

MyQuran Diary Application Development Considering the Proposed Usability Features

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Abstract

With the progress of technology, the Al-Quran is now studied in every corner of the world with more vigour. This culture is celebrated in a healthy manner due to the availability of several Quran-learning application that use both television and technological media. Digital Quran, mp3 Quran, Quran-tafseer based on surah, as well as studying Iqra and Tajwid series, are some of the most popular modules offered by electronic media application pertaining to the Quran. This research proposes a method for discovering the collective meaning of certain Quran verses of interest based on topic keys. The development of application specifications and content requires the collection of data from a group of instructors and adult learners of Quran Harfiah and Tadabbur Quran class. Tadabbur Quran learning based on subject keys has been performed manually for numerous years in Harfiah Quran study sessions by Harfiah and Tadabur teachers. Therefore, in order to make this learning more effective and simple, and so that it may be utilised in class or as a series of home revisions, this study proposes that it be created in the form of digital application. Despite several studies on the user interface aspects of Quranic application, there is still a shortage of appropriate features, resulting in an improperly constructed user interface thus are not tailored to a certain audience. This study also proposes usability aspects entailing usability features, learning and engagement qualities and Islamic genre application qualities. Subsequently, this study presents the incorporation of recommended usability features for the development of MyQuran Diary.

Keywords: *Islamic Application, Usability Features, Al-Quran Application, Islamic Website*

1. Introduction

The Quran is a very significant guidance for the daily life of a person, as well as a guide to a prosperous ummah. As the Quran has played a significant role in the formation of the Ummah, al-Quran studies must concentrate on national education development in order to have the greatest influence on the process of constructing the Ummah [1]. The fast growth of Internet technology has had a significant impact on Muslims' religious activities online, including reading, comprehending, and studying the Quran. As a result of the proliferation of al-Quran-related websites, Muslims around the globe are more drawn to read and refer to the Quran. Face-to-face religious practices remain preferable, particularly for formal education [2], despite the widespread availability of the Quran's text online and the attractiveness and significance of religious websites. Moreover, the traditional offline religious practices involving studying Muslims and erudite Muslims experts are often regarded as very satisfying [2]. Users must keep up with the fast evolution of

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technology in order to successfully study religion on the Internet [3], which is a challenge. As there are several definitions of an Islamic website, [4] defines Islamic-oriented websites as those whose primary goals are to disseminate the real teachings and practice of Islam online and to promote peace and understanding across other faiths, organizations, and communities.

Several techniques are used for Quran-based Islamic applications, including digital Quran, mobile applications, and websites. Popular modules offered by these application include mp3 music, the Iqra' series (learn how to pronounce the Quran word-by-word), and Tajweed (learn how to vocally recite the Quran in an appropriate way). Numerous Quranic mobile applications have been created to facilitate various areas of second language acquisition, including listening, reading, and writing. Muslims from all around the globe use the Internet for online education, Quran memorization/study, Quran instruction, online commerce, banking, social networking, politics, and communication [5]. These applications, which often include music, visuals, and interactivity, are obviously appealing to learners. However, the interactivity of mobile applications in these sectors is often intended for the typical user [6]. However, in general, these features are not geared toward a particular target audience.

Despite the paucity of published study findings on Islamic application, a number of studies on Islamic websites that give information on Islamic rites and activities have been done. To the best of the researchers' knowledge, however, no study has been conducted on private online diary or note-taking in relation to Quran education and other Islamic information sharing. In addition to recognizing the basic usability difficulties of Islamic-related websites, the objective of this study is to give the crucial information about the usability of the MyQuran Diary application. This study also discusses the recommended usability features that were successfully included into the development of the digital application MyQuran Diary. It was built in partnership with a Kuala Lumpur-based non-governmental Quran study center. The MyQuran Diary application is a revolutionary method for Muslim learners and teachers to create, save, share, and revise lecture and study notes.

MyQuran Diary is an internet based application which is designed to store all the lecture notes or ta'lim of Muslim scholars pertaining to the study of the Quran through tadabbur and tafsir. The graphical user interface is a crucial component of any application user experience. It enables typical people to understand how to use the website without having to use the command line to access the system's features. The user interface elements should be aesthetically pleasing, well-organized, and devoid of distractions. The features should make it easy for the user to complete the required function.

