

Quranic Prayers' Mobile Application Development

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Abstract

In Islam, the word '*Du'a*' or known as prayer, supplication, and purification is considered acts of worship (*'ibadah*). It is an expression of submission of faith to Allah and imploring to Him to gain His blessings and assistances. There are many prayers mentioned by Allah in al-Quran that can be practiced by us in our daily life. Generally, prayers were arranged by certain thematic themes like prophets' prayers, prayers of asking, and prayers of worship. However, this study will focus on the arrangement of Quranic prayers based on the order of juzu' beginning with surah al-Fatihah to al-Nas. The objectives of this paperwork are to extract all prayers found in the al-Quran, to design and develop an interactive application on Quranic prayers Apps. The methodology applied in this study is an ADDIE instructional design model which stands for five phases consist of analysis, design, development, implementation, and evaluation.

Keywords: Quranic, Prayer, Android Application

Introduction

The Quran is the central religious text of Islam. It is considered the ultimate source of guidance for Muslims and serves as a comprehensive source of wisdom and guide for various aspects of life, including law, morality, ethics, and spirituality. It not only imparts knowledge and moral teachings but also encourages believers to establish a direct connection with Allah the Almighty through heartfelt prayer known as '*du'a*'. The application of prayer in the Quran is a profound aspect of Islamic faith, highlighting the intimate relationship between humans and their Creator. It offers a unique pathway to seek solace, find strength, and establish a profound sense of reliance on Allah in times of joy, distress, or uncertainty. The Quran itself serves as a treasure trove of prayers, containing numerous verses that encourage believers to engage in these spiritual practices and worship (*'ibadah*).

According to Malaysia Federal Mufti,¹⁵⁴⁹ the word ‘prayer has various meanings. Among them are the meaning of worship in surah Yunus: 106, praising in surah al-Isra’: 110, asking for help or assistance in surah al-Qasas: 64, and the meaning of request in surah Ghafir: 60:

وَلَا تَدْعُ مِنْ دُونِ اللَّهِ مَا لَا يَنْفَعُكَ وَلَا يَضُرُّكَ فَإِنْ فَعَلْتَ فَإِنَّكَ إِذَا مِنْ الظُّلْمِينَ ١٠٦
(Yunus: 106)

Translation:

“And do not invoke, instead of Allah, what can neither benefit nor harm you for if you do, then you will certainly be one of the wrongdoers”.

قُلْ أَدْعُوا اللَّهَ أَوْ ادْعُوا الرَّحْمَنَ أَيًّا مَا تَدْعُوا فَلَهُ الْأَسْمَاءُ الْحُسْنَىٰ وَلَا تَجْهَرُ بِصَلَاتِكَ وَلَا تُخَافُتْ بِهَا وَابْتَغِ بَيْنَ ذَلِكَ سَبِيلًا ١١٠
(al-Isra’: 110)

Translation:

Say, O Prophet, “Call upon Allah or call upon the Most Compassionate, whichever you call, He has the Most Beautiful Names.” Do not recite your prayers too loudly or silently but seek a way between.

وَقِيلَ ادْعُوا شُرَكَاءَكُمْ فَادْعُوهُمْ فَلَمْ يَسْتَجِيبُوا لَهُمْ وَرَأُوا الْعَذَابَ لَوْ أَنَّهُمْ كَانُوا يَهْتَدُونَ ٦٤
(al-Qasas: 64)

Translation:

“It will be said ‘to the disbelievers’, “Call upon your associate-gods ‘for help’.” So, they will call them, but will receive no response. And they will face the punishment, wishing they had been ‘rightly’ guided.”

