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EXTENDED ABSTRACT BOOK

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EXTENDED ABSTRACT

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International Jasin Multimedia & Computer Science Invention and Innovation Exhibition



Ramadhan Prep: A Mobile Application in Preparing for the Bigger Season of the Year

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Abstract— Mobile applications have many positive effects in various fields, especially education, business, and others. This innovation product study to looks at the potential of mobile applications from the aspect of managing an individual's fasting worship, where an individual is often forgot to do the best practices that need to be practiced in the month of Ramadan. With the existence of this application, all practices can be recorded for reference. This innovative product aims to provide convenience to users in increasing the level of efficiency in managing and organizing activities throughout the month of Ramadhan. This application combines multimedia elements to make it more interesting and interactive. This application using illustration, video, audio, animation, and text. There are seven main components involve in this application, which is daily prayer, daily practice, fasting chart, tarawih chart, sunnah food, related video, and list of bazaar Ramadhan. The target user for this application is Muslims who practice fasting. Based on the beta test conducted on this application, it shows that with the existence of this application the user can carry out fasting worship perfectly, besides that it makes fasting worship more interactive.

Keywords— Ramadhan, Mobile Application, Innovation, Fasting, Ibadah

I. INTRODUCTION

Ramadan is the ninth month in the Islamic lunar calendar and has great significance for Muslims around the world. It is the holiest month in Islam, in which Allah s.w.t. gives a great reward to Muslims who carry out Allah s.w.t. commands of fasting, prayer, almsgiving and other circumcision practices. In the month of Ramadan, Muslims fast from dawn (sahur) to sunset (iftar), refraining from eating, drinking, smoking, and performing certain behaviours from the time of Subuh prayer to Maghrib (sunset). The practice of fasting in the month of Ramadan is one of the Five Pillars of Islam, which is a basic worship and practice that all Muslims must follow. Fasting in Ramadan is seen to purify the soul, practice self-discipline, and develop empathy for those less fortunate (Ahmad et al., 2012). It is also believed that the reward of charity and worship is multiplied in this holy month.

In addition to fasting, Muslims increase their obedience and perform additional prayers, such as Tarawih, which is performed after the Isha prayer. They also spend time reading and meditating on the verses of the Quran, because it is believed that the Quran was revealed to the Prophet Muhammad (peace be upon him) in the month of Ramadan. Ramadan is a time to increase spirituality, community bonding, and giving to those in need. Many Muslims take the opportunity to do charity to get blessings and get closer to God.

The practice of fasting in the month of Ramadhan is a practice that is done for a month in which Muslims are encouraged to do various practices, to manage practices carried out throughout Ramadan, the integration of technology through mobile applications is considered to help complete practices throughout the month of Ramadhan. A mobile application specially designed to enhance your experience during the holy month of Ramadan. According to Samsudin, Sulaiman, Guan, Yusof, and Yaacob (2021) Mobile apps can increase user motivation as a teaching and learning tool. The mobile app is designed to serve as your trusted companion throughout this auspicious month, providing you with various features and resources to make the most of this blessed time.

In addition, this mobile application aims to support you in every step of your journey during this holy month, making it easier to observe religious practices, stay spiritually connected, and fully embrace the essence of Ramadan. There are some key features of the main application of this mobile application and how it will provide the best experience throughout the month of Ramadan. There are seven main components involved in this application, which is daily prayer, daily practice, fasting chart, tarawih chart, sunnah food, related video, and list of Ramadhan bazaar. It is hoped that with the existence of this mobile application, Muslims can manage worship more effectively.

II. OBJECTIVE

- i. Identify the potential of mobile application as a management tool in worship practice during the month of fasting.
- ii. Develop a mobile application that becomes a comprehensive tool in the management of daily practices in the month of Ramadhan.

III. RAMADHAN PREP MOBILE APPLICATION MODULE

In the month of Ramadan, Muslims all over the world try to get closer to God by performing various recommended practices and acts of worship. Fasting, tarawih prayer, reading the Qur'an, giving alms, zakat and improving practices during the last 10 nights of Ramadan. Besides that, one of the interesting things in the month of Ramadhan is food and the Ramadhan bazaar. This shows that, in the month of Ramadan, Muslims have many interesting activities. If it is recorded it makes this worship more comprehensive which through the mobile application Muslims can learn, make the mobile application as a reminder, and record daily activities. Through this mobile application it will make worship more interesting with a combination of multimedia elements such as text, graphics, animation, audio, and video (Banerjee, 2019).

