakah Foundation to pay their zakat. In addition, the benefits obtained from this research include the efficiency of energy and time used to write data and also the convenience of paying zakat for zakat payers so that the data processing system can run more precisely and quickly when using an application on a smartphone

Definition of Application Design

Design is the process of developing new system specifications based on the results of system analysis recommendations while the application is the application, storing something, data, problems, work into a facility or media that can be used to apply or implement existing things or problems so that they turn into a new form without losing the basic values of things data, problems, and the work itself [2]. Applications are applied tools that function specifically and are integrated according to their capabilities. Software made by a computer company to do certain tasks, for example Microsoft Word, Microsoft Excel [3]. A conclusion can be drawn from the two meanings that have been conveyed previously, namely the application is a software or software that performs the function of carrying out various specific tasks including making data, applying data, deleting and adding data.

Definition of Zakat

Zakat (zakah) literally means "purify", "grow", or "develop". According to the term syara', zakat means giving out a certain amount of property to be given to people who are entitled to receive it (mustahik) in accordance with the conditions determined by Islamic law. Zakat is one of the pillars of Islam whose ima and the law of its implementation are obligatory. Zakat is divided into two types, namely soul zakat (zakah al-fitr) and wealth zakat (zakah al-mal) [4]. Zakat of the soul is also called zakat fitrah which is obligatory for a Muslim when entering the fasting month (Ramadan) and before the sermon gives an Eid prayer sermon with the size of one sha' (about 2.5 kg or 3.5 liters) of staple food in this case rice to perfect fasting worship by giving zakat to



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the poor on Eid day, namely Eid al-Fitr. Meanwhile, zakat assets where professional zakat is part of it is the result of work or profession (lecturers, civil servants, doctors, etc.).

Android

Android is one of the most well-known operating systems based on Linux and is made for touchscreen mobile devices such as smartphones and tablet computers. Research by Imron, Nurul Azizah, M. Sinta Nurhayati, Bambang Wijonarko (2021) where this research discusses designing an application regarding Mobile Zakat and Infaq which was carried out at Baznas Tangerang Regency. The purpose of this research is to build and create an android mobile application for BAZNAS Tangerang Regency where later the application made can provide services to the community, besides that this application can share information and store zakat data. In addition, the results obtained are information, some new news, documents, and there is also a kind of space for sharing as a place to meet online so that people's religious and aqidah values grow stronger and belief in religious teachings increases [5].

The study conducted by Dwi Andini Putri, and Siti Ernawati (2019) entitled Study of Web-Based Online Zakat Application Design at the Bogor City National Amil Zakat Agency (Baznas). The purpose of this article is to be able to help BAZNAS, especially Bogor City and its surroundings, in managing zakat data or managing zakat distribution data and providing convenience to the public in carrying out the obligation to pay zakat through web application media [6]. The study conducted by Lilis Setianingsih, Apriyanto, Hisma Abduh (2020) with the study title Application for Android-Based Zakat Amount Calculation. The specific objective of the study they made was to build an application for calculating zakat which could make it easier for the public to calculate the amount of zakat that must be issued besides making it easier for BAZNAS employees and officers to provide information about the prices of gold and rice [7]. The fundamental difference between the author's study and previous research is that in this study the authors used the RnD method, where the authors wanted the results of this research to continue to grow.

II. METHODS

The method that researchers use is implementing research and development (RnD) methods. Research and development methods or in English Research and Development are research methods used to produce certain products, and test the effectiveness of these products [8]. In this research, what researchers are trying to do is build and create a kind of application that can be used in zakat payments at Android-based baituzzakah foundations that suit the needs of baituzzakah foundations. The researcher carried out several related things in terms of collecting some data and also information where the data and information obtained could later support and perfect the results of the research that the researcher did, including going directly to the field to conduct field studies by observing or observing the process of paying zakat fitrah and professional zakat contained in the baituzzakah foundation and interviews with the head of the foundation, employees and officers, according to the required data requirements.

III. RESULTS AND DISCUSSION

From the description of some of the things above, researchers can determine some of the problems and solutions that can be done. Researchers observe the problems that exist in the Baituzzakah Foundation, namely they have deficiencies in the system they use in paying zakat. This deficiency is caused in processing zakat data, they still use the manual method, namely using handwriting, which results in many problems they face, such as inefficient time and energy used for data duplication costs and data recording and calculation of zakat fitrah payments and professions.

To solve the problems that exist in the Baituzzakah Foundation, researchers offer solutions so that the zakat payment system can be carried out easily and optimally which will later make the zakat processing system work quickly and precisely when using the zakat payment application with a smartphone. In this case the author makes it happen by designing a zakat payment application at the Android-based Baituzzakah Foundation.

Problem Solving Algorithm with Flowchart and Pseudocode

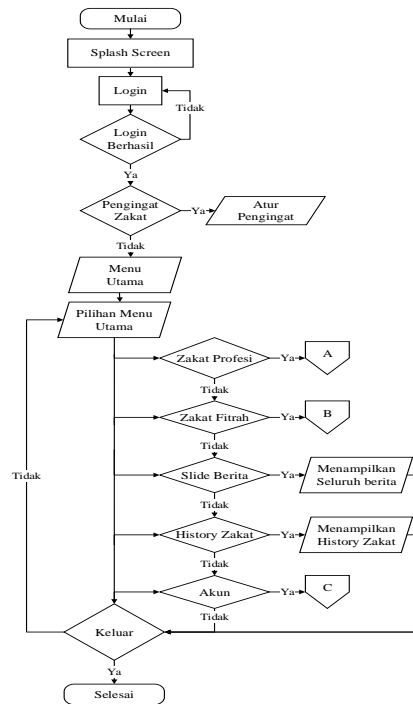
"A flowchart is a string of picture symbols (charts) that shows the flow (flow) of the process to the data." [9]. Flowcharts (flow charts) are usually used by programmers or computer program linguists before they do coding in terms of expressing their thoughts and ideas when they want to design a system through written media in the form of symbols so that later it will be easily understood by other programmers, colleagues or by fellow team



