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# Elayah: Mobile Based Media For Al-Qur'an Memorization Using Takrar Method

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Abstract. As a pesantren based campus, University Of Darussalam Gontor requires their student to memorize Al-Qur'an as part of learning activities. However, the facts shows the level of memorization of students has not been able to achieve the target. This media aims to help students improve the quality of memorizing Al-Qur'an with practical features in a mobile application. This media uses the takrar method which has been used since the time of the Prophet Muhammad S.A.W. The takrar method is used by repeating the reading 40 times each sentences. This media based on mobile android application and created using waterfall model. Testing is done in two ways, the suitability of the application with an Android devices that shows the suitability of a device measuring at least 5 inches, and the distribution of questionnaires to the examiner or Muhafidz resulted in the suitability of the functions and materials as much as 93%, and the average value of students as much as 97.3% in terms of ease of use. The results of the questionnaire indicate the suitability of the media to the user needs.

#### 1. Introduction

Al-Qur'an is the holy book of Muslims throughout the world. Al-Qur'an was given to humans not only as teaching material, but also as a miracle for the prophet Muhammad S.AW and proof of his prophethood.[1] As a Muslim, it is a must to study Al-Qur'an so that it is not wrong in understanding the meaning contained therein. One of the virtues that can be obtained from the Koran is to become a memorizer.[2] As mentioned in one of the verses "But it is clear revelations in the hearts of those who have been given knowledge, and none deny Our revelations save wrong-doers." Al-Ankabut:49.

Indonesia is a unique country, one of its uniqueness is the existence of pesantren, pesantren is an educational institutions that are more focused on religious education and the morals of their students.[3] one of the pesantren models in Indonesia is the pesantren *Tahfidz Al-Qur'an* which specifically teaches memorization of Al-Qur'an, each pesantren has its own methods of memorizing Al-Quran. some methods are *juz'i*, *sima'i*, *tasmi'*, *muraja'ah*, *jama'*, *takrar and kitabah*.[4] This research uses the *takrar* method as the Al-Qur'an memorization method and the waterfall method in its design because it is considered to be in accordance with the memorization system carried out at the university, and there are previous studies that have verified their strengths and weaknesses so as to provide convenience in future development.

University Of Darussalam Gontor as one of the pesantren model university requires all students to memorize Al-Qur'an, in fact memorization of Al-Qur'an is used as one of the requirements for

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graduation. This is in accordance with the principle of University of Darussalam Gontor which applies the practice of dzikir, thought, sports and feeling as a principle in living everyday life. [5] The memorization system of al-quran which has been implemented at the University of Darussalam Gontor is by visiting examiners or muhafidz regularly. The weakness that arises is that there is no memorization method of Al-Qur'an specifically applied at the university, so the expected results have not reached the target, even the data in 2016 and 2017 showed only 48% of students who managed to achieve the memorization target.

The target of this media is Darussalam gontor university students and every muslims who have difficulty in memorizing Al-Qur'an, because they do not have the correct method.

This media is designed to be used on Android-based smartphones, because the device is the most popular among students, the Android device is also the most widely used device in the world today, more than 190 countries are recorded using the Android. In addition to practicality and ease of use, Android provides convenience in terms of developers because all the code in Android has an open source license from Google so that it gives freedom for anyone to develop it.[6]

in other research about the development of mobile based assistive applications in memorizing Al-Qur'an has produced applications that can be accepted by its users, also the usefulness of the features contained in the application make it easier for users to memorize.[7] Secondly, research on the use of the *takrar* method in memorizing the Koran has given positive results, the *takrar* method is proven to have advantages in strengthening one's memory of memorization, with the recitation method which is done repeatedly, making it easy for the memorizer to memorize verses so that he can know verses by paragraph in more detail.[8]

The novelty of this research is to focus on the use of features provided in Android that are tailored to the needs of the Takrar method, so that the results obtained can be appropriate and better than the use of the Takrar method directly

#### 2. The Methods and Materials

#### 2.1. Materials

This research uses java programming language for back end and XML for front end design, Corel Draw X7 software is used to design images and logos. Open source software from Google Android Studio and SQL Lite to store application databases.

