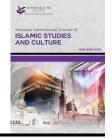


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Exploring Tafsir Surah Al-Fil: A Mobile Application Interpretation for Children

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ABSTRACT

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Received 23 August 2025 Received in revised form 25 September 2025 Accepted 8 October 2025 Available online 23 October 2025 In this digital era, mobile applications have become effective teaching and learning tools. Although many educational applications are available, there is a lack of engaging and child-friendly applications that teach the interpretation of Surah Al-Fil to young learners. Traditional teaching methods are less appealing to children, who now prefer interactive and visually engaging learning experiences rather than lengthy texts without visual aids. This is evident in the absence of applications focused on the interpretation of Surah Al-Fil specifically designed for children aged 5-6 on platforms such as Google Play Store and Apple Store. Therefore, as researchers, we decided to develop this application to help them understand the interpretation of Surah Al-Fil. Current educational methods suggest that children prefer visual learning over reading long texts or receiving information without any images. By employing a combination of qualitative and quantitative methods, we gained a comprehensive understanding of the application's performance and user interaction with Surah Al-Fil. This achievement was made through surveys conducted among students of the Quranic Studies with Multimedia program at the Faculty of Quran and Sunnah Studies, USIM, to demonstrate the application's effectiveness and evaluate the user experience, ensuring its suitability for children. Furthermore, this application provides an engaging and effective method to support teaching and learning processes in kindergartens for understanding the interpretation of Surah Al-Fil interactively. This application also has the potential to be commercialized to educators at the national and international levels.

Keywords:

Surah Al-Fil; application; interpretation; education

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1. Introduction

In today's digital world, traditional methods of teaching religious education to children face significant challenges. One major issue is the limited use of technology to enhance learning, especially in understanding complex Quranic verses like Surah Al-Fil. Despite the potential of technology, many kids lack access to engaging and interactive resources tailored to their educational needs.

Modern children, who are used to interactive and visually rich content, often find current religious educational resources unappealing. This gap highlights the need for innovative approaches to make Quranic teachings more accessible and engaging.

The "Al-Fil Explorer" concept aims to address this gap by integrating educational technology with religious education. This digital platform would use augmented reality (AR) and other advanced technologies to provide interactive and visually appealing interpretations of Surah Al-Fil. By bringing Quranic stories and lessons to life, it helps children connect with their faith on a deeper level.

Such an initiative can significantly enhance children's spiritual development and understanding of the Quran. Ignoring the potential of technology in religious education means missing out on opportunities to engage children effectively. Therefore, developing applications like "Al-Fil Explorer" is essential to meet the educational needs of children today, offering rich multimedia interpretations of Quranic content.

This research will explore the development and impact of such digital resources on children's religious education, bridging the gap between traditional teaching methods and modern technology.

1.1 Problem Statement

In today's rapidly changing digital world, traditional methods of teaching and engaging children in religious education face significant challenges. One such difficulty is the restricted application of technology to improve educational opportunities, particularly in the domain of religion and Quranic interpretation. Despite the enormous potential of technology, a lack of easily accessible and interesting resources catered to children's educational needs prevents many kids from reaping the full benefits of its inventive applications. This disparity is especially noticeable when attempting to comprehend and value the intricate meaning of Surah Al-Fil.

In a perfect world, educational technology would be seamlessly integrated with religious education to offer kids engaging and immersive learning opportunities that help them connect spiritual lessons on a deeper level. Imagine a digital resource, like the "Al-Fil Explorer," that was created expressly to provide interactive and aesthetically appealing interpretations of Surah Al-Fil and other verses from the Quran. This platform makes the stories and lessons of the Quran come to life in a way that appeals to the generation that was raised in the digital age by utilising augmented reality (AR) and other cutting-edge technologies.

Such an initiative allows children to explore, learn, and appreciate the profound teachings of the Quran in a relevant and impactful way, enhancing their spiritual development and understanding of their faith. It does this by fusing traditional religious education with contemporary digital learning.

Children are spending more time on their smartphones for entertainment purposes [8], such as gaming and watching YouTube, and they are frequently ignoring Quranic activities. This trend calls for a change to make children's smartphone use more constructive and instructive [6].

Should suitable adjustments not be made, kids might lose out on significant chances to utilise technology in purposeful and beneficial ways. Through the provision of more interactive and captivating content, technologies like Augmented Reality (AR) can enhance educational experiences. Children will not fully benefit from technological advancements that can improve their involvement

in religious activities if this potential is ignored. This is especially true when it comes to comprehending and appreciating Quranic content like Surah Al-Fil. To meet the educational needs of children in this digital age, it is necessary to develop an application called "Al-Fil Explorer," which will provide visually and multimedia rich interpretations of Surah Al-Fil.

1.2 Research Objectives

- i. Identifying the requirements for the "Al-Fil Explorer" application.
- ii. Designing and developing "Al-Fil Explorer" application
- iii. Evaluating the "Al-Fil Explorer" application to ensure it is robust and efficient.

1.3 Research Questions

- i. What are the key functional and non-functional requirements necessary for the How can the user interface and experience of the "Al-Fil Explorer" application designing of the "Al-Fil Explorer" application?
- ii. Be effectively designed to meet user needs and preferences?
- iii. What are the best practices and methodologies for designing efficient "Al-Fil Explorer" application.