وَقَالَ رَبُّكُمْ ادْعُونِي أَسْتَجِبْ لَكُمْ إِنَّ الَّذِينَ يَسْتَكْبِرُونَ عَنْ عِبَادَتِي سَيَدْخُلُونَ جَهَنَّمَ دَاخِرِينَ ٦٠
(Ghafir: 60)

¹⁵⁴⁹ Razif, Mohamad. “Bayan Linnas Siri Ke - 156: Doa bersama dengan bukan Islam dalam satu majlis”. Retrieved from <https://www.muftiwp.gov.my/ms/artikel/bayan-linnas/2883-bayan-linnas-siri-ke-156-doa-bersama-dengan-bukan-islam-dalam-satu-majlis>.

Translation: Your Lord has proclaimed, “Call upon Me, I will respond to you. Surely those who are too proud to worship Me will enter Hell, fully humbled.”

Based on the definitions of prayer, it can be concluded that prayer is an act of worship to express a sense of humility and submit to Allah the Almighty while expressing a desired wish or request. Prayer is the most important element in our worship as mentioned by The Prophet Muhammad PBUH in a hadith narrated by al-Nu'man bin Bashir:

عَنِ النَّعْمَانِ بْنِ بَشِيرٍ، عَنِ النَّبِيِّ ﷺ قَالَ: "الدُّعَاءُ هُوَ الْعِبَادَةُ قَالَ رَبُّكُمْ ادْعُونِي أَسْتَجِبْ لَكُمْ".¹⁵⁵⁰

Translation: Narrated al-Nu'man ibn Bashir, The Prophet PBUH said: “Prayers (du'a) is itself the worship”. He then recited: “And your Lord said: Call on Me, I will answer you”.

In Islam, some certain times and situations are considered more conducive to making prayers due to their special significance and the higher likelihood of prayers being answered. Some of these times include making prayers during the last third of the night or *tahajjud*, between *adhan* and *iqamah*, during sujud or prostration, on Fridays, when it is raining, during umrah and hajj, during fasting, before iftar, and many more. It is important to note that while these times are considered more auspicious for making prayers, a Muslim can make prayers at any time and in any situation. Thus, this study provides a practical tool for accessing and utilising prayers by using mobile applications. It will help users to access these prayers at anytime from anywhere on their devices.

Nowadays, many Muslims are unaware of the specific prayers mentioned in the al-Quran. They are also unable to differentiate between prayers derived from Quranic verses, the Prophet Muhammad PBUH's hadith, the Companions' prayers, pious and righteous people such as *salafussalih*, *ulama'*, and others. This lack of awareness limits their ability to incorporate Quranic prayers into their worship and spiritual practices. Therefore, the validity of prayers found in the Quran is presented in this study by focusing on Quranic prayers based on juzu' division beginning with surah al-Fatihah to al-Nas. Besides that, it also gives exposure to young Muslims to strengthen their memorisation of Quranic prayers by applying available technological facilities to their daily routine.

Literature Review

In accordance with the objectives of this study, some literature reviews related to the topic are listed below:

A project titled Mobile Development: Learn Du'a for Early Childhood Learners was conducted by Mohamed Imran Mohamed Ariff, Natasha Irina Khairul Annuar, Ahmad Farid Najmuddin and Ireen Munira Ibrahim in the year 2022. This project stands by acknowledging

¹⁵⁵⁰ Al-Sijistani, Sulayman bin al-Asy'at (2009), *Sunan Abi Dawud*, Kitab al-Witr, Bab al-Du'a', hadith number 1479, vol.2, Beirut: Dar al-Risalah al-'Alamiyyah, 603. Hadith graded sahih by al-Albani.

the use of mobile technology has been progressively popular among early childhood learners in recent years. However, an extensive systematic literature search on educational mobile technology and touchscreen indicated that most of the applications are not suitable for early childhood learners as they lack several multimedia features. Therefore, this project designates the development procedure of an educational mobile application for early childhood learners, who are very receptive to new knowledge and information. As a proof of concept, the development of this application utilizes the learning of the Islamic du'a recitation. This application was designed using the Android studio and the Flutter software combined with the Java programming language.¹⁵⁵¹ In conclusion, this application is an opportunity and convenience for children to learn new knowledge by listening without touch and guidance from anyone.