### 2.2. Methods

The Takrar method is derived from the Arabic word *takrar* which means to repeat something, to do it repeatedly. Based on the above understanding, the takrar method is a systematic practice that is carried out repeatedly regularly, orderly and think well to obtain the expected results. Takrar method in memorizing the Qur'an based on the verse in the Surah Al-Furqan verse 32 states: "And those who disbelieve say: Why is the Qur'an not revealed unto him all at once? (It is revealed) thus that We may strengthen thy heart therewith; and We have arranged it in right order".

In the implementation of the takrar method, the memorizer reads repeatedly 40 times, after which the memorizer starts the memorization in accordance with what has been repeated. in the takrar method there are several conditions for easy memorizing Al-Qur'an, namely thought, sincerity, patience, istiqomah, good character, parental consent. In addition to the memorization model, there are several strategies that support the successful implementation of this method, namely:

- Double looping strategy
- Never move on to the next verse before the verse being memorized is completely memorized
- Memorizing the sequences that are memorized in a single unit after the number of memorized verses.
- Using just one mushaf
- Understand the verses that are memorized
- Pay attention to similar verses

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- Deposit to someone who is able to memorize the Qur'an.
- Manners to memorize Al-Qur'an.[8]

The design uses the waterfall model with the stages of requirement, design, implementation, verification, and maintenance[9] as shown in Figure 1, all the results in each of these stages will be explained in the implementation chapter.

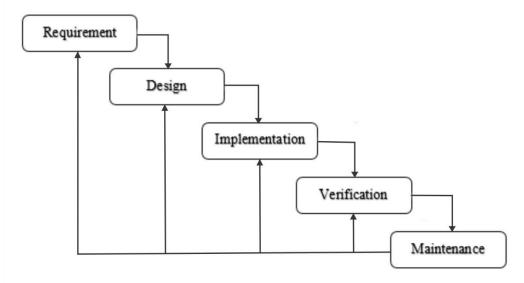


Figure 1. Waterfall Model

#### 3. Implementation and Result

### 3.1. Requirement

At this stage the initial analysis phase begins, such as the formulation of the problem, until the technological solution that will be developed to complete the development of mobile-based quran memorization media. Needs based on the needs of students in obtaining a memorization method that can help improve the quality and quality of their memorization of the Koran, the solution is combined with the latest Android technology that is easy to use anywhere and anytime.

**Table 1:** Application development needs

No	Activities	Result
1	identification of problems	Many students have difficulty in completing the target
		of memorizing the Koran because they do not have the
		correct memorization method
2	Application content	The procedures for memorizing Al-Qur'an using the
		takrar method
3	The memorization method	Takrar Method
4	Offered solution	Elayah mobile based media for Al-Qur'an
		memorization using takrar method
5	The used technologies	Android based mobile application

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#### 3.2. Design

The next stage of the content that has been obtained previously, the development of the design flow of the use of mobile applications to be made. Included are juz inputs, audio inputs and clock inputs etc, as explained in Figure 2 below:

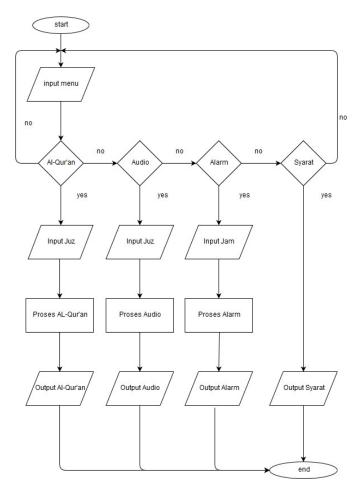


Figure 2. Flowchart steps for using Al-Quran memorization media

# 3.3. Implementation

The next stage is application development based on the flowchart that has been made before, some of the results of application development can be seen in Figures below.



Figure 3. Elayah welcome screen

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In figure 3, welcome screen page is intended for new users who install the Elayah application, will show some of the application available services, such as the Al-qur'an, alarm, audio and terms



Figure 4. Elayah main Menu

The main menu displays the main features of the application area that can be used by each user. Users can choose each menu according to their desired needs.