2. Background

A website with Islamic content is an Islamic website. The use of Muslim websites is rather prevalent among Muslim Internet users. A number of Muslim organizations and students utilize these websites to disseminate and teach their doctrines. As a result, having a good website has the ability to attract more internet visitors and

inspire them to return often. Therefore, the number of Muslim websites is expanding, as is the engagement of internet users in Islamic education [7].

The fast growth of internet technology has had a significant impact on Muslims' religious activities online, including reading, comprehending, and studying the Quran. As a result of the proliferation of al-Quran-related websites, Muslims around the globe are more drawn to read and refer to the Quran. Reading the Qur'an is an act of worship. Every Muslim must read the Qur'an. Qur'an and Hadith studies guide a life based on Divine revelation. The Qur'an encompasses all aspects of existence. Every Muslim must read and disseminate the Qur'an teaching. From the perspective of reciting the Qur'an, the perfection of recitation depends on the correct pronunciation of the Arabic language, which requires knowledge of tools known as Tajwid, whereas from the perspective of understanding the Quran, comprehension of the Quran's own Arabic language is required, and this requires knowledge of tools known as Harfiah al-Quran. Nevertheless, individual learners will be more equipped to comprehend the interpretation of the Qur'an if they possess the capacity to grasp the Harfiah knowledge.

Tadabbur Quran is recognized as an innovative teaching and learning approach whose goal is to enhance the state of Islamic education learning [8]. As Muslims, we should not schedule Quran recitation without planning and incorporating tadabbur al-Quran into our daily agenda [9]. In order for the ummah in the end times to better grasp, appreciate, and implement the Qur'an's actual teachings, more emphasis should be placed on the distribution of the Qur'an by observing the latent meaning of its verses' interpretation. In contrast to the study of tajwid and memorising of the Qur'an, the study of the Harfiah skills and Tadabbur of the Qur'an is not as widespread among ordinary publics. Figure 1 shows the scope and meaning of Tadabbur [8].

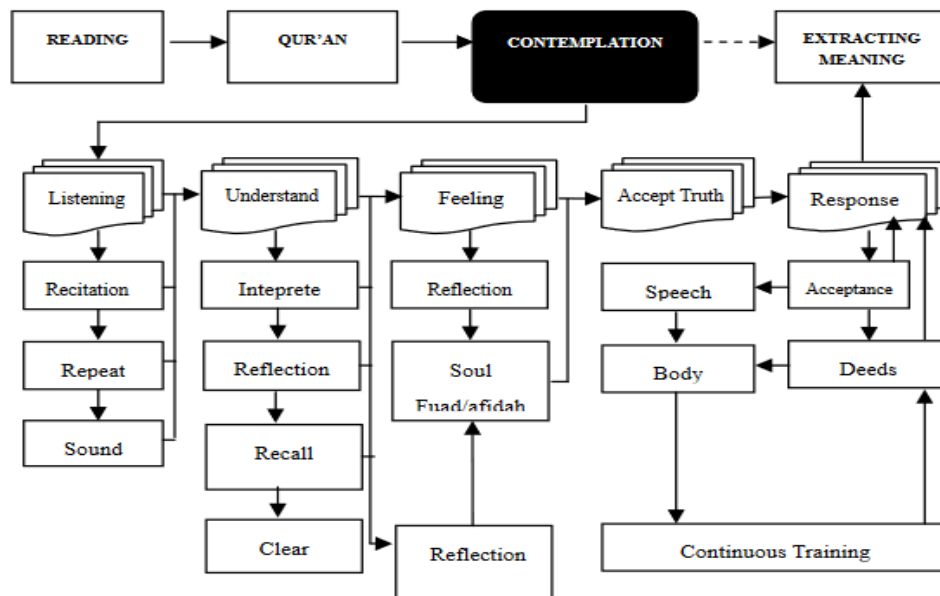


Figure 1. The scope and meaning of Tadabbur [8]

On the request of congregational organizations and religious groups and doctrines, al-Quran seminars are often provided to the general public in a more formal setting at local institutions. Despite the success of Muslim websites in disseminating Islamic knowledge and information online to Muslims and non-Muslims, web site owners and designers need a deeper understanding of the users' needs, particularly in terms of design features that influence web site experience. Design characteristics may encourage consumers to embrace and frequent the Muslim website. Reinvestigation using other metrics will assist confirm the factors' validity and dependability. Future research should repeat the results utilizing a larger sample size and various Islamic website categories to increase generality. Muslim Internet users' opinions about Islamic websites may prohibit them from engaging in online Islamic activities.