Besides that, some previous studies have discussed Islamic Education Mobile Applications in their writings. In 2019, Kamal Azmi Abd. Rahman and Muhammad Hilmee Izanee conducted an Analysis of The Islamic Education Mobile Application for Children at Google Playstore. This research is a qualitative type through content analysis while the study sample also uses a purposeful sampling method. The analysis aims to categorize the mobile application of Islamic education for children based on its themes, characteristics, and approaches. In addition, it also discusses the methodology of interpretation, thinking patterns, and scholars' views on the interpretation of Fi Zhilal al-Qur'an.¹⁵⁵² The conclusion of this study is the most popular mobile apps are based on high download numbers due to their multiple functions, interactive and attractive features. Most children's Islamic education mobile apps are focused on the theme of Aqidah and the Holy Book of al-Quran.

The research conducted by Maha Alqahtani and Ayham Fayyumi in the year 2015 helps people to interact with the device as if were they talking to another person. This technology helps people to learn anything using computers by promoting self-study over extended periods. The objective of this study is to focus on designing and developing a mobile application for the Arabic recognition of spoken Quranic verses. The application is suitable for Android-based devices. The application is called Say Quran and is available on Google Play Store. Moreover, this study presents the results of a preliminary experiment to gather feedback from students regarding the developed application. Mobile application developments have enabled different types of users to carry out many tasks such as social networking, self-learning, gaming, internet access, and others. Much research has proved that learning using mobile technologies can have a positive effect on students.¹⁵⁵³ In conclusion, this study uses the method of interaction with

¹⁵⁵¹ Mohamed Imran Mohamed Ariff et al. (2022). Mobile Development: Learn Du'a for Early Childhood Learners, *Bulletin of Electrical Engineering and Informatics*, 11(4), 2253-2261. <https://doi.org/10.11591/eei.v11i4.3860>

¹⁵⁵² Abd. Rahman, K. A., & Izanee, M. H. (2019). Analisis Aplikasi Mudah Alih Pendidikan Islam untuk Kanak-Kanak di Google Playstore: Analisis on The Islamic Education Mobile Application for Children at Google Playstore. *Jurnal Pengajian Islam*, 12(2), 146-156. Retrieved from <https://jpi.kuis.edu.my/index.php/jpi/article/view/18>.

¹⁵⁵³ Alqahtani, M., & Fayyumi, A. (2015). Mobile Application Development for Quran Verse Recognition and Interpretations. *International Journal of Interactive Mobile Technologies (IJIM)*, 9(1), 19-22. <https://doi.org/10.3991/ijim.v9i1.4171>

the smartphone. The technology that is built is very helpful in all forms of learning and that is also in line with the trend.

Research done by Rendi Andika in 2017 focused on the Juzu' 'Amma Memorisation Application and Daily Prayers Using the Android-Based Murrotal Method in LPPM Journal. This research uses qualitative studies through a literature review. This research aims to produce an application for memorising prayers and short surahs for Muslim children based on Android. This study produces an application for memorizing juzu' 'Amma and prayers for children and addresses children's interest in learning to memorise prayers.

Next, a study conducted by Widya Ayu Lestari in the year 2019 is an Android-based Interactive Mobile Learning Application for Daily Prayer Readings and Morning & Evening Dhikr. The Multimedia Development Life Cycle (MDLC) development method was used, which has six stages: concept, design, material collection, assembly, testing, and distribution. Based on user feedback from the questionnaire, there was an increase in knowledge about morning and evening dhikr from 22% to 91%, and the interactive application of daily prayer readings and morning and evening dhikr is interesting.¹⁵⁵⁴ In conclusion, this study reveals an application for Muslims to commemorate the daily prayers in our lives and aims to spread goodness in the form of technology like this.

