

Storyboard Design of Android-Based Learning Multimedia Integration Application Using Standard Process Tutorial Model

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Abstract

Bina Pribadi Islam is a subject taught in Islamic elementary schools with the aim of improving students' spiritual well-being through guidance from teachers or mentors. Islamic elementary schools have an educational system designed by the Ministry of National Education and adapted to Islamic law. In the process of learning Bina Pribadi Islam, there is a need for a strategy to increase students' motivation and interest by using a multimedia application that includes elements such as text, audio, graphics, video, and animation tailored to the standard process tutorial model. To create an interactive multimedia application, multimedia design should be prepared in accordance with the tutorial model. Therefore, to produce a good application, a storyboard design needs to be created first that is tailored to the tutorial model to facilitate the application's development. Based on the storyboard design created according to the tutorial model, three main menus are produced as the characteristic features of the tutorial model, namely introduction, tutorial material, and exercises. Each menu produces several sub-menus tailored to the material in the Bina Pribadi Islam subject.

Keywords: android, multimedia, storyboard, tutorial model

1. Introduction

Bina Pribadi Islam is a program that involves the guidance of students in relation to their Islamic personality to help them deal with problems and challenges they face in their daily activities (Karmila & Tarmana, 2021). The aim of Bina Pribadi Islam is to improve the spiritual intelligence of students so that they can avoid deviant behavior and attitudes that are not in line with Islamic education (Fadliyani et al., 2021).

Integrated Islamic elementary schools are schools that are part of the Integrated Islamic School Network (JSIT), which means there is an obligation to

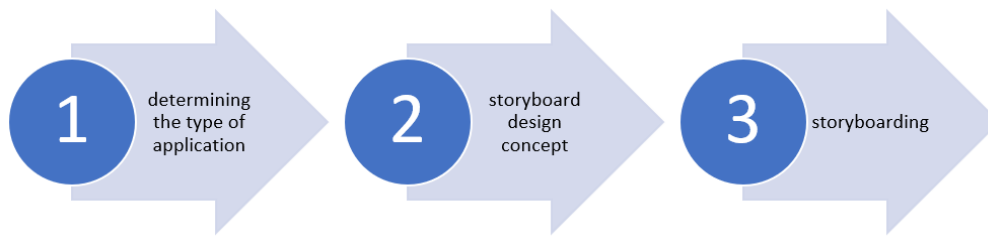
implement education that includes character values designed by the Ministry of National Education and adapted to Islamic law (Agra, 2021). One of the integrated Islamic elementary schools in Subang has implemented the Bina Pribadi Islam subject with a teacher who serves as the BPI mentor and follows the BPI book as a guide.

The first grade is one of the classes that has received BPI material with series A and B, and this has become a research focus on how to make first-grade students more interested in understanding and implementing Bina Pribadi Islam. Multimedia applications are one solution for this improvement because they include learning packaged with various elements such as text, audio, graphics, video, and animation (Syahputra & Kurniawan, 2019). The platform used for this is Android, which provides users with easy access to learning supplements anytime and anywhere (Tabrani et al., 2021). To create a multimedia application that meets the needs, a storyboard should be created first to provide an overview of the story from the material being presented (Rakadea et al., 2021). Storyboards are used to ensure that the created flow is in line with the material being presented (Zulfan et al., 2021). In this storyboard design, a tutorial model is used to provide a satisfactory learning experience that includes material, demonstration, and testing (Rusydi et al., 2020). During tutorial-based learning, control devices can be used to assist students in operating the application and displaying selected materials (Abdillah et al., 2021).

This research proposes a storyboard design for an integrated multimedia application for Islamic personal development learning, using the standard tutorial model process, at one of the integrated Islamic elementary schools in the Subang area.

2. Research Method

The research method is used to ensure that in preparing the storyboard design in accordance with the established flow so that it does not deviate from the research objectives that have been outlined in the introduction, the following method will be used.



Source: Research Results (2023)

Figure 1. Research Methods

Figure 1 shows a research method that provides an overview of the flow to be carried out. Firstly, the determination of the application type, what kind of application will be planned to help improve student motivation in learning Islamic personal development. Secondly, from the determined application type, the concept of storyboard design is developed by determining what model will be used to meet the needs of students. Finally, the storyboard is compiled based on the concept and type of application that has been determined beforehand.