In recent years, the number of assessment studies on Islamic websites has increased substantially, with several academics using models from other settings to create Islamic websites evaluation criteria [4, 7, 11]. Users and academics have assessed Islamic websites using a variety of methodologies. Some pay attention to interface design characteristics [12], however the majority are more concerned with content quality [13].

As a result of the reviews, we determined that the relevant factors may be categorized into three groups: website usability, learning and engagement qualities and Islamic genre application qualities. The following Table 1. summarizes the features of these three categories that our study have considered and proposed in the development of MyQuran Diary.

Table 1. The Proposed Features for MyQuran Diary

Category	Features	Authors
Website usability	<ul style="list-style-type: none"> • Accessibility • Appropriate Use of Image • Navigation • Ease of Use 	[4], [13-14]
Learning and engagement qualities	<ul style="list-style-type: none"> • Relevancy • Credibility • Trust 	[4], [11], [15]
Islamic genre application qualities	<ul style="list-style-type: none"> • Islamic Information • Islamic Identity • Islamic Traits • Islamic Sound • Islamic Support 	[10], [11]

3. Methodology

The steps of the overall study include literature review, preliminary inquiry, design and development, and assessment. The purpose of the first phase is to find relevant research and evaluate the absence of features in the user interface. Next, we performed an initial interview with Quran Teachers and users of Quran-based applications to determine the application's requirements and specifications. Then, a Use Case Diagram and specification were created for design purposes. Then, a web application was created using the Codeigniter PHP Framework and the Rapid Prototyping Method. The intention is for this application to be compatible with both desktop and mobile platforms. Web Application Framework will be used in its construction. To increase portability across several platforms, every transaction will be sent through Application Programming Interface (API). Two experienced adult learners and one Al- Quran instructor were interviewed to get their insightful opinions on this application's initial concept. The questions are organized into three groups: website usability, Islamic genre application qualities, and learning and engagement qualities. The input was later included into the development of the application. During the design and development of the website for the Quran, a revolutionary concept is conceived. It requires development to transform a fresh idea into a workable prototype. However, the assessment step will be addressed in a future phase of this project.

4. Result

The results are organized into three sections as follows.

4.1 Preliminary Result of Manual Tadabbur Note-Taking

This section presents the findings of interviews, discussions, and observations conducted in Harfiah and Tadabbur classes at one Kuala Lumpur Al-Quran study facility. Typically, the first hundred verses of surah al-Baqarah are used in the Quran Harfiah study session to familiarise learners with the norms of the Quran's Arabic language. In Malaysia, the major module of the Harfiah study class is organised into three sections: 1) Nahu Soruf (Grammar), 2) Harfiah Arab (Meaning), and 3) Tadabur Quran. Adult classes typically last from 2 to 4 years, with meetings taking place once a week for 1-2 hours with the Harfiah instructor or teacher. Figure 2 depicts harfiah session learning on a manual whiteboard, whereas Figure 3 depicts the tadabbur session.