In the year 2022, research conducted by Ariep Jaenul looks at how mobile phones can be used as a guide to help children learn and memorise Islamic prayers through interactive applications. The primary goal of this research is to create a daily prayer application that focuses on developing apps for the Android platform. The prototype consists of text, images, animations, and audio files recited in Arabic and translated into Indonesian text format.¹⁵⁵⁵ In conclusion, the daily prayer mobile application is intended to assist children in reading their prayers every day for all routine activities.

Methodology

This study applies mixed methods consisting of qualitative and quantitative approaches. Qualitative research is a research process to understand human or social phenomena by creating a comprehensive and complex picture of the human condition, that can be presented in words, reporting detailed views obtained from informant sources, and conducted in a natural setting. Meanwhile, quantitative methods refer to a set of research techniques and approaches used to gather, analyse, and interpret numerical data to make objective and statistically supported conclusions about a specific phenomenon or research question.¹⁵⁵⁶ It focuses on collecting numerical data often through structured surveys, experiments, observations, or existing datasets. The data is typically expressed in terms of numbers, which can be analysed

¹⁵⁵⁴ Lestari, Widya A., et al. (2019), Aplikasi Mobile Learning Interaktif Bacaan Doa Sehari-Hari Dan Dzikir Pagi & Petang, *Journal Teknik Informatika* 14(1), 99-108.

¹⁵⁵⁵ Jaenul, A. (2022). Aplikasi Doa-Doa Islam Untuk Pelajar Berbasis Android. *PANRITA: Journal of Science, Technology, and Arts*, 1(2), 31–40. Retrieved from <https://journal.dedikasi.org/pjsta/article/view/27>.

¹⁵⁵⁶ Apuke, Oberiri Destiny (2017). Quantitative Research Methods: A Synopsis Approach, *Kuwait Chapter of Arabian Journal of Business and Management Review* 6(11), 40-47.

statistically. In this study, qualitative approaches were applied in gathering information based on content analysis from the Quran, books, journal articles, and websites related to the topic. Meanwhile, quantitative approaches include apps usage analytics and surveys by referring to user feedback, and insights.

The deductive method was applied for data collection based on research objectives. First, raw data about Quranic verses related to prayers were gathered according to the juzu' arrangement starting from surah al-Baqarah to al-Nas. Secondly, these Quranic prayers were classified and categorised based on thematic analysis by focusing on the first word in the sentence such as *Rabb* (رَبِّ), *Rabbana* (رَبَّنَا), *A'udhu* (أَعُوذُ), and others. Finally, the collected data was analysed and presented according to the related themes. In developing a mobile application for this study, the ADDIE model was applied. It is a well-known model and is considered the most implemented model for the instructional design framework. The model's phases include analysis, design, development, implementation, and evaluation. Each phase represents a dynamic and flexible standard for developing efficient training and performance support instruments.¹⁵⁵⁷ Five phases of the ADDIE model and their description is explained below:



Figure 1: The ADDIE Model

i) Analysis:

The analysis phase involves understanding the target audience, their needs, and the objectives of the application. Researchers can thoroughly analyse the chapters of the Quran and the corresponding Quranic prayers to identify patterns and themes. This analysis helps in structuring the content and determining the appropriate segmentation approach.

ii) Design:

Researchers can create a user-friendly interface and design the overall layout of the application. This includes organising Quranic prayers content according to the chapters of the Quran and incorporating relevant features such as search functionality, bookmarking, and audio recitation. The design should consider aesthetic appeal, ease of navigation, and intuitive user experience.

iii) Development:

The application is built based on the design specifications. Programmers and developers work on coding, database integration, and testing to ensure the functionality

¹⁵⁵⁷ McIver, D., Fitzsimmons, S., & Flanagan, D. (2015). Instructional Design as Knowledge Management. *Journal Of Management Education*, 40(1), 47-75.

and performance of the application. The segmented Quranic prayers content is linked to the respective chapters, allowing users to access specific prayers easily.

iv) Implementation:

The developed application is launched and made available to users. This involves deploying the application on appropriate platforms such as mobile devices and web browsers. Feedback mechanisms and user support channels can be established to gather insights and address any technical issues.

v) Evaluation:

The evaluation phase assesses the effectiveness of the application. Researchers can gather user feedback through surveys, app analytics, and user testing sessions to gauge the user's satisfaction, engagement, and the impact of the segmented Quranic prayers content. This feedback helps identify improvement areas and refine the application to better meet user needs.