1.4 Literature Review

According to a study conducted by Kadir *et al.*, [4], Quranic education for children is crucial in shaping a harmonious society with strong human values. The researchers developed a mobile application to teach children about Surah Ad-Dhuha, aiming to create an engaging and enjoyable learning experience while fostering a love for the Quran. The app integrates qualitative and quantitative methods to ensure its effectiveness, receiving positive feedback from students enrolled in Quranic and Multimedia studies at USIM. Results show that the app successfully aids in understanding Surah Ad-Dhuha, making Quranic education accessible and engaging for children.

A study by Mado [5], states that multimedia applications aid children's learning through the use of animation, images, and sound. Children begin learning at a very early age and require engaging methods to retain the information they learn. Furthermore, computers play a significant role in efficiently manipulating data, thereby aiding the learning process through automation. Multimedia combines text, graphics, sound, video, and animation to provide engaging interactive presentations. In this context, learning is a fundamental process for individuals to acquire knowledge. The use of multimedia applications in early childhood education not only makes learning more engaging but also more effective.

According to Hamzah and Aman [3], their study implemented an interactive multimedia application using Unity software to teach short surahs from Juz Amma to preschool students at Datok Sulaiman Putra Islamic Preschool in Palopo City. Furthermore, Usability Testing was conducted to evaluate the user-friendliness of the multimedia application. The results showed that this multimedia application facilitated the learning of short surahs from Juz Amma, aiding students in reading and understanding Quranic verses effectively. Overall, this study demonstrated the benefits of using interactive educational tools to enhance the Islamic education learning experience for preschool children.

According to Yahaya *et al.*, [9], in their research the integration of technology in education has significantly transformed traditional learning methods. Mobile applications have become vital tools in language learning, offering interactive and accessible platforms for learners. This literature review

explores the development and impact of mobile applications in Arabic language learning in Malaysia from 2010 to 2019, highlighting key studies accessed through online databases.

A study by Rifai [7], states that the digitalization of Quranic interpretation has significantly transformed the accessibility and democratization of religious sources. This process, often referred to as digital hermeneutics, involves the application of digital tools and platforms to interpret religious texts, thereby making religious knowledge more widely available and interactive. The concept of online religion underscores this shift, illustrating how digital spaces facilitate new forms of religious engagement and community. In Indonesia, for instance, the impact of social media on Quranic interpretation has been profound, allowing a broader audience to participate in religious discourse and interpretation. This democratization through digital platforms ensures that religious sources are no longer confined to traditional scholarly circles but are accessible to anyone with internet access, fostering a more inclusive and participatory approach to religious learning and interpretation.

Although previous studies have explored different approaches to suitable methods for teaching the Quran to children, especially during their early schooling, there is still no research on the application of multimedia visual interpretation for Surah Al-Fil specifically. While some studies have examined ways to help children understand, memorize, write, and read Quranic verses, there is little research on methods or ways to incorporate multimedia images specifically designed for the application of Surah Al-Fil. This gap highlights the need for more research into the creation of this Surah Al-Fil application, tailored for children, considering the different thematic content and the potential benefits it may provide in terms of enhancing children's understanding and interaction with the Quranic text.

2. Methodology

This project will utilize both quantitative and qualitative approaches, structured around the ADDIE model, which stands for Analysis, Design, Development, Implementation, and Evaluation. This approach provides a step-by-step system to develop better and more effective Multimedia learning tools for children in Tafsir Surah Al-Fil, so they can adapt easily and effectively.

2.1 Method of Data Collection

To collectively develop the "Al-Fil Explorer" application and assess its impact on children's understanding and interpretation skills of Surah Al-Fil, a comprehensive data collection approach will be employed. This approach will integrate both quantitative and qualitative methods, aligned with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model.



Fig 1. ADDIE MODEL

2.1.1 Analysis phase

In this initial phase, data collection will focus on understanding the needs, preferences, and current learning methods of the target audience, specifically children aged 5 to 6 years. To achieve this, structured surveys will be administered to parents, teachers, and students to gather information on existing learning practices, challenges faced, and expectations from the new application. Additionally, semi-structured interviews with Quranic and Multimedia studies experts at USIM will provide deeper insights into effective multimedia learning strategies and content requirements. A thorough review of existing literature, including studies on Quranic education and multimedia learning tools, will be conducted to identify best practices and gaps that the "Al-Fil Explorer" application can address.

2.1.2 Design phase

In the design phase, data collection will focus on creating a blueprint for the application based on the insights gathered during the analysis phase. Small focus groups with students and educators will be organized to brainstorm and validate design concepts, interactive features, and visual elements of the application. Initial storyboards and wireframes will be presented to these focus groups for feedback, ensuring that the design aligns with user expectations and educational goals.

2.1.3 Development phase

During the development phase, the focus will be on iterative testing and refinement of the application. A prototype of the "Al-Fil Explorer" application will be developed and subjected to usability testing. Children within the target age group will interact with the prototype, and their feedback will be collected through direct observation to identify usability issues and areas for improvement. Additionally, structured user testing sessions will be conducted where children will complete specific tasks within the application, and their performance and feedback will be recorded for further analysis.