3. Results and Analysis

3.1. Application Type Determination

In this first stage it determines the type of application that is suitable for students in grade 1 of an integrated Islamic elementary school.

Table 1. Description of Application Types

Application	Description
Title	Storyboard Design of Android-Based Learning Multimedia Integration Application Using Standard Process Tutorial Model
Objective	Increase motivation and interest in learning Islamic Personal Development
Genre	Tutorials
Platform	Android
Player	1 player
Target users	1st grade integrated Islamic elementary school children
Interactivity	Touch (select menu)
Graphics	2 dimensions
Features	Display material, display images, produce audio, quizzes

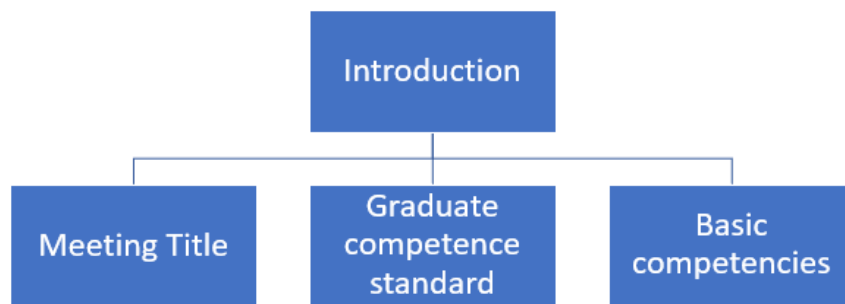
Source: Prayogha & Pratama (2020)

3.2. Storyboard Design

The storyboard design that will be made refers to the standard process of the interactive program tutorial model in the form of a tutorial containing introductions, information presentation, and quizzes as a form of exercise to strengthen the understanding of grade 1 students. The following is the storyboard design concept that will be made.

a. Introduction

The introduction will provide understanding to students to find out the analysis of teaching programs for one semester as well as based on a personal Islamic book series with pictures for the introductory storyboard design concept.



Source: Zamzami (2020)

Figure 2. Introductory Storyboard Design Concept

In the introduction menu, students will be presented with several sub menus to get to know related to Islamic personal development learning for a series starting from the title of the meeting, then competency standards for each meeting as well as basic competencies.

b. Presentation of Material Information

Presentation of information is related to the material to be learned in the Islamic personal development subject, which are limited to four meetings, including the presentation of material information that will be covered (Zamzami, 2020):

Meeting 1 I am used to Saying Hamdalah

1) Words and the meaning of hamdalah

2) Time to say hamdalah

3) The virtue of saying hamdalah

Meeting 2 I Get Used to Saying Hamdalah and Sincerely Doing Charity

- 1) Practicing Reading Hamdalah
 - 2) Practicing Sincerity in charity
- Meeting 3 I Like to Do Ablution (Wudu)
Procedure for ablution
- Meeting 4 I Like to Do Ablution (Wudu)
- 1) Ablution before going to bed
 - 2) Perform ablution after defecating
 - 3) Procedure for ablution

c. Exercise

Exercise is the final stage of the tutorial model that includes several quizzes related to the material presented in the information presentation. The exercise consists of multiple-choice questions that can be selected and matched by students. Each meeting contains five exercise questions to improve students' understanding of Islamic personal development material.

3.3. Composing Storyboard

The arrangement of the storyboard is based on the results of the analysis in the concept stage of the storyboard design. The following is the storyboard for the integrated multimedia application for Islamic personal development learning using the standard tutorial model process at one of the integrated Islamic elementary schools in the Subang area.



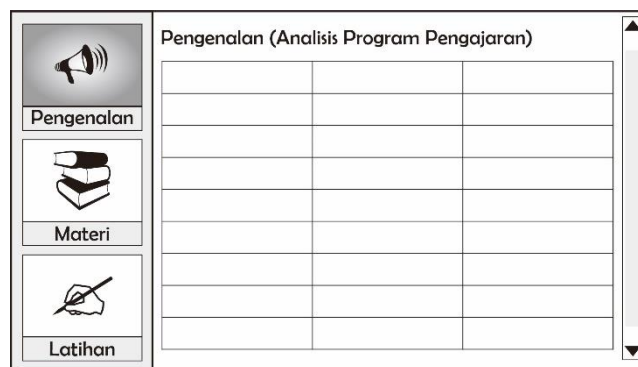
Source: Research Result (2023)

Figure 3. Storyboard Start Page

Visual in Figure 3, the first sketch displays the start page with a 6.5 inch cellphone size, greeting text according to Islam, displays three menu options according to the tutorial model, namely: Introduction, Material, and Exercise.