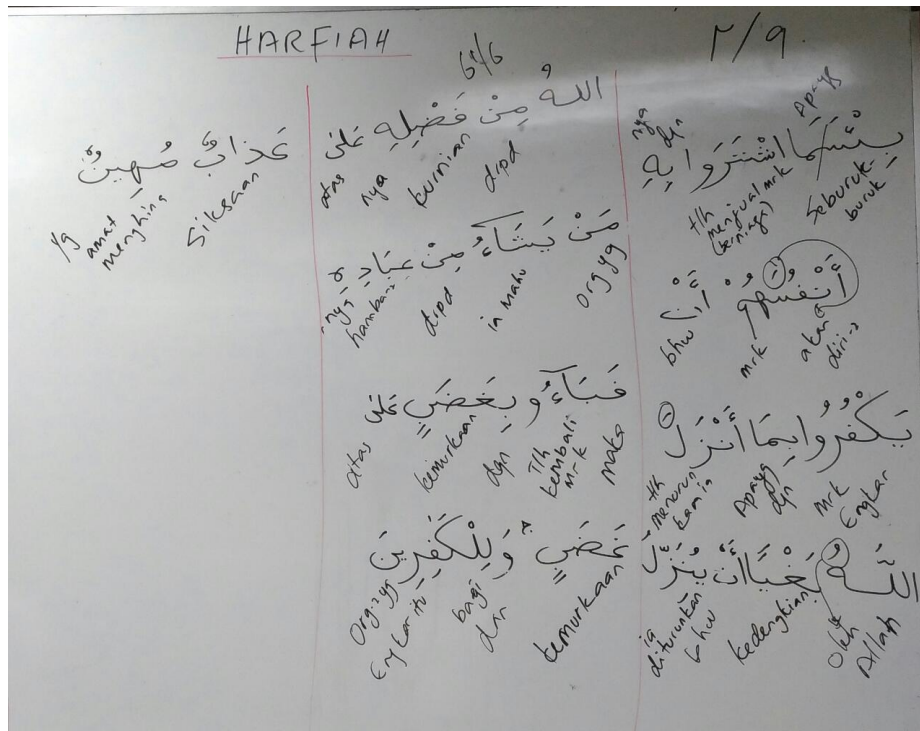


Figure 2. Harfiah Session Regarding Surah al-Baqarah: 90

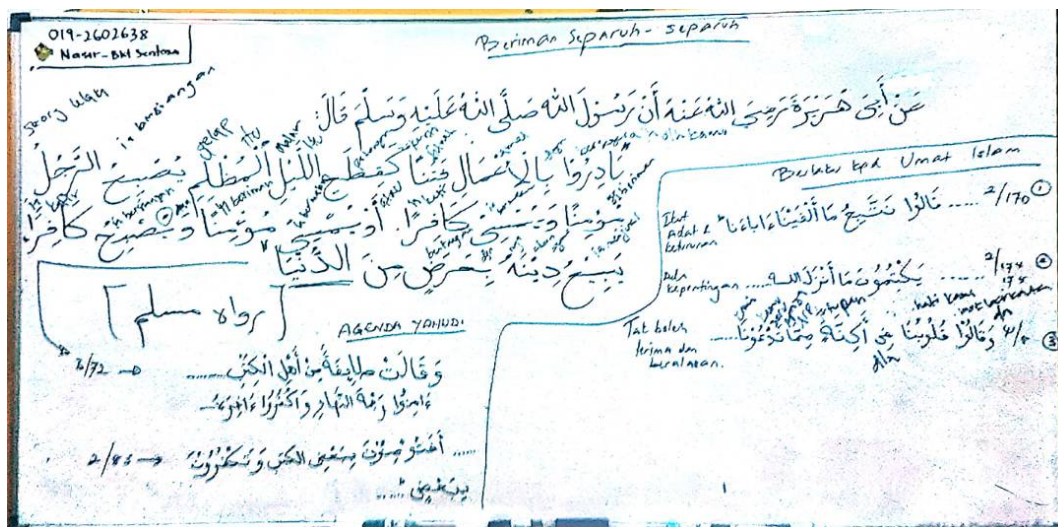


Figure 3. Sample of Tadabbur Session (Topic Key: Faith)

According to the respective instructors and students, a digital application of Quran meaning searching based on key topics should be developed to assist current students and teachers. Thus, using the suggested digital application, the process of locating certain Quran versus meaning based on subject keys may be transferred and programmed into the digital application system. This will make classroom learning more conducive, rapid, and productive. Students of harfiah and tadabbur may utilize this intelligent application, which can be programmed into their mobile phone or computer application. When the subject key is chosen by the instructor,

the students can just choose the topic key from the topic list and may even make extra notes when the application provides the topic's primary material.

4.2 The Development of MyQuran Diary

The application was created using Web Application Framework's API to give cross-platform capabilities. Writing notes according to alphabet and category, saving notes, editing notes, sharing notes to other platforms (such as Whatsapp and Facebook), printing notes, viewing other students' notes (if the individual chooses to share), reciting selected verses from the Quran, and creating bookmarks are all significant features provided by the MyQuran Diary prototype. This application may in the future be hosted over the cloud with a greater data storage capacity to promote wider use. With consideration of the categories of system features from literature review summary of this, our study has proposed the use case diagram as shown in Figure 4 in supporting MyQuran Diary application.