2.1.4 Implementation phase

In this phase, the application will be rolled out for broader use within the target audience. A pilot test will be conducted in selected primary schools and Quranic classes, where the application will be introduced to children and their interaction with it will be closely monitored. Post-implementation surveys and questionnaires will be distributed to parents, teachers, and students to gather feedback on the application's usability, engagement, and educational effectiveness.

2.1.5 Evaluation phase

The final phase will focus on evaluating the overall effectiveness and impact of the "Al-Fil Explorer" application. Children will be assessed on their understanding and interpretation of Surah Al-Fil before and after using the application through pre- and post-tests to measure learning outcomes. Follow-up interviews and focus groups with teachers, parents, and students will provide qualitative insights into the application's impact on children's learning experiences and engagement with Quranic teachings. Both quantitative data (test scores, survey responses) and qualitative data (interview and focus group transcripts) will be analyzed to evaluate the success of the application and identify areas for further improvement.

By employing this mixed-methods approach, the research will ensure a comprehensive understanding of the application's development process and its effectiveness in enhancing children's understanding of Surah Al-Fil.

By following this structured approach, the research aims to develop a user-friendly and effective mobile application that enhances children's understanding and interpretation of Surah Al-Fil through engaging multimedia content.

2.2 Instrument

To address the research objective of identifying the requirements for the "Al-Fil Explorer" application, we will employ expert consultation and conduct content analysis based on existing research. This involves thoroughly reviewing relevant research, papers, and studies related to similar applications, Islamic educational tools, and mobile applications in general. Subsequently, we will extract data from these sources to inform the requirements of the "Al-Fil Explorer" application, including user preferences, technological trends, best practices, and challenges encountered in comparable projects.

Furthermore, to achieve the objective of designing, developing, and evaluating the "Al-Fil Explorer" application to ensure its robustness and efficiency, we will utilize open-ended questionnaires. The specific information targeted for collection through these questionnaires includes understanding user preferences, identifying desired features, and exploring usability concerns. We will develop open-ended questions designed to elicit detailed responses and insights from respondents. Pilot testing of the questionnaire with a small group will be conducted to ensure clarity and effectiveness in gathering relevant information for the research article.

2.3 Data Collection Method

Data was gathered using a variety of questions regarding study issues that were included in the questionnaire [1].

Table 1List of questions for survey and questionnaires

No.	Section	Question
		1. Gender
1	Section A: Demography	2. Age
		3. Course
	Section B: User Feedback on the	1. Is this application interesting?
2	Design Interfaces of "Al-Fil Explorer"	2. Is this application easy to use?
	арр	3. Is the design suitable for kids?
		4. Is the content easy to understand?
		5. Is the color suitable for kids?
3	Section C: Users Feedback on the	1. In your opinion, is this application effective for
	Effectiveness of "Al-Fil Explorer" app	children in learning Surah Al-Fil?
		2. Which features of the app do you think children enjoy the most?
		3. Were there any features of the app that
		children will find difficult to navigate or
		understand?
		4. How would you describe the impact of this app
		on children's education?
		5. Do you have any additional comments or
		suggestions for the improvement of the app?

Researchers gave questionnaires to users or second-year students of the USIM multimedia Quran program to collect data for this study and evaluate the feasibility of the produced products.

3. Design And Development

3.1 Proposed Design

The proposed design for the development of the Al-Fill Explorer application is both simple and visually appealing. Before the development phase began, flowcharts and storyboards were created to ensure that the content structure was well-organized and easy to comprehend throughout the development process.

3.2 Screen Flow

A screen flow represents the sequence of different screens that users will navigate through in the application. It typically outlines various tasks and interactions, presenting information to users in a structured manner. However, not all task types are supported in a screen flow, and it cannot be set as the initial flow in the application.

In the development of Al-Fill Explorer, the screen flow focuses on user interactions and task flows rather than serving as a simple connector. The screen flow designed for this application is as follows:

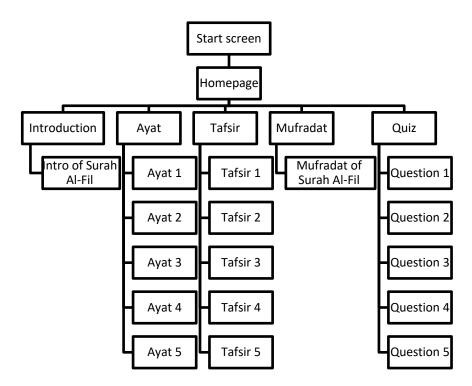


Fig. 2. Screen flow chart

3.3 Fidelity and Protoyping

Low-fidelity prototyping is a basic and simplified representation of concepts created during the initial stage of the design process. It involves rough sketches and diagrams that focus on core design ideas, such as page layout, content arrangement, and user flow. This phase is essential in the design

thinking process as it encourages creativity and helps refine early-stage concepts. For the Al-Fill Explorer application, the low-fidelity prototype is as follows:

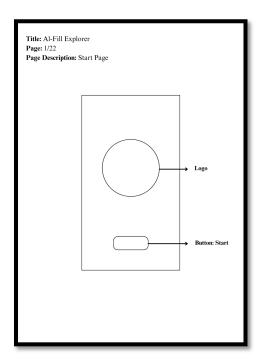


Fig. 3. Starting page

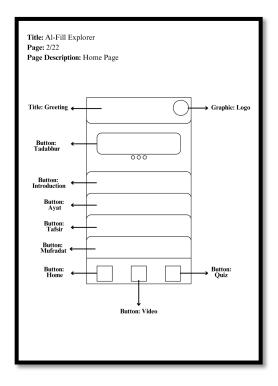


Fig. 4. Home page

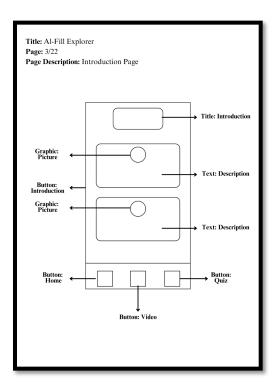


Fig. 5. Introduction page

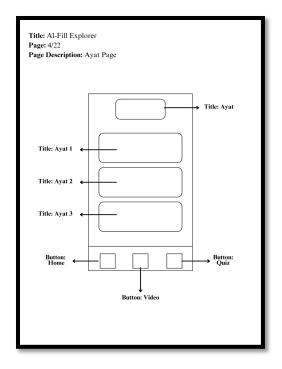


Fig. 6. Ayat page

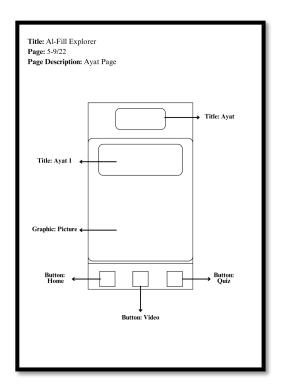


Fig. 7. Ayat page

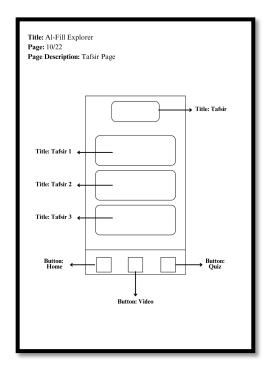


Fig. 8. Tafsir page

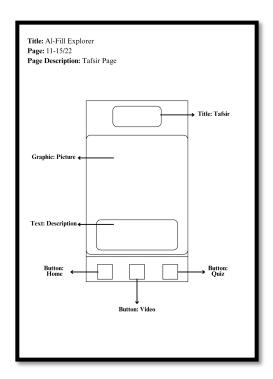


Fig. 9. Tafsir page

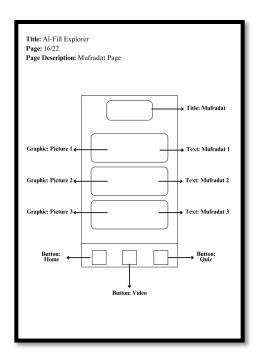


Fig. 10. Mufradat page

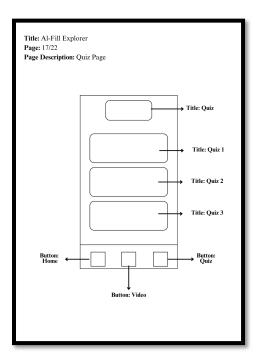


Fig. 11. Quiz page

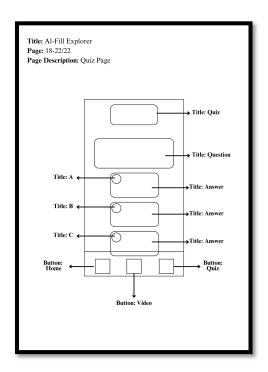


Fig. 12. Quiz page

3.4 Result of Product Development

This prototype was initially provided as a guideline for researchers to develop the mobile application following the phases outlined in the ADDIE model. Using this approach, the Al-Fill Explorer application was successfully developed.



Fig. 13. Al-Fill explorer starting page



Fig. 14. Al-Fill explorer home page



Fig. 15. Al-Fill explorer introduction page



Fig. 16. Al-Fill explorer ayat page



Fig. 17. Al-Fill explorer ayat page



Fig. 18. Al-Fill explorer tafsir page



Fig. 19. Al-Fill explorer tafsir page



Fig. 20. Al-Fill explorer Mufradat page



Fig. 21. Al-Fill explorer quiz page



Fig. 22. Al-Fill explorer quiz page

4. Data Analysis

The application testing stage involves gathering user feedback through a structured process using Google Forms as the primary data collection tool. During this stage, respondents, are invited to evaluate various aspects of the application, such as usability, functionality, engagement, and educational effectiveness.

4.1 Analysis

This section provides a detailed analysis of the data gathered from a completed questionnaire. Comprehensive respondent information, including gender, age, and field of study, is covered in the demographic analysis in Section A. The application's interface design is also thoroughly examined in Section B, with a focus on assessing the interactive and visual components. The effectiveness of the application is assessed using respondent feedback in Section C that follows. The tables and pie charts that follow provide thorough documentation for each dataset.

4.2 Finding of Section A: Demography

4.2.1 Gender

The gender distribution of respondents to the "Al-Fil Explorer" application shows a balanced representation of gender, with 56.7% identifying as male and 43.3.3% as female. Demographics of respondents based on gender.

