

ANDROID-BASED PAYMENT APPLICATION IN MA USB FILIAL MAN BATAM

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ABSTRACT

Education Guidance Contribution is a fund that must be paid by parents of students to be used for the student's educational needs. The tuition fee must be paid every month. Lack of payment information becomes a communication barrier for parents about payments at school, especially tuition payments. Manual data processing is quite complicated and takes a long time. Based on these problems, it is necessary to apply Android-based tuition fees at MA USB FILIAL MAN BATAM. This study uses data collection methods, observation and interviews. In designing the application using SDLC (System Development Life Cycle). This research, which is an android-based payment application, is expected to be able to help parents of students in the process of paying tuition fees at MA USB FILIAL MAN BATAM to make it more accurate and efficient.

Keywords: Application; Education Development Contribution; Android

PRELIMINARY

Over time, human needs for technology are also growing. Technological facilities make it easier for the community to solve existing problems. In order to improve services related to madrasah, of course madrasah must implement a good management system and be supported by good administrative facilities as well. At MA USB FILIAL MAN BATAM, the payment for Education Development Contribution is a provision that must be paid by each student every month, the goal of students making payments as a means of improving the best services or facilities for the madrasah and their students. The financial management of the Education Development Contribution is very influential on teaching and learning activities. Currently, the financial payment process at MA USB FILIAL MAN BATAM is still manual. Administrative officers often have difficulty dealing with students making payments, so the process takes longer to record and submit reports. In addition, sometimes there is a misunderstanding between the officer who receives the payment and the guardian of the student regarding the month that has been paid and what has not been paid.

This research is expected to produce an Android-based tuition payment application that can be accessed by every user, both students and guardians, wherever and whenever. And it can help Administrative officers (TU) in carrying out their duties so that administrative staff and guardians can see administrative data more clearly and accurately,

and can improve the best services or facilities for madrasah and their students.

LITERATURE REVIEW

Mobile Application Concept

Mobile applications can be defined as a product of a mobile computing system, namely computing system that can be easily physically moved and whose computational capabilities can be used while they are being moved. Examples are Personal Digital Assistants (PDA), smartphones and cell phones. Overall, the mobile application is an application that can be used even if the user moves from one place to another without interruption or interruption of communication.

Payment of Education Development Contribution

Payment of Education Development Contribution as an effort to assist or organize teaching and learning activities at madrasahs so that they can run smoothly, with the assistance of the payment or contribution funds. According to Ahmad Syaifulloh, Dedi Irawan (2017: 59). The correct student data collection process and student financial administration are very important. One of the information needed is information about the payment of development donations and student monthly tuition payments, this information is very influential for the smooth learning process and maximizing the existing facilities in the school. Meanwhile, according to Damayanti, Heni Sulistiani (2017: 26) Payment of School Fees is a donation that is charged

to students to be used for the purposes of implementing and fostering education. The details of school fees consist of uniform fees, insurance costs, extracurricular costs, building costs and monthly tuition fees.

Android

According to Slamet Winardi, et al (2019:94), android is an operating system developed to be implemented on linux-based mobile devices which includes an operating system, middleware, and applications. According to Sri Hartati, et al (2017:144), android is a system on mobile phones that is open and bases on the linux operating system. Overall android is an operating system designed for mobile devices such as mobile devices and tablet computers. Android is now worldwide. In fact, android is the most widely used mobile operating system in the world.

Flowchart

According to Rita Irviani, Rossi Oktaviani (2017:65), flowchart is a unit of image symbols (chart) that show the flow of the process to data. According to Adi Prasetya Nada, Anggi Maharani (2018:130), flowchart is a flowchart design that describes the process of the relationship between a process in a program. Overall the meaning of a flowchart is the logical sequence of a procedure in solving a problem which is written in the form of certain symbols.

MySQL

According to Muhammad Muslihudin, Anggun Larsati (2014: 34) MySQL (My Structure Query Language) is a relationship database software or Relational Database Management System (RDBMS) which is distributed free under the GPL (General Public License) license. Where everyone is free to use MySQL, but cannot be used as a closed source or commercial derivative product.

RESEARCH METHODS

In the data collection method carried out in this study, there are several stages, including the following:

Observation Method

At this stage the researchers conducted direct observations in the payment process at MA USB

FILIAL MAN BATAM to obtain more complete data or information. Observation can be said as a data collection technique by making direct observations to the point of the object that you want to study.

Interview Method

In this stage the researcher conducts questions and answers to the Administrative Officers and Principals concerned about the payment process. In short, the interview is a question and answer session or interview with the parties concerned in the object of research to find out what obstacles are experienced and what are needed by the school so that the payment process, especially in MA USB FILIAL MAN BATAM itself, will be better and more efficient.

System Development Model

In system development or designing an application, of course, there are methods in it. In this study, researchers used a system design or development method in the form of SDLC.

