

## ANDROID-BASED EDUCATIONAL APP FOR LEARNING THE PRAYER PROCESS

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### ABSTRACT

*Prayer is one part of prayer. There are several obligatory prayers for Muslims: morning, noon, Asar, Maghrib, and Isha. By following the development of mobile technology, prayer learning applications can be developed to be used anywhere and at any time without an internet connection. Android is a Linux-based mobile operating system designed by Android. Various activities can be done using a smartphone, such as working, playing, entertaining, and studying. Using multimedia development, it is hoped that users will be interested in learning how to pray. The application developed includes several pages containing material evidence, pillars, preparation, and prayer guides.*

*Keywords: Shalat, Android, Applications*

### INTRODUCTION

Prayer is one of the two pillars of Islam. The obligatory prayers of Muslims consist of dawn, noon, asr, maghrib, and isha. In every prayer, pillars start from the intention to the greeting. This is what sometimes makes Muslims not memorize and know all the prayer intentions and prayers, so when they are going to pray, they have to first look for and learn the prayer intentions and prayers, which, of course, means they have to bring the book to memorize them. This is what sometimes makes Muslims too lazy to perform these prayers. Android is a Linux-based mobile operating system developed by Android. Various activities can be carried out using this smartphone, such as work, play, entertainment, and even studying. As for getting to know and learning more about religion, one of them is praying using a smartphone, and it will be easier to get to know and understand because it can be used anywhere. Azhary [1] has researched prayer guidance, namely a multimedia-based prayer guidance application—applications designed using Flash. The Flash used by previous researchers is desktop-based, which can only be used on computers or PCs, so it cannot be used on smartphones. We need an application that can also be used on smartphones, such as Android, to make it easier for users because using a smartphone will be easier to use anywhere without having to open the PC first. The content of the material in the application is the intention for fardhu prayers and prayer procedures. In terms of size, the appearance must be small in this application, and then the application only

discusses prayer guidance. Meanwhile, the application that will be built will explain prayer guidance in prayer procedures by explaining the advantages of prayer procedures, prayers after prayer accompanied by audio to make it easier for users to memorize and listen directly.

Previously, there were several applications on Google Play, including a prayer guide application uploaded by Imajlis Mobile. This application contains guidance for performing prayers, such as prayer intentions and prayers. It still needs to be understood in applications with a display because all the information is stored on one page and does not include audio. Based on the problems above, the proposed solution is to build an Android-based application for prayer guidance and using a multimedia system. This research uses the multimedia system development method by Luther-Sutopo, one of the system development methods used by multimedia application developers.

## LITERATURE REVIEW

Applications are collections of program commands created for specific work [2]. It can also be explained that an application uses instructions or statements in a computer that have been arranged so that they can process input and become output [3]. From these two definitions, it can be concluded that an application is a computer program that contains a collection of commands or statements that have been arranged systematically so that they can process input into output for a particular job.

Android is an operating system for Linux-based mobile devices, including an information system, middleware, and applications. Android provides an open platform for developers to create applications. Android is a new generation of mobile platforms that allows developers to develop according to their expectations [6].

## RESEARCH METHODS

The first activity starts by formulating the problem by determining the background that will explain in general about this research. After that, the problem formulation is used as a reference for creating a research objective. Then, the goals are determined; the next stage is to search for and formulate a literature study by reviewing books related to this research to serve as research references so that they can support the research objectives seen from a scientific perspective. Based on the previous purposes and literature, the activity sequence can be described as shown in the image below. The following is a detailed schematic of the conceptual framework:

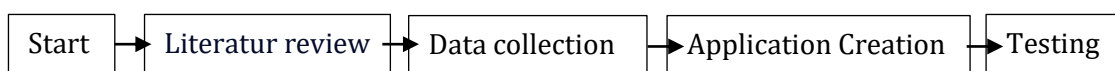


Figure 1. research methods

## RESULTS AND DISCUSSION

## A. Application Creation

### 1. Purpose of Making the Application

A prayer guide application aims to create a medium for learning about Android-based prayer procedures and making it easier for users to find information about prayer and the pillars of worship on a smartphone or tablet computer.

### 2. User Identification

Based on references from research results, this application is intended for the general public, Muslim students, and students who want to learn about prayer procedures. Based on the target users of the application it is the adult Muslim community who are not in the environment, be it Islamic boarding schools or religious institutions. To find out user needs in creating this prayer guidance application, this was done by distributing questionnaires.

### 3. Application Concept

In determining the application concept for this prayer guide, a literature study was carried out on material related to prayer procedures and related research. Apart from that, these applications are similar to references in presenting material displayed in the prayer procedures application. For guidance on prayer procedures, refer to the existing application and then change the input method to make it easier. Based on the concept to be designed, the designer must create a description, as in the following table:

Table 1. Description of Application Concept

Users	:	Muslims
Duration	:	Unlimited
Image	:	png and .jpg
Audio	:	Recording in .amr
Interactivity	:	Green button with icons on the screen

## B. Planning

### 1. Storyboard Design

This stage is a series of images created to depict a story and the series of stories that will be created, so they must be understood by all parties. The storyboard of the application for prayer guidance is as follows:

Table 2: Introduction and Application Storyboard.

Scene 1	:	Scene opener.
Scene 2,	:	<i>The scene contains a display of information menu options with three initial menus. Prayer, about and exit</i>
Scene 3,	:	Scene to display the propositions, pillars, preparation, and guidance menu
Scene 4,	:	Scene to display the about menu regarding the application maker
Scene 5,	:	<i>Scene to exit the application</i>

### 2. Navigation Structure Design

This navigation structure designs the working relationship between one

scene and another. In making this application, the navigation structure is a hierarchical menu structure. This hierarchical mode can be seen in Scene 1 (opening), connecting Scene 2 (information menu), and then Scene 3 is connected to the other menus, namely the prayer, about, and exit menus. The function of this scene is to help give orders and messages.

### 3. Material Collection

According to requirements, this data collection stage also involves collecting all the materials needed in the application creation process, including audio, images, photos, and text. The material was also taken from books about prayer and pictures downloaded and obtained for free in jpg and png format, then audio in.mp3 format.

### 4. Making

At this stage, the implementation of the design results will be carried out. This stage consists of the application creation stage, where the application creation is based on the menu structure, scenario, or storyboard, which is at the design stage. This creation stage is also equipped with interactive button command text in the form of a picture. This is intended to attract users to use the application. The following is the interface of the prayer guidance application:



Figure 2. Application

Here, you can see a main menu that redirects to various main menus in this application. In the picture above, you can see that there is a menu that can be visited by the user, namely the agenda, arguments, etc. Here, it can be seen that Sanya has rules regarding his prayers. Figure 2: Display of several menus in the prayer procedures application. In this section, you can see videos that can be played using this application so users can use this application.

### E. Testing

Application testing is carried out by testing application installation on several devices and testing system functionality, including interface design sound, and the material displayed is standard GUI (Graphical User Interface) so that it makes it easier for users to interact with the application. They are testing the application directly to the public by providing the app so that it will be installed on each device to test whether the application is easy to understand and follow up for further development on any existing deficiencies.

## CONCLUSION

Based on the discussion and results obtained, the following conclusions can be drawn:

1. The prayer learning application is Android-based, so it is easy to use

- anywhere and anytime without needing an internet connection.
2. The application developed serves to learn more deeply about prayer.
3. In the application for learning prayer procedures, there is material about the arguments for prayer and the pillars of worship, as well as visual displays with video and audio.
4. Based on the results of tests carried out directly by people from various groups, the application can be accepted according to user needs regarding material content, visualization, sound, and comfort.

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