Audio, assalamualaikum warahmatullahi wabarakatuh, musical instruments and the sound of the button when the button is selected.

Visual in Figure 4, the second sketch displays an introductory page related to the analysis of teaching programs with an application size of 6.5 inc, introductory text (analysis of teaching programs), displays three menu options according to the tutorial model, namely: Introduction, Material, and Exercise and there is a scroll function. Audio, explanation of the introduction to the analysis of the teaching program, musical instruments and the sound of the button when the button is selected.



Source: Research Result (2023).

Figure 4. Introduction Page Storyboard

Visual in Figure 5, the third sketch displays a page with an application size of 6.5 inches, learning materials ranging from meetings one to four, displaying three menu options according to the tutorial model, namely: Introduction, Material, Exercise and there is a scroll function. Audio text description selected for each meeting of learning material, musical instruments and the sound of the button when the button is selected.



Source: Research Result (2023)

Figure 5. Storyboard of Learning Material Selection Pages

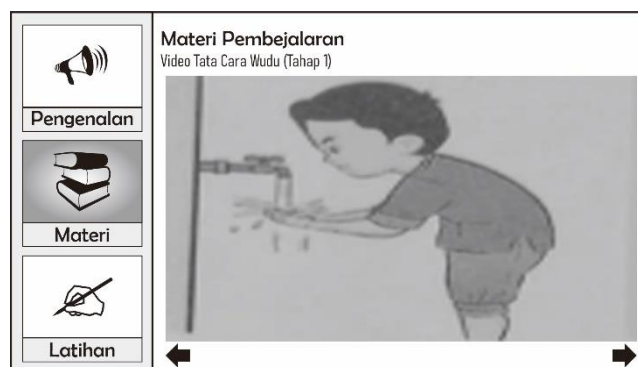
Visual in Figure 6, the fourth sketch displays the learning material page here as an example of meeting three with an application size of 6.5 inc, displays three menu options according to the tutorial model, namely: Introduction, Material, Exercise and there is a scroll function. Audio explanation of I like to do ablution (wudhu) procedures for ablution, musical instruments and the sound of the button when the button is selected.



Source: Research Result (2023)

Figure 6. Storyboard Video Tutorials

Visual in Figure 7, The fifth sketch displays a learning material page with an explanation in the form of a video tutorial here as an example of three meetings with an application size of 6.5 inches, displays three menu options according to the tutorial model, namely: Introduction, Material, Exercise and there are back and next. Audio explanation of the first stage of ablution, musical instruments and the sound of the button when the button is selected.



Source: Research Result (2023)

Figure 7. Storyboard Video Tutorials

Visual in Figure 8, the sixth sketch displays a training material page with an application size of 6.5 inc, learning material exercises starting from meeting one to four, displaying three menu options according to the tutorial model,

namely: Introduction, Material, Exercise and there is a scroll function. Audio text descriptions selected for each learning material practice meeting, musical instrument instruments and the sound of the button when the button is selected.



Source: Research Result (2023)

Figure 8. Storyboard of Learning Material Selection Exercise Pages

Visual in Figure 9, the seventh sketch displays a practice page with an application size of 6.5 inc, an example of the third meeting practice, displays three menu options according to the tutorial model, namely: Introduction, Material, Exercise and there are returns and so on, when an answer is selected an animated tick will appear if it is a cross if wrong. Audio text descriptions selected for each learning material practice meeting, musical instrument instruments and the sound of the button when the button is selected.



Source: Research Result (2023)

Figure 9. Storyboard of Meeting 3 Practice Pages

4. Conclusion

Based on the storyboard design, multiple storyboards can be created to cater to the needs of the multimedia integration application for Islamic personal development learning using the standard tutorial model process. The main menu consists of three buttons: introduction, material, and exercises, in

accordance with the model concept. The tutorials planned for each menu have several sub-menus that are tailored to Islamic personal development learning. The storyboard created based on the tutorial model can facilitate future development of the Android platform application.