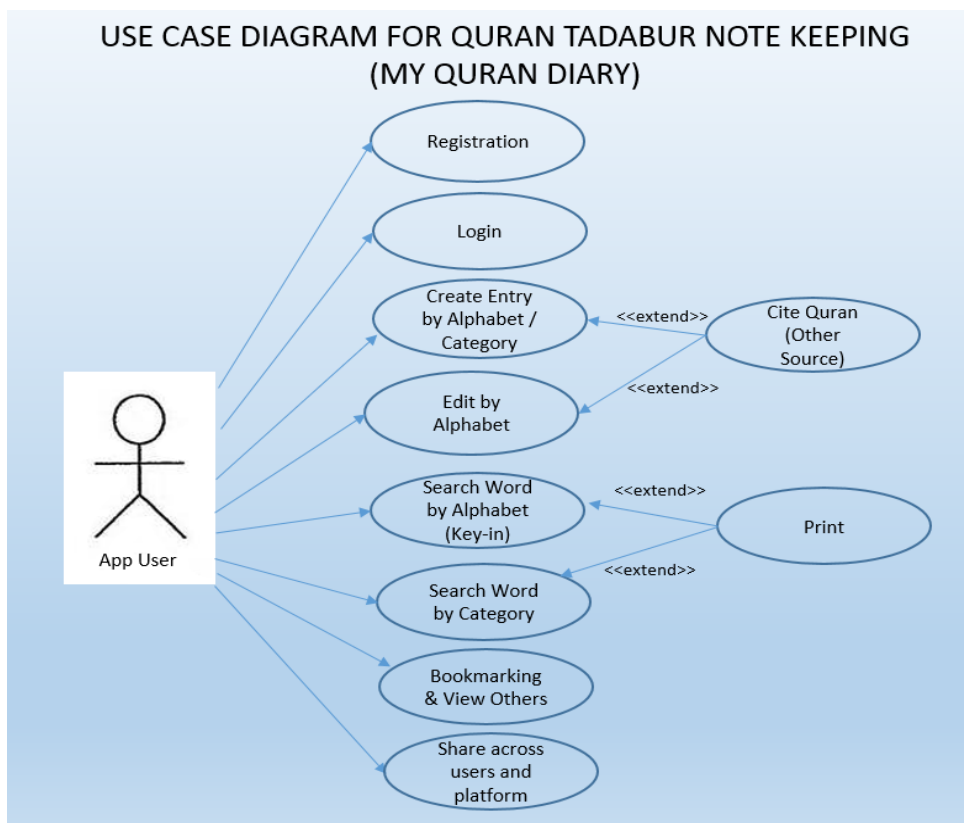


Figure 4. Use Case Diagram

4.3 The adaptation of proposed features into MyQuran Diary

The login screen, the note-taking function, and the sharing feature of the application are each shown in Figures 5, 6, and 7, respectively. This application's major objective is to enable students to make their own notes and diaries on any topic in a Quran chapter or verse, which may then be kept, organized, and searched

according to a variety of categories (such as Tauhid, Feqah, and Akhlak), as well as alphabetically. All of a student's written work may be reviewed by a religious scholar or another registered user of the service. This privilege is not shared with any other users. Figures 5 and 7 demonstrate visually the features specific with learning and engagement. These features are reliability, credibility, and trust. Figure 6 depicts the Islamic genre application features, which comprise Islamic Information, Islamic Identity, Islamic Traits, Islamic Sound, and Islamic Support. Figure 7 demonstrates the website's usability, including the accessibility, appropriate use of images, navigation, and ease of use.

