

Learning Media for Introduction to Messages and Readings of Obligatory Prayers Based on 3-Dimensional (3D) Animation

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ABSTRACT

One of the challenges for parents in teaching obligatory prayers to children is that children are less interested in paying attention to their parents' explanations. To address this challenge, innovation is needed, one of which is by utilizing 3-dimensional (3D) animation to be developed into a learning medium. Because with the existence of obligatory prayer learning media based on 3-dimensional (3D) animation, it becomes something new and interesting for children in learning obligatory prayers. This learning media has 3 (three) features to help deliver learning about obligatory prayers, namely the obligatory prayer procedure menu to learn the stages of prayer in detail, the obligatory prayer menu to provide an understanding of the obligation of prayer and a short surah menu to facilitate memorization. This learning media is in the form of a desktop built using the Unity game engine, with the Luther-Sutopo development method. The design of this learning media has been successfully implemented, proven by blackbox testing, with the results obtained that all features in this learning media can run 100% according to their objectives.

INTRODUCTION

Islamic religious education is very important to shape the character of children who obey the commandments of the Islamic religion (Muhammad et al., 2019). Therefore, religious education has begun to be instilled in children at an early age, when the child is going through the golden age, which is the most appropriate time to instill religious education, especially the fardhu prayer, to become a habit of practicing one of the obligations of Muslims, namely the fardhu prayer (Mavianti et al., 2022). Rasulullah SAW said, "Order children to pray when they are seven years old and beat them if they leave them when they are ten years old and separate the beds between them. (HR. Abu Daud." For parents or teachers as second parents at school, they have a very important role in teaching children the correct way to perform fardhu prayers (Dasar et al., 2022).

Prayer is a form of worship consisting of specific words and actions, beginning with takbiratul and ending with a greeting, with certain conditions and pillars (Imam Al Ghazali). Therefore, prayer consists of two elements: the verbal element, which includes the prayer recitations, and the movement element, which encompasses the prayer movements. Additionally, the conditions and pillars of prayer must be performed correctly to ensure the prayer is valid (Laela & Setiawan, 2021). However, currently, parents are experiencing problems with religious instruction at home regarding the procedures for obligatory prayers because children prefer playing with gadgets. Therefore, parents often complain about the difficulty in teaching their children about religion, especially regarding obligatory prayers and memorizing their recitations.

Based on the problems experienced by parents, action is needed to address them. One solution is to utilize 3D animation-based learning media to introduce movements and recitations for obligatory prayers as a supporting tool in delivering the material. With the help of 3D animation, young children will tend to be more interested in imitating the movements and expressions of the characters as part of their nonverbal communication (Paulus, 2021).

In addition, with the help of 3-dimensional (3D) animation, children will find it easier to understand each movement of the obligatory prayers, because 3-dimensional (3D) animated images have the advantage of a realistic appearance that is equipped with structured animation movement effects, so that the procedures for obligatory prayers in this learning media can be conveyed clearly and coherently.

THEORETICAL REVIEW

Instructional Media

Learning media is a tool that helps educators deliver material to students, stimulating their thinking and interest in the learning process. Currently, learning media is widely used as an alternative in teaching and learning activities to facilitate the delivery of material and achieve learning objectives. This is because learning media can create a more lively classroom atmosphere, facilitate understanding of the material presented, increase student enthusiasm through

various learning strategies, and motivate students to learn more actively (Rosanaya & Fitrayati, 2021).

Learning media has several types such as print media, image media to technology media with multimedia themes or interactive animations, with the presence of multimedia learning media can improve the quality of learning, because it is able to convey material visually and dynamically which can increase children's interest in paying attention to the material presented through interesting animated images (Maghfiroh & Suryana, 2021).

Obligatory Prayer

Prayer is a form of worship by Muslims to Allah SWT by carrying it out in the form of words (prayer reading) and deeds (prayer movements) which begin with takbiratul ihram and end with greetings in accordance with the established pillars of prayer (Efendi, 2019).

Fardhu prayer is an obligatory prayer that, if done, will get a reward from Allah SWT, and if left out intentionally, will result in a sin. Fardhu prayer consists of Fajr, Midday, Asr, Maghrib, and Isha', all of which must be performed according to each prayer schedule when the call to prayer has sounded to form a Muslim's spiritual attitude, so that he can refrain from immoral acts (Dasar et al., 2022)

Introduction to Prayer Movements

The movements of prayer are the stages of prayer, beginning with standing upright facing the Qibla and ending with a greeting if the person is able to do so. If unable to stand, a person is permitted to pray sitting or lying down to make it easier for Muslims to perform the prayer in any situation (Oktaviai et al., 2020).

In obligatory prayers, there are movements that must be carried out correctly; these movements include (Mauidhoh, 2019):

1. Stand Up Straight
2. Takbiratul Ikham
3. Arms Crossed
4. Ruku'
5. I'tidal
6. Prostration
7. Sitting between Two Prostrations (Sitting Iftirasy)
8. Early Tahiyat Sitting
9. Final Tahiyat Sitting
10. Greetings

It can be concluded that prayer movements are physical manifestations of prayer worship that must be performed correctly to ensure the prayer remains valid.

Introduction to Prayer Readings

Prayer reading is one of the obligatory pillars of prayer, containing verses that must be read when performing it. Prayer readings are prayers to Allah SWT, which must be done with correct pronunciation. The readings in prayer include (Umah, 2020):

1. Intention
2. Iftitah Prayer
3. Al-Fatiha
4. Short Letter
5. Ruku' reading
6. I'tidal reading
7. Prostration Recitation
8. Reading Sitting between Two Prostrations
9. Reading the Initial Tahiyat Prayer
10. Reading the Final Tahiyat Prayer
11. Greetings

The conclusion is that the prayer reading consists of sentences containing verses from the Qur'an, serving as prayers and reminders of the greatness of Allah SWT. These must be recited correctly during the prayer service to ensure the prayer remains valid.

Animation

Animation comes from the word "to animate," which means to move or bring to life. Animation is the process of creating motion effects or changes in shape that occur over time, displaying images sequentially with illustrations or movement to give the impression of life