Table 2Percentage of respondents by gender

Gender	Number of People	Percentage (%)
Male	17	56.7
Female	13	43.3
Total	30	100

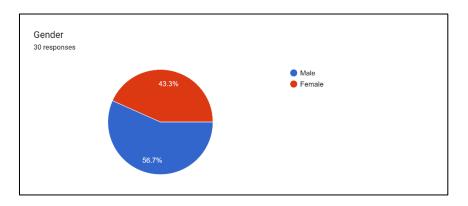


Fig. 23. Demographics of respondents by gender

The app's main goal is to provide an entertaining and educational experience for all children learning about Surah Al-Fil. This gender-neutral engagement aligns with that goal.

4.2.2 Age

The "Al-Fil Explorer" apps age distribution of respondents, with the majority 83.3% falling within the 20-25 years old, 13.3 over 25 years old, and just 3.3 under 19 years old. Demographics of respondents based on age.

Table 3

Percentage of respondents by age

Percentage of respondents by age				
Age	Number of People	Percentage (%)		
< 19 years old	1	3.3		
20-25 years old	25	83.3		
>25 years old	4	13.3		
Total	30	100		

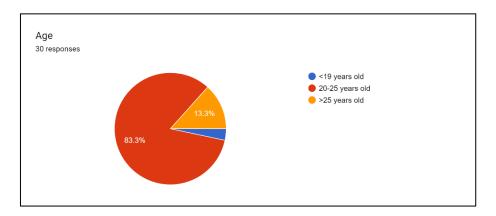


Fig. 24. Demographics of respondents by age

Understanding and addressing these differing viewpoints will be essential to ensuring that the app's design successfully satisfies the needs and expectations of its target audience and adds to an overall enjoyable user experience for children studying Surah Al-Fil.

4.2.3 Course

Table 4 and Figure 4 indicate respondents from the Bachelor of Quranic Studies with multimedia (USIM) 30 respondents. Demographics of respondents based on course.

Table 4Percentage of respondents by course

Course	Number of People	Percentage (%)
Bachelor of Quran and Sunnah	0	0
Studies		
Bachelor of Quranic Studies with	30	100
Multimedia		
Bachelor of Sunnah with	0	0
Information Management		
Bachelor of Qiraat Studies	0	0
Total	30	100

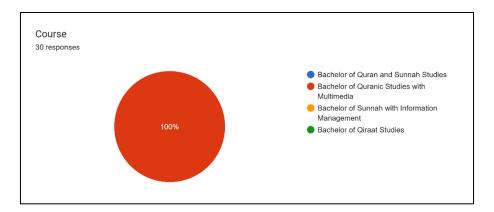


Fig. 25. Demographics of respondents based on course

The information shown in Table 3.3 and Figure 3.3 particularly emphasises comments from 30 respondents who had a background in multimedia and a bachelor's degree in Quranic studies. This participant subset offers insightful information about how experts in Quranic Studies with Multimedia view the app's usefulness and compatibility with learning goals. Examining their answers helps us gain a more thorough grasp of how the app is being received by this particular academic audience.

4.3 Finding of Section B: User Feedback on the Design Interfaces of "Al-Fil Explorer" app 4.3.1 Is this application interesting?

An analysis of user reviews indicates that the "Al-Fil Explorer" app has gotten good feedback, with 96.7% of respondents stating they found it engaging. An additional 3.3% of users think the app is moderately interesting. The fact that none of the respondents claimed the app wasn't engaging indicates that most people have a favourable opinion of it.

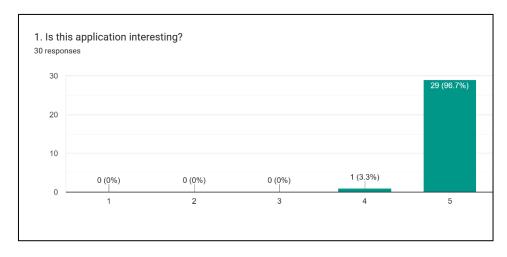


Fig. 26. Design Interfaces of "Al-Fil Explorer" app

This positive feedback demonstrates the application's ability to successfully maintain the interest and attention of the target audience. It becomes essential to understand how users perceive the app's intriguing element while enhancing and perfecting features in order to ensure ongoing engagement and satisfaction. According to the earlier study, a good user interface can only be fully appreciated when it is combined with a clever overall system architecture that consists of both hardware and software that provides a useful service in a meaningful way. This point of view

emphasises the importance of continuous improvements and feature optimisations for the program in keeping with the positive feedback received, with the goal of giving the target student audience an enjoyable and interesting learning experience.

4.3.2 Is this application easy to use?

86.7% of respondents, or the vast majority, stated that the program is simple to use. This suggests a very positive trend in the "DHUHAKIDS" app's user-friendliness analysis. The absence of unfavourable comments or unclear areas indicates that the app's designers and user interface did a fantastic job, proving that usability and accessibility were given priority. The 13.3% of respondents who thought the app was reasonably easy to use offer a useful viewpoint. This suggests a possible area for improvement in terms of providing more guidance or better user navigation.