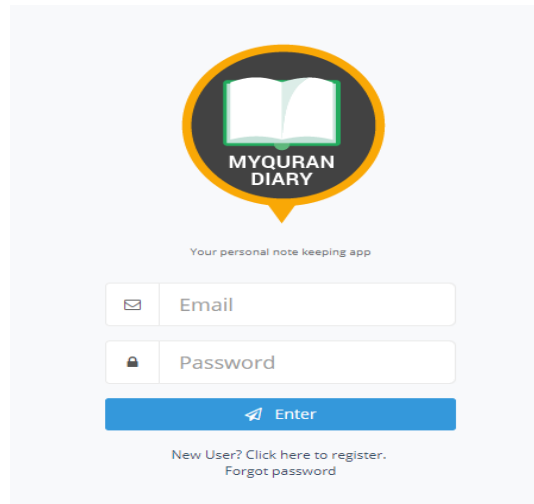


Figure 5. Login Page of MyQuran Diary

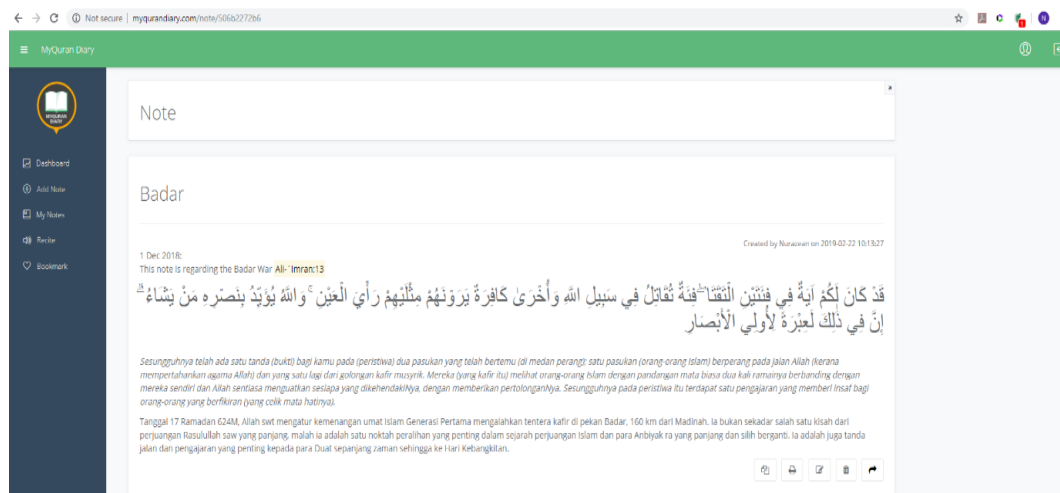


Figure 6. Example of Note Taking

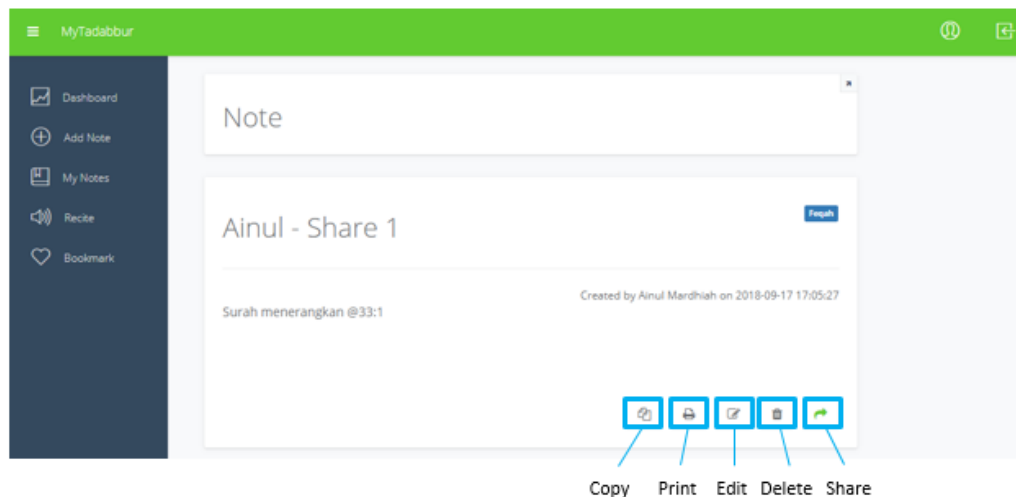


Figure 7. Application Features

6. Conclusion

The purpose of this study was to fulfil the Phase-One of Quran Tadabur application development project entitled MyQuran Diary. This was accomplished by transforming the concept of manual note-taking during Tadabur and Tafsir class among Muslim adult learners into an application that can be accessed by any registered user from Quran study registered association. Prior to that, we did a study of the relevant literature and chose the relevant features to be included into the MyQuran application. In the future, we hope to have this application to be fully developed and utilized extensively among all adult learners and scholars of the Quran linked to it, which may be beneficial in spreading the knowledge of al-Quran throughout the country and beyond the globe.

Learners' capacity to grasp the Quran knowledge will have a significant influence not only on themselves, but also on society and the nation as a whole. Therefore, effective and reliable Quran application study must be emphasized so that Quran knowledge may be applied at all levels of society. MyQuran Diary application is not only capable of displaying the collected notes based on topic keys for the use of among formal religious learners but it is also suitable for anyone who wishes to learn about and delve deeper into specific topics from this application's topic key list.

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