Ramadhan prep combines several components such as prayer, daily practice, fasting chart, tarawih chart, sunnah food, related video, and list of Ramadhan bazaar. In addition to praying five times as usual, Muslims are also encouraged to perform sunnah prayers, especially Tarawih, which is done in congregation after the Isha prayer. In addition, daily practices are also applied in this application such as reading the Qur'an, almsgiving and so on. Also applied in this application is the fasting chart and tarawih chart which use the method of recording the activities performed.

Through this method users can see if their fasting worship has been completed with the suggested activities. To make activities in the month of Ramadhan more interesting, this application also contains a list of Ramadhan bazaars as a reference. In addition, this application also presents related videos for viewing and user reference.

IV. METHODOLOGY

The ADDIE model is a systematic instructional design framework used to guide the development of effective learning materials and experiences (Khalil & Elkhider, 2016). It stands for Analysis, Design, Development, Implementation, and Evaluation. The model is widely used in educational and training settings to ensure that learning interventions are well-planned, learner-centred, and aligned with specific learning objectives. Let's explore each phase of the ADDIE model:



A. Analysis:

In the analysis phase, instructional designers identify the learning needs, goals, and objectives. They conduct a thorough analysis of the target audience, their existing knowledge and skills, and the context in which the learning will take place. The analysis phase involves gathering data through interviews, surveys, focus groups, and other methods to understand the learners' requirements and the performance gaps that need to be addressed.

B. Design:

In the design phase, the instructional designers use the information gathered during the analysis phase to create a detailed learning plan. They define the learning objectives, instructional strategies, content structure, and assessment methods. This phase also involves selecting appropriate learning materials, technology, and instructional methods to meet the specific learning needs of the target audience.

C. Development:

The development phase is where the actual learning materials and experiences are created based on the design specifications. Content is developed, multimedia elements are incorporated, and interactive activities are built. Subject matter experts, instructional designers, and multimedia specialists collaborate to create engaging and effective learning resources.

D. Implementation:

The implementation phase is when the learning materials and experiences are delivered to the learners. This may involve classroom training, online courses, workshops, or a combination of various delivery methods. During implementation, instructors, or facilitators guide learners through the learning process, ensuring that the materials are presented effectively and that learners have the necessary support.

E. Evaluation:

In the evaluation phase, the effectiveness of the learning intervention is assessed. This involves gathering feedback from learners, measuring learning outcomes, and determining the overall success of the instructional design. The evaluation phase helps identify strengths and weaknesses in the learning materials and experiences, which can inform improvements for future iterations. After completing the evaluation, the instructional designers may return to previous phases (e.g., analysis and design) to make necessary adjustments and improvements based on the feedback and evaluation results. The ADDIE model emphasizes the iterative nature of instructional design, allowing for continuous refinement and enhancement of the learning experience to achieve optimal objectives (Nichols Hess & Greer, 2016).

Beta testing involve in this application development where a pre-release version of application is made available to a limited number of expertise. The experts involved consist of lecturers. The main purpose of beta testing is to gather real-world feedback and identify any issues or bugs before the software is released to the public (Fine, 2002).

During beta testing, developers aim to test the software in a diverse range of environments and use cases, allowing them to discover and address potential problems that may not have been apparent during internal testing. Beta testers are typically not part of the development team but are volunteers or selected users who are interested in trying out the product and providing valuable feedback. The feedback received from beta testers can be instrumental in improving the software's stability, functionality, user experience, and overall quality. It helps developers identify and fix bugs, understand user behaviour, and make necessary adjustments to enhance the final version.

V. CONCLUSION

Mobile applications show a significant impact in various fields. The application has also shown a significant effect as a learning tool. Ramadhan application is introduced to help users to make fasting better. This application introduces several components that can increase the level of motivation of users in fasting. This mobile application was introduced to make it easier for users to make references and learn. Learning using this mobile application involves various multimedia elements that interest users. Ramdhan Prep Mobile Application applies learning components such as daily practices, prayers, and references such as learning videos, sunnah food, fasting chart, tarawih chart and bazaar list. This shows that it is a suitable platform as a support tool in fasting. Support tools such as mobile applications are important to facilitate daily affairs. Today's technology-based life gives a great influence in which every matter of life is simplified with the use of technology.

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