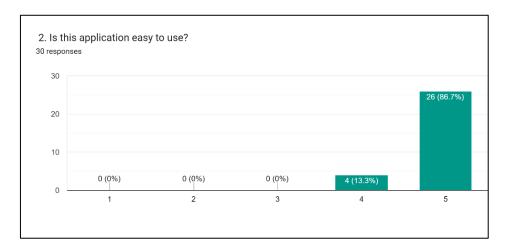


Fig. 27. Design interfaces of "Al-Fil Explorer" app

For an application to be usable and interesting for its target audience, a well-designed user interface is essential. People can interact with the app with ease thanks to a smooth user experience that includes easy navigation, users can comprehend how to use a system without consulting a user manual when the interface is easy to use. Furthermore, usability can be further improved by offering interactive tutorials, tooltips, or instructional guides, particularly for novice users or those who are unfamiliar with digital platforms. The app can be further improved through ongoing user feedback and iterative changes based on actual usage, guaranteeing that it stays effective, user-friendly, and in line with the needs of its target audience.

4.3.3 Is the design suitable for kids?

The design of the "Al-Fil Explorer" app is highly appealing to children, with 83.3% of respondents finding it suitable for kids, and 16.7% rating it as moderately for kids. This indicates that the app effectively captures children's attention through engaging visuals, interactive elements, and a child-friendly interface, making it both enjoyable and suitable for young users.

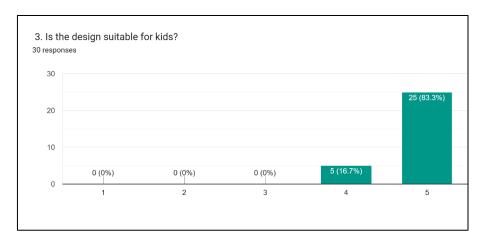


Fig. 28. Design Interfaces of "Al-Fil Explorer" app

Age-appropriate graphics, simple navigation, and interactive features that promote exploration and learning are all components of a well-designed children's app. Vibrant hues, entertaining animations, and captivating sound effects can improve the user experience and increase the app's attractiveness to younger users. Furthermore, a straightforward and organised design guarantees that kids can comprehend and use the app without difficulty. A well-thought-out design can create an enjoyable and instructive environment that keeps kids engaged and inspired to learn by putting accessibility and engagement first.

4.3.4 Is the content easy to understand?

The content of the "Al-Fil Explorer" app is highly comprehensible, with 80% of respondents strongly agreeing that it is easy to understand and 20% agreeing.

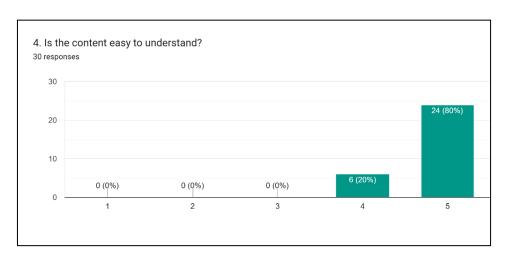


Fig. 29. Design Interfaces of "Al-Fil Explorer" app

This indicates that the app effectively delivers information in a clear and accessible manner, using simple language, engaging visuals, and interactive elements to enhance comprehension. The structured content ensures that children can grasp concepts effortlessly, making learning both enjoyable and effective.

4.3.5 Is the color suitable for kids?

The colour scheme of the "Al-Fil Explorer" app received mixed feedback, with 10% of respondents strongly agreeing that it is suitable for kids, 6.7% agreeing, and 3.3% remaining neutral.

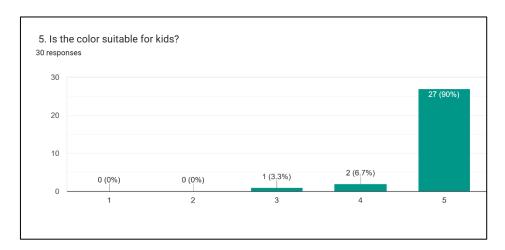


Fig. 30. Design Interfaces of "Al-Fil Explorer" app

This suggests that while some users find the colours appropriate and engaging for children, there may be room for improvement in terms of vibrancy, contrast, or overall visual appeal to better capture young users' attention. A well-chosen color scheme for a children's app should be bright, engaging, and visually stimulating to capture their attention and enhance their learning experience. High contrast between elements can improve readability, while a balanced combination of warm and cool colors can create an inviting and fun atmosphere. Additionally, using colors strategically to highlight important features or guide navigation can make the app more intuitive and user-friendly for young users.

4.5 Finding of Section C: Users Feedback on the Effectiveness of "Al-Fil Explorer" app 4.5.1 In your opinion, is this application effective for children in learning Surah Al-Fil?

According to the study's user opinion analysis, all respondents (100%) concurred that the "Al-Fil Explorer" app is very effective at teaching kids Surah Al-Fil.

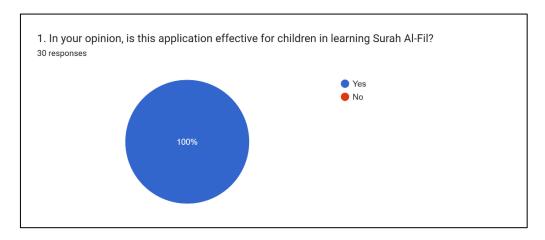


Fig. 31. Effectiveness of "Al-Fil Explorer" app

The unanimous agreement among respondents indicates that the "Al-Fil Explorer" app is highly effective in helping children learn Surah Al-Fil. This suggests that the app successfully delivers educational content in an engaging and accessible manner, making it easier for young learners to understand and retain the surah. The combination of interactive elements, structured lessons, and child-friendly design likely contributes to its effectiveness, reinforcing memorization and comprehension in an enjoyable way.