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Author Contributions

Santi Purwanti proposed the topic, conducting a design related to the needs of the Storyboard design of the Android-Based Learning Multimedia Integration Application Using the Standard Process Tutorial Model.

Conflicts of Interest

There is no affiliation with any elementary school in the preparation of this research, and the research is solely intended to promote and enhance students' learning motivation with the support of technology.

References

- Abdillah, Y., Susilaningih, S., & Wedi, A. (2021). Pengembangan Multimedia Tutorial Materi Tata Surya Untuk Membantu Siswa Belajar di Rumah. *JKTP: Jurnal Kajian Teknologi Pendidikan*, 4(1), 98–107. <https://doi.org/10.17977/um038v4i12021p098>
- Agra, H. (2021). Implementasi Program Bina Pribadi Islami (BPI) dalam Membentuk Karakter Peserta Didik. *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 2268–2276.
- Fadliyani, F., Sahal, Y. F. D., & Munawar, M. A. (2021). Implementasi Bina Pribadi Islam (BPI) dalam Membina Akhlak Peserta Didik di Sekolah Dasar Inspiratif Al-Ilham Kota Banjar. *Bestari | Jurnal Studi Pendidikan Islam*,

- 17(2), 165. <https://doi.org/10.36667/bestari.v17i2.512>
- Karmila, W., & Tarmana, U. (2021). Penanaman Nilai-Nilai Karakter Islami Melalui Program Bpi (Bina Pribadi Islam) Di SMPIT Al Khoiriyah Garut. *Al-Hasanah: Islamic Religious Education Journal*, 6(1), 88–96. <https://doi.org/10.51729/6133>
- Prayogha, A. P. D., & Pratama, M. R. (2020). Implementasi Metode Luther Untuk Pengembangan Media Pengenalan Tata Surya Berbasis Virtual Reality. *BIOS: Jurnal Teknologi Informasi dan Rekayasa Komputer*, 1(1), 1–14.
- Rakadea, A. J., Ramdhan, Z., & Sumarlin, R. (2021). Meningkatkan Apresiasi Masyarakat Terhadap Desain Grafis Storyboard Design for “Appreciation” 2D Animation in Increasing Community’ S Appreciation of Graphic Design. *E-Proceeding of Art & Design*, 8(6), 3204–3213.
- Rusydi, T., Darmawan, D., & Hermawan, H. (2020). Penggunaan Multimedia Interaktif Model Tutorial untuk Meningkatkan Aktivitas Belajar dan Hasil Belajar Siswa pada Materi Adaptasi Makhluk Hidup. *Jurnal Teknologi Pendidikan dan Pembelajaran*, 5, 852–873.
- Syahputra, A., & Kurniawan, E. (2019). Perancangan Aplikasi Multimedia Pembelajaran Iqro’ Menerapkan Konsep User Centered Design. *JURTEKSI (Jurnal Teknologi dan Sistem Informasi)*, 3(2), 117–129. <https://doi.org/10.33330/jurteks.v3i2.309>
- Tabrani, M. B., Puspitorini, P., & Junedi, B. (2021). Pengembangan Multimedia Interaktif Berbasis Android pada Materi Kualitas Instrumen Evaluasi Pembelajaran Matematika. *Jurnal Inovasi Teknologi Pendidikan*, 8(2), 163–172. <https://doi.org/10.21831/jitp.v8i2.42943>
- Zamzami, R. (2020). *Bina Pribadi Islami Tingkat Dini Seri 1A* (A. P. Pratama (ed.)). JSIT Publishing Indonesia.
- Zulfan, Z., Sa’adah, N., Mustafa, S., Munawir, M., Erdiwansyah, E., Susmanto, S., & Hidayat, T. (2021). Perancangan Storyboard Konten Animasi 3 Dimensi Untuk Edukasi Anak Usia Sekolah Dasar Tentang Mitigasi Penyebaran COVID-19. *Jurnal Serambi Engineering*, 7(1), 2547–2553. <https://doi.org/10.32672/jse.v7i1.3710>