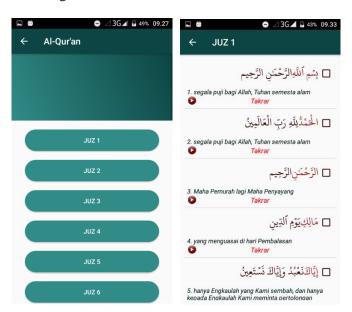


Figure 5. Al-Qur'an And Juz pages section

In figure 5, explained when the user selects the Al-Qur'an menu on the main page, it will be directed to the Al-Qur'an page, there is a button for each juz in the Al-Qur'an. When user selects one of the juz of Al-Qur'an, then the entire verse list will be displayed as much as one juz, and in each verse list there is audio, translation, checklist buttons, and different colors in the verse letters. the core of this media usage is on the juz page, when a check mark on a verse is turned on, only the red paragraph appears. This

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applies until the user squeezes the verse up to 40 times in accordance with the takrar method. after that, then the next verse will appear, and so on until the whole verse is raised.

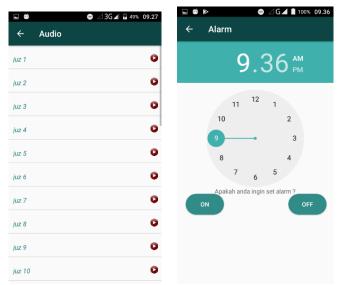


Figure 6. Audio and alarm pages section

In figure 6, display the audio and alarm pages. On the audio page, there is audio divided into chapters with a play and stop buttons. and on the alarm page there is a clock that has an on and off button. If the user sets an alarm the system will display a notification and a ringtone and the alarm will stop when the off button is pressed.



**Figure 7.** Terms page

On the Terms page, there is a slide there is a picture and description of the memorization requirements. On this page there are 7 slide conditions for memorization, namely mind, sincerity, patience, istiqomah, good character, parental consent, can read the Qur'an.

#### 3.4. Verification

Testing is done in two ways, namely the suitability of the application with an android device and the distribution of questionnaires to prospective users, with the following results

3.4.1. Software Functionality Test. At this stage, testing the suitability of the software when used on a variety of different Android devices. the results obtained by the software can work well on all android devices with a minimum size of 5 inches. Details of the test are in table 2 below.

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**Table 2.** The result of software functionality test

No	Brand and type of devices	Screen size	Suitability of function
1	Samsung A20	6,4 inc	Yes
2	Xiaomi Redmi Note 7	6,3 inc	Yes
3	Samsung J5	5,2 inc	Yes
4	Vivo V15	6,3 inc	Yes
5	Samsung Galaxy Tab A6	7 inc	Yes

3.4.2. Application Material Test. This test aims to check the results material / content in the application as a material consideration for users. This Testing is given to the examiners or muhafidz to be able to assess the suitability of the contents to the needs of users. All muhafidz are expert and work at Al-Qur'an and language department. The results of the test can be seen in table 3 below.

Table 3. The result of application material test

No	The elements	Result
1	Clear content presentation	9
2	Material compatibility with the needs of memorizing Al-	9
	Qur'an	
3	Suitability and ease of media flow	8
4	Interactive and communicative presentation	9
5	The media can encourage users to increase the quantity of	10
	memorization	
6	The media does not cause ambiguity and confusion	10
7	Clarity of function of each feature contained in the media	9
8	Compatibility of the contents of the features with the	10
	purpose of making media	
9	The media can increase user understanding the importance	9
	of the topic	
10	The media can help achieve the target of memorization	10
	Average	93%

In addition, testing is also carried out on students, as potential application users and get 97% of a satisfaction rate. The results of the test can be seen in figures 8 below.

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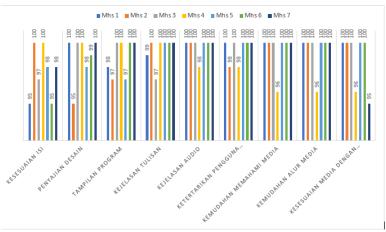


Figure 8. The result of user satisfaction level

#### 3.5. Maintenance

the final stage was repairs and maintenance of application based on feedback from the Muhafidz and students from the results of testing application and questionnaire distribution. one of which is the addition of the guide feature, to help users who are confused in running the media.

#### 4. Conclusion

Mobile based media for Al-quran memorization elayah is proven to be compatible with android devices with a screen resolution of at least 5 inches, and the contents and features in it can be accepted by students and recognized by Muhafidz in helping to achieve memorization targets. but this media can not automatically increase the number of memorization, unless it is balanced with the intention and sincerity of users in carrying out memorization of Al-Qur'an in an orderly and disciplined manner.

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