4.5.2 Which features of the app do you think children enjoy the most?

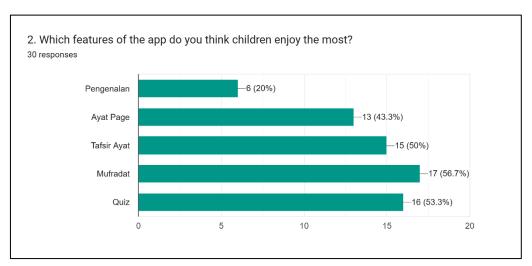


Fig. 32. Effectiveness of "Al-Fil Explorer" app

Based on 30 responses, the bar chart shows which features of the "Al-Fil Explorer" app kids like the most. Mufradat is the most popular feature among those available, with 56.7% (17 respondents) saying it is the most enjoyable. This implies that children find learning new words interesting, perhaps because of interactive features, vibrant graphics, or gamified learning strategies that facilitate and enjoy memorisation.

Closely behind, the Quiz feature was chosen as the favourite by 53.3% (16 respondents). This suggests that kids value interactive tests, which could add some enjoyment while strengthening their comprehension of Surah Al-Fil. For young students, quizzes frequently provide a sense of challenge and achievement, which can be very motivating.

One of the more well-liked features of the app is the Tafsir Ayat feature, which was selected by 50% of the respondents (15). This implies that kids like to learn more about the meanings of verses, perhaps through captivating storytelling, illustrations, or clear explanations that make tafsir easy to understand and pleasurable.

Children may enjoy direct verse reading, but they may also favour features that offer more context or interaction, according to the Ayat Page, which had 43.3% of the responses (13 respondents). This might suggest that a more captivating presentation, like guided pronunciation or animated recitations, could increase its allure even more.

However, only 20% (6 respondents) said that the Pengenalan (Introduction) feature was the most enjoyable, making it the least popular. This implies that children might not find introductory content as engaging as more interactive features. Instead of spending time on introductory explanations, children might prefer to dive right into the learning activities.

Overall, the data suggests that interactive and vocabulary-based features are what most engage children, whereas less interactive content—like introductory sections—might not have the same

effect. This knowledge can help improve the app's design even more, making sure that interesting features like vocabulary exercises, quizzes, and tafsir explanations are improved to keep kids interested and make the most of their educational experience.

4.5.3 Were there any features of the app that children will find difficult to navigate or understand?

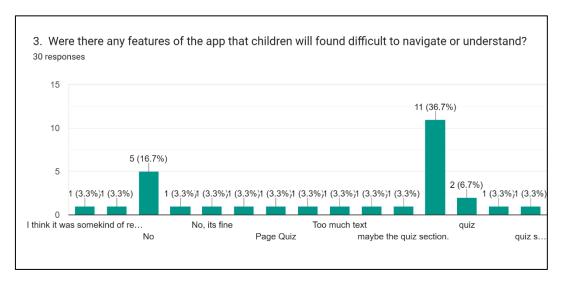


Fig. 33. Effectiveness of "Al-Fil Explorer" app

Based on the responses, most users found the app easy to navigate, as a significant number of respondents simply stated "No" or "No, it's fine", indicating that they did not experience any difficulties. However, some users pointed out potential challenges, particularly in the Quiz section, which was mentioned multiple times as a feature that children might find difficult. This suggests that the quiz format or its level of complexity may require some refinement to better suit young learners.

Additionally, a few respondents highlighted issues such as too much text, a lack of visual guidance, and the absence of a guide for using the app. These comments suggest that adding more visual aids, clearer instructions, or an onboarding tutorial could improve the user experience, especially for younger children who might struggle with text-heavy content.

Another notable concern was the lack of audio recitations, which could pose a challenge for auditory learners or children who are not yet proficient in reading. Integrating audio features, such as verse-by-verse recitations or interactive voice instructions, could help make the app more accessible and engaging.

Overall, while the majority of users did not report difficulties, the feedback suggests that improvements could be made in the quiz section, visual guidance, and audio integration to enhance the app's usability and learning experience for children.

4.5.4 How would you describe the impact of this app on children education?

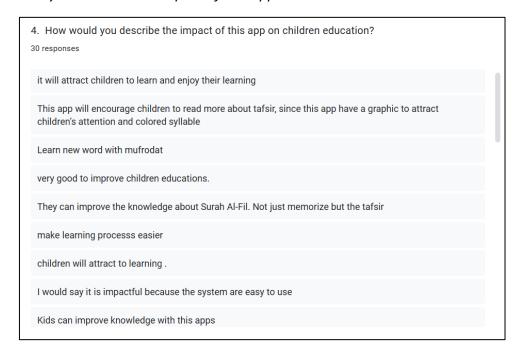


Fig. 34. Effectiveness of "Al-Fil Explorer" app

The "Al-Fil Explorer" app has a significant positive impact on children's education by making the learning process more interactive, engaging, and accessible. Many respondents highlighted that the app not only helps children memorize Surah Al-Fil but also deepens their understanding of its tafsir, providing a more meaningful learning experience beyond rote memorization. The inclusion of graphics, coloured syllables, and interactive features makes the app more appealing, attracting children's attention and encouraging them to explore Islamic education in a fun and engaging way.