A systematic and iterative process can be ensured by applying the ADDIE model to the development of the application that incorporates Quranic prayers chapter by chapter. This method enables user-centered design, efficient development, successful implementation, and continuous evaluation and improvement of the app's functionality and content.

Result and Discussion

The development process in terms of preliminary design, development, and user interface design will be discussed briefly in this section. A detailed storyboard and prototype illustrating the app content, graphic design, and user interface will be addressed in this phase. Meanwhile, the storyboard design will be based on the project scenario, and the user interface design will be described in terms of navigation design, input, and output design.

i) Development Process

Below is the chart of categorization of Quranic prayers that was selected from the Quran based on juzu' arrangement:

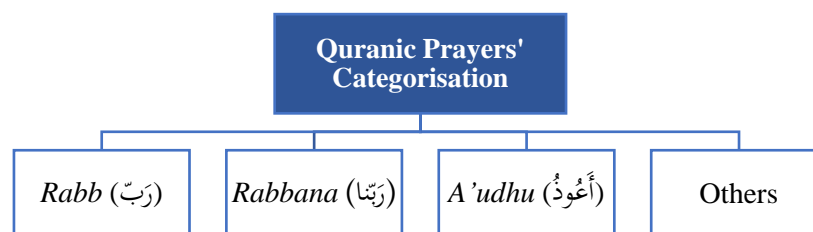


Figure 2: The Categorisation of Quranic Prayers

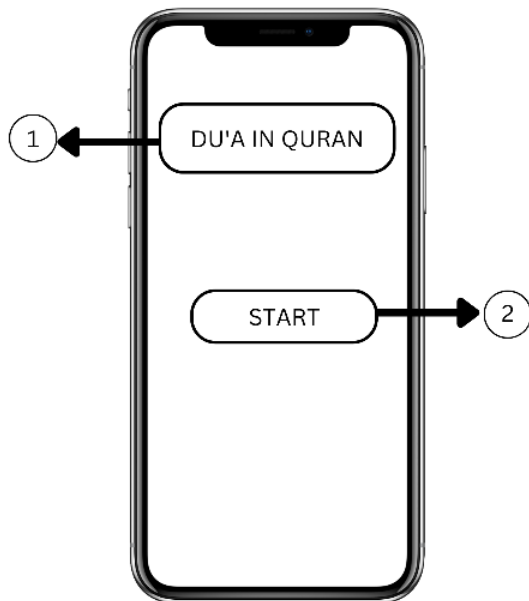
ii) Storyboard

A storyboard is a planning document, and it is a visual representation of the user interface and user experience design of a mobile application. It has rough sketches or screen layouts presentation about the product, and created before the final product is developed and used to illustrate a story or show the changes of in the scene. In many cases, this will be based on a timeline but could also be decided by the user's choices of selection or navigation.¹⁵⁵⁸ The following storyboard shows a developing process for Quranic Prayers Apps:

Mobile Application Development

Mobile Application Title: Du'a In Quran

Homepage



Screen Layout Description:

1:- Title of app

2:- Button start

Colour Background:

#1B6969

Action:

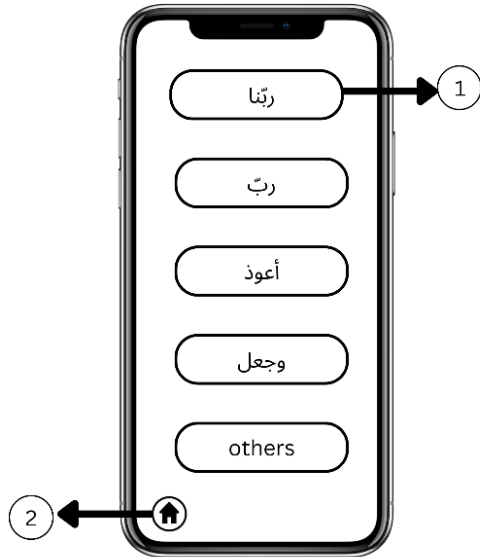
- Click on the button start to move to the next page

Figure 3: The Storyboard of Homepage of Quranic Prayers Mobile Apps

¹⁵⁵⁸ n.a. "The OCR Guide to Storyboard" <https://www.ocr.org.uk/Images/168849-the-ocr-guide-to-storyboards.pdf>. Retrieved on 25th August 2023.

Mobile Application Title: Du'a In Quran

Page title: Types of Categorizes in Prayer



Screen Layout Description:

1:- Button verse of " رَبَّنَا "

2:- Button Home

Colour Background:

#1B6969

Action:

- Click on the button (1) to move to the next section page

- Click the button (2) to go to the homepage

Figure 4: The Storyboard of Types of Categories in Prayer

Mobile application Title: Du'a In Quran

Page Title: Prayers Include in Each Categorization

Screen Layout Description:

1:- Verse of " رَبَّنَا "

2:- Types of chapters

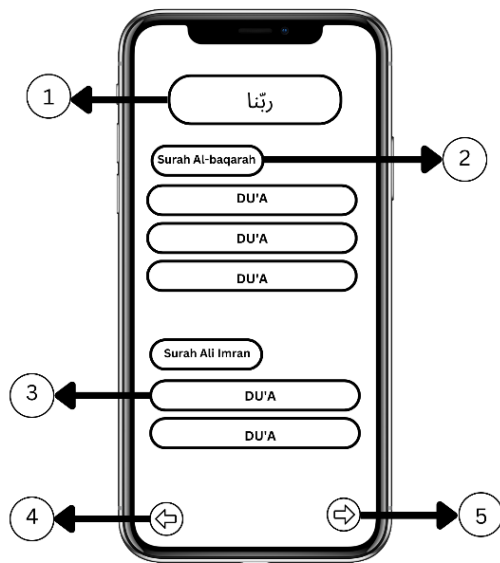
3:- Du'a based on chapter/ "surah"

4:- Button Back

5:- Button Next

Colour Background:

#1B6969



Action:

- Click on the button (4) to go to the previous page

- Click on the button (5) to move to the next page

Figure 5: The Storyboard of Prayers Include in Each Categorisation

iii) User Interface Design

User interface design is the process of creating visually appealing and user-friendly interfaces for digital products and systems such as websites, mobile applications, and other interactive platforms. A well-designed interface helps users interact with a product seamlessly and effectively. Among key aspects of interface design are visual design, layout and organization, navigation design, interaction design, usability, accessibility, responsive design, user-centered design, prototyping, consistency, and finally feedback and error handling. User Interface designs for Quranic Prayer Apps are shown below:



Figure 6: User Interface Design of Quranic Prayers Mobile Apps

Conclusion

Prayers in the Quran become a bridge that connects humans with Allah the Almighty. It also strengthens our spiritual relationships, thus leading us to obedience and submission to Allah in all aspects of life. Therefore, the initiative has been taken to develop Quranic Prayer Mobile Apps. It is an application that has been renewed by presenting Quranic prayers according to the juzu' arrangement and has been upgraded to a better one. This application can help users to identify Quranic prayers based on surahs' names, juzu' arrangement, and word themes like *Rabb* (رَبِّ), *Rabbana* (رَبَّنَا), and *A'udhu* (أَعُوذُ), and others. With the presence of this mobile application, it is hoped to be beneficial to Muslim users in reciting and practicing the recitation of Quranic prayers. Besides that, they also can enrich their spiritual strength by taking advantage of current technological facilities.

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