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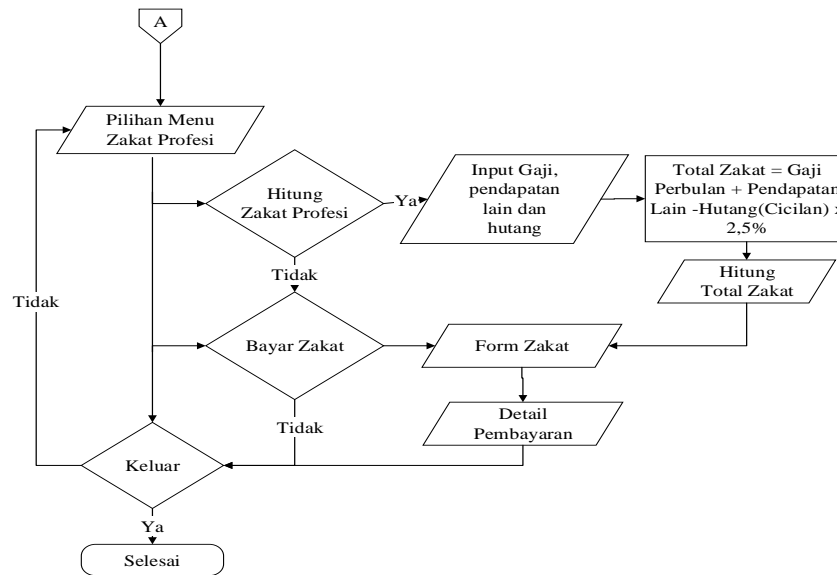
members. project. This is very useful, especially in making flowcharts for research on Zakat Payment Applications at the Baituzzakah Foundation.



Picture. 1. Initial Menu Flowchart of the Zakat Payment Application

1) At the start of the main menu display there is a splash screen; 2) After that the login page; 3.) If the login is successful then a zakat reminder page will appear, if not we want to set a zakat reminder then the user will go to the main menu display; 4) this main menu has five buttons namely: Profession zakat menu button, zakat fitrah menu button, news slide button, zakat history and account button: 5) When the user clicks one of the five buttons above, the application will then go to the menu that was clicked earlier.





Picture. 2. Professional Zakat Menu Flowchart

1. On the professional zakat menu, there are two buttons, namely: the button for calculating professional zakat and also the button for paying zakat. 2. When clicking on one of these buttons, the application will go to the selected menu. 3. In this zakat calculation menu the user is asked to enter the amount of monthly salary, other income, and debt or installments to find out how much professional zakat obligations will be paid each month

Main Menu Pseudocode

Tampilan login

Tampilan pengingat zakat

Tampilan menu utama

Pilih button

Button menu zakat profesi

Button menu zakat fitrah

Button menu slide berita

Button menu history zakat

Button menu akun

Button menu zakat profesi menampilkan tampilan menu zakat profesi

Button menu zakat fitrah menampilkan tampilan menu zakat fitrah

Button menu slide berita menampilkan seluruh berita

Button menu history zakat menampilkan history zakat

Button menu akun menampilkan tampilan menu akun

Pseudocode of Professional Zakat Menu

Tampilan splash screen

Tampilan hitung zakat profesi

Tampilan bayar zakat

Pilih button

Button menu hitung zakat profesi

Button menu bayar zakat

Button menu hitung zakat profesi menampilkan proses perhitungan zakat profesi

Button menu bayar zakat menampilkan proses bayar zakat

Pseudocode Proses Hitung Zakat Profesi

Proses hitung zakat profesi

Input gaji perbulan



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- Input pendapatan lain
- Input hutang atau cicilan
- Proses hitung total zakat
- Output total zakat
- Tampilan form zakat
- Pilih button zakatkan
- Tampilan detail pembayaran
- Pseudocode proses bayar zakat
- Tampilan form zakat
- Pilih button zakatkan
- Tampilan detail pembayaran

The login display is intended for payment security in this application. By entering the employee number and password and pressing the login button, you will go to the set reminder menu.

Main Menu Page Display



Picture. 4. Main Menu Page

The initial menu page is intended so that the user or users can click on the type of page you want to display. When the user clicks on one of the four options on this page, it will display to the user the page that the user wants to see. This page is useful for presenting program button images at a glance, professional zakat button texts, zakat fitrah text buttons, Zakat history buttons and account buttons

Display of Professional Zakat Calculation Page



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Picture. 5. Professional Zakat Calculation Menu page

In the zakat calculation menu, users are asked to enter the amount of monthly salary, other income, and debt or installments to find out how much professional zakat obligations will be paid each month. This page contains zakat calculations which are calculated from the amount of salary plus other income and reduced by debt or installments

Display of the Zakat Fitrah Calculation Page



Picture. 7. Menu Page to Calculate Zakat Fitrah

IV. CONCLUSION

That there is a project to design a zakat payment application that will be made for the Baituzzakat Foundation. This application will be built based on Android, so it can be accessed via cellphones or tablets with the Android operating system. This application aims to facilitate the process of paying zakat for muzakki (people who pay zakat), so they no longer need to come to the Baituzzakat Foundation office to make payments. With this application, muzakki can pay zakat more easily, quickly and safely. Overall, this project will help increase the efficiency and effectiveness of zakat collection by the Baituzzakat Foundation, as well as provide convenience for muzakki in carrying out their religious obligations.



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