Another key benefit of the app is its role in improving memory skills and vocabulary development, particularly through the introduction of mufrodat (new words). Additionally, it fosters digital literacy by helping children become comfortable with learning tools on digital platforms, an important skill in today's technology-driven world.

Several respondents also emphasized that the app makes learning more enjoyable and accessible, especially for children who may struggle with traditional methods of education. The interactive elements help sustain children's interest, making the process less intimidating and more effective. Furthermore, the app's usability was praised, as its simple and intuitive system makes it easier for children to navigate and learn independently.

Overall, the "Al-Fil Explorer" app serves as a valuable educational tool that enhances children's understanding of Islamic teachings, improves their learning experience, and makes education more enjoyable. Its well-designed approach encourages children to actively engage with their studies, fostering a love for learning in a digital-friendly environment.

4.5.5 Do you have any additional comments or suggestions for the improvement of the app?

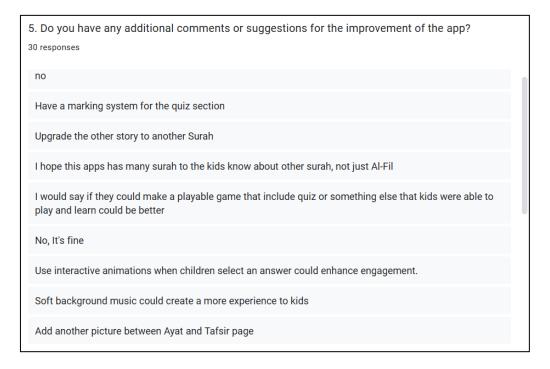


Fig. 35. Effectiveness of "Al-Fil Explorer" app

Several respondents provided valuable suggestions to enhance the "Al-Fil Explorer" app, highlighting potential areas for improvement that could further engage children and improve their learning experience. A common recommendation was to expand the app's content beyond Surah Al-Fil, allowing children to learn other surahs in a similar interactive manner. Adding more Islamic stories or additional Surahs could broaden children's understanding of the Quran.

Another key suggestion was to increase the interactivity of the app. Respondents proposed integrating more games, interactive animations, and a reward system to maintain children's interest and motivation. Features such as a marking system for the quiz section, parental involvement in quiz sessions, and visual enhancements between Ayat and Tafsir pages were also recommended to make the learning experience more engaging and structured.

Additionally, several users suggested incorporating soft background music or short story animations to create a more immersive and enjoyable atmosphere for young learners. Implementing a playable game mode alongside the quiz section was another popular recommendation, as it would encourage children to learn through play, making the educational process more fun and effective.

Overall, these suggestions reflect a strong desire for a more dynamic, visually engaging, and interactive learning environment. By incorporating these enhancements, the "Al-Fil Explorer" app could further improve its educational impact, ensuring that children remain motivated, engaged, and eager to explore more aspects of Islamic teachings.

5. Discussion And Conclusion

5.1 Objective Analysis

No	Objectives	Analysis
1	Identifying the requirements for the "AI-Fil Explorer" application.	Preliminary data from literature reviews, surveys, and usability testing with children and educators were conducted. Common requirements identified
		included interactive storytelling, simplified Tafsir explanations, engaging visuals, and accessibility features for different learning needs.
2	Designing and developing "Al-Fil	The application was developed with child-friendly
	Explorer" application.	features such as animations, voice narration, and
		interactive quizzes. It incorporates engaging educational methods and was iteratively refined
		based on feedback from usability tests.
3	Evaluating the "Al-Fil Explorer"	The application was tested with children and
	application to ensure it is robust and efficient.	educators to assess its performance, usability, and
		educational impact. Metrics such as user
		engagement, knowledge retention, and ease of
		navigation were evaluated to ensure its
		effectiveness.

5.2 Project Limitation

The mobile application primarily focuses on a simplified Tafsir of Surah Al-Fil for children, which may not cover deeper theological interpretations. Additionally, the application is designed with an emphasis on interactive learning, which may not cater to all learning styles. Future iterations may need to include multilingual support and customization options for different age groups to enhance accessibility.

5.3 Recommendation for Future Work

The application can be expanded to include other Surahs to provide a more comprehensive learning tool for children. Additional features such as augmented reality (AR) storytelling, more interactive quizzes, and gamification elements could enhance engagement further. Collaboration with Islamic scholars and educators is recommended to ensure the accuracy and effectiveness of the content. Furthermore, integrating feedback mechanisms for parents and teachers would help refine the application's educational impact.

5.4 Discussions

Usability test results indicate that the mobile application succeeded in making the interpretation of Surah Al-Fil engaging and comprehensible for children. High usability scores and positive feedback confirmed the effectiveness of interactive storytelling and visual elements in maintaining children's interest. The inclusion of multilingual support was identified as a key area for improvement to reach a broader audience. Additionally, incorporating adaptive learning techniques could further personalize the learning experience based on individual user progress.

Overall, the application successfully bridges the gap between traditional Tafsir methods and modern digital learning, offering an engaging and educational experience for young learners.

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