

Hayyat Ajmal (Better Life)

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Abstract:- The technologies these days are much helpful than before and can do more tasks to help people to get whatever they need and because of the people become busier than before, the technology will help them to catch up with their needs. Also, Muslims needs to use the technologies for their life style to perform their worships in a specific time and get the benefits of the technologies. Therefore, an application to remind them about their prayers and other worships is required to make the technologies helpful for their Islamic deeds. The life nowadays becomes much easier than early ages, where now the technology become in everything. So, HAYYAT AJMAL (BETTER LIFE) Application will be a helpful for Muslims around the world to know the prayers time, help them memorizing the noble Quran, reading the noble Quran, and listen to the noble Quran. Furthermore, this application will give the Muslims the opportunity to make their Islamic life become easy by helping them to pray on time, memorize the noble Quran as long as they want, and much more as will be detailed in this report. Moreover, by providing a login and registration functions, users has an option to access their data from another Android devices. This project is developed using Java programming language and XML.

Keywords: Islam, Noble Quran, Prayer Time, Alarm, Android

1. Introduction

Nowadays, smartphones are becoming more popular and easy to use, they become in every hand and everywhere. Smart phones are not limited to make calls nor messages. They become a life planner and reminder to help people to achieve their needs and goals. Moreover, Muslims are getting benefits from the technologies tha provided via smartphones, because of the fast life pattern, Muslims become busier and miss to do their worships. Also, there are so many things that Muslims should do daily, and Muslims should not forget about their Islamic deeds.

Therefore, an android application that gathers a notifications and reminder function to help Muslims to remember and to be notified are required. HAYYAT AJMAL is an android application that contains a Prayers' time and Quran' memorization. The use of this application is limited to the registered users, which means users can access their data with any Android device by installing HAYYAT AJMAL and login with their own information.

2. Objectives

Several objectives are identified so that the development of the system will achieved the aim of the work and these objectives are as follows:

- i. To identify and study problems in similar existing applications.
- ii. To design and implement an application for HAYYAT AJMAL (BETTER LIFE) that compatible on Android operating system.
- iii. To test the developed Android application for its performance and user acceptance.

3. Methodology

In this project, Rapid Application Development is chosen due some features that is different than the other methodologies, For example, RAD gives you the ability to do changes to the system based on the user feedback even if it is in the development cycle. Moreover, the documentation in RAD is limited but not necessary like Waterfall method, the minimal software requirements needed in developing and running HAYYAT AJMAL are shown in Table 1.

Table 1. Software Specifications

Category	Software
Operating System	Windows and Android
Database System	Firebase
Programming Languages	JAVA and XML
Coding	Android Studio
Project Documentation	Microsoft Word 2013
Interface Design	Adobe Photoshop and Microsoft Paint
Emulator	Android SDK 24.0

After stating the main functions of the proposed application, use case diagram is used to illustrate these functions. For HAYYAT AJMAL application, there are two users, which are normal user and admin. Figure 1 shows the use case of the proposed application.

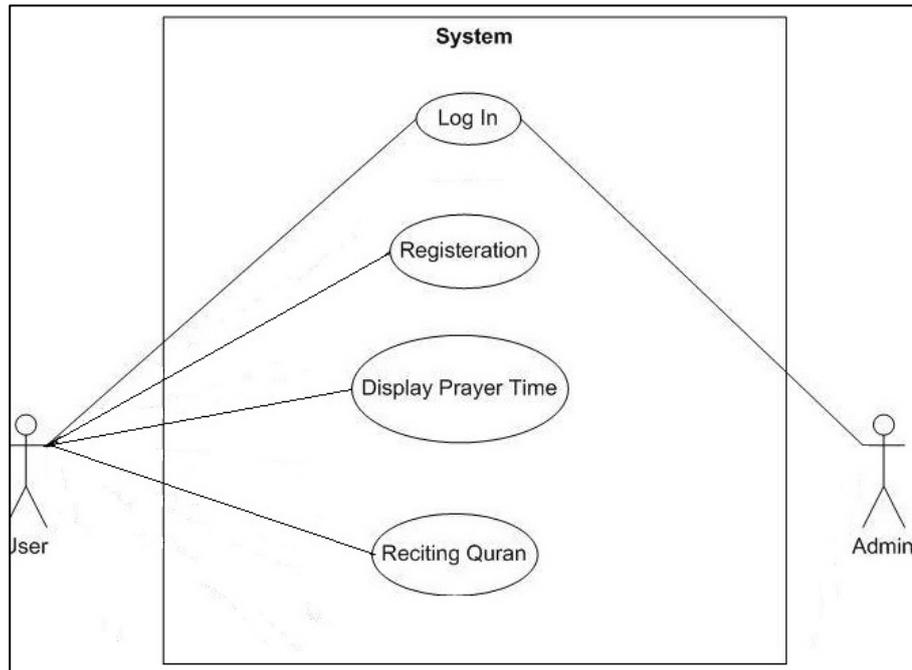


Figure 2. Use Case of Hayyat Ajmal

4. Result

The results that achieved from Hayyat Ajmal, Figure 2 shows the home page of the application.