DISCUSSION

System Design

In designing this payment application, it refers to a concept as follows:

Main Program Menu Flowchart

The main program menu flowchart is a flowchart that describes the workflow or process of a program. Are as follows:

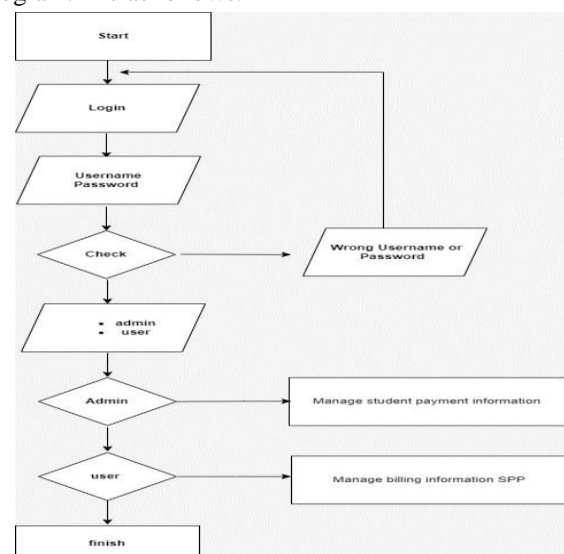


Figure 1. Main Program Menu Flowchart

Admin Flowchart

Admin flowchart is a flowchart that describes admin requirements to users in database operation. Are as follows:

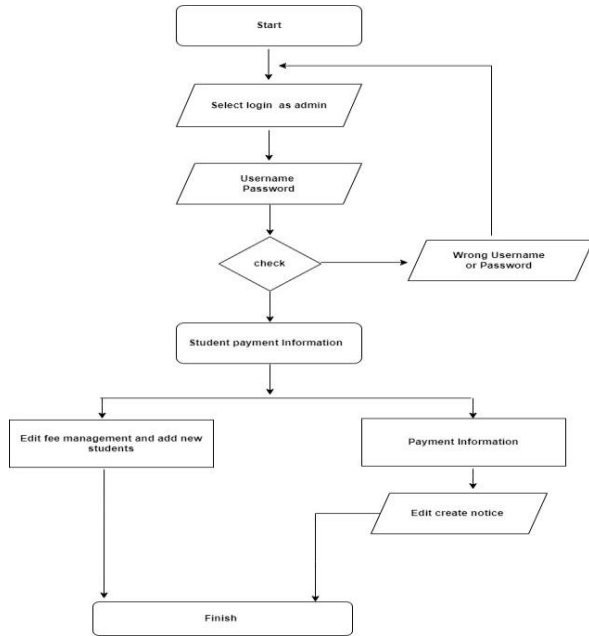


Figure 2. Admin Flowchart

User Flowchart

A user flowchart is a flowchart that describes the needs of a user or application user in the payment process. Are as follows:

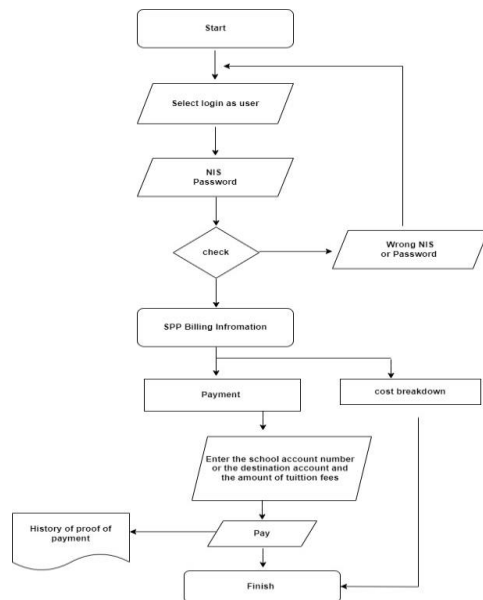


Figure 3. User Flowchart

Interface Design

Researchers who act as designers create the main menu, login menu and home menu that determine the design style of the payment application interface. The following is an interface design on the payment application.

Main Menu Design

The main menu design where this display describes a design when starting or entering the Payment application.

Admin Login Menu Design and User Login Menu

Admin login menu design where this display is used by admin or Administrative officers to enter the school tuition payment application while the user login menu design is where this display is used by the user to enter the school tuition payment application.

Analysis of Research Results

The analysis of the results of this study is the result of a questionnaire that has been given to 20 respondents to get results and answers about how the appearance and function of the school fee payment application that has been designed is the result of the questionnaire stated that the average respondent gave an answer that the appearance of this application was quite interesting and can make it easier for students and parents to make payments and can find out information on fees that have been paid and fees that have not been paid.

CONCLUSION

Based on the results of research in designing school tuition payment applications at MA USB FILIAL MAN BATAM, this application can make it easier for students, parents and users in the process of making payments at MA USB FILIAL MAN BATAM, so that users do not have to come directly to school to make payments. Users can find out details about fees and information from the school regarding payments. In addition, this application can also help Administrative officers in handling students who make payments and can shorten time and efficiently.

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