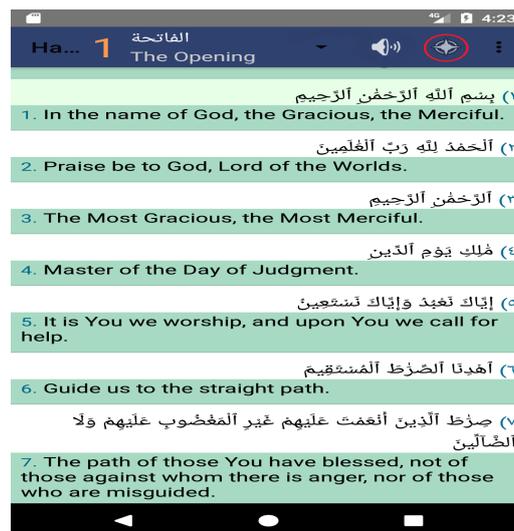


Figure 2. Home Page for Hayyat Ajmal

Black box testing has been implemented on some of the functions. In this function, user are required to fill up a form for the login, the system will display the homepage and play recitation. The test is shown in Table 2 and Figure 3, 4 and 5 shows how the output that displayed in the system.

Table 2. Test case of the functions

Test Procedures	The Expectation of Test result	Test Result	
		Successful	Unsuccessful
Click on login button	Users can log in to the application after they registered	*	
Shows Main Page of the Application	The Nobel Quran is displayed to users	*	
Click on Recitation Icon	Recitation is played to users	*	

Figure 3. Log in form

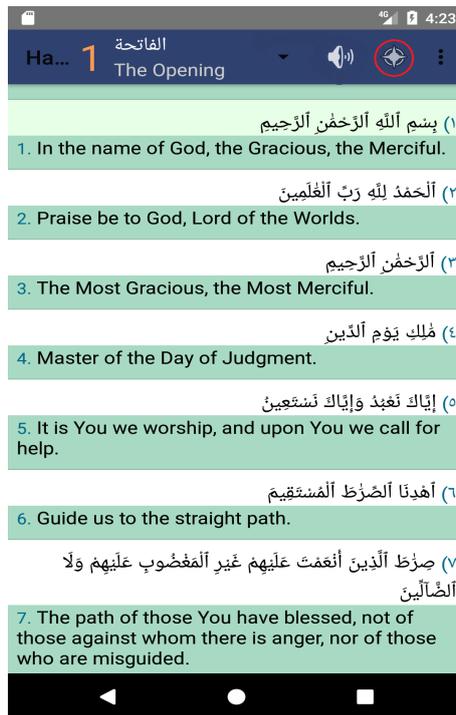


Figure 4. Displaying Main Page

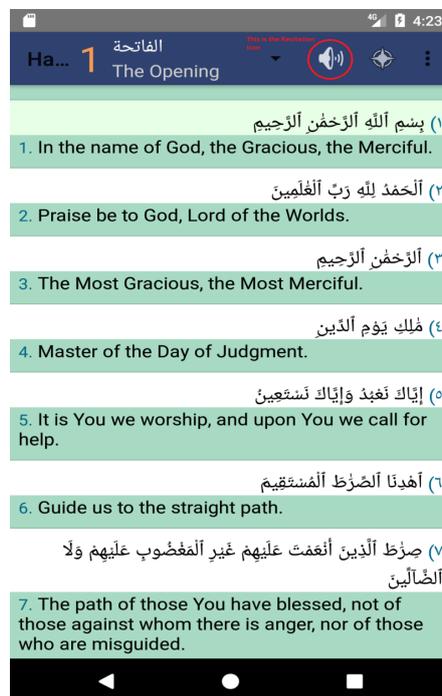


Figure 5. Playing Recitation

5. Discussion

The purpose of this project is to provide an Android application for Muslims around the world which can help them to ease the process of reading the Noble Quran, listening to the Noble Quran and notified for prayer time anytime without having the difficulties of the current way of some applications.

Comparative study of Islamic applications has conducted and documented and based on the findings, Muslims face a number of difficulties on having these functions in one application. This comparative study was conducted in order to gather the user requirements for HAYYAT AJMAL application.

Also, the system analysis and design has helped in achieving a clear flow about the design features prior to develop an application that could be executed smoothly and able to fulfill the requirements.

Finally, the testing and implementation of the system has been done. The testing was done in two categories and they are Black Box Testing and White Box Testing.

6. Conclusion

This project and based on the results that gained from the application testing, it can be concluded that an Android Islamic application with multi functions has completed and achieved its goals and objectives as a final output. The main achievements that have been succeeded are to design an Islamic application that have the Nobel Quran with recitation and at the same time it has prayer remainder. The goal of this project was to help Muslims to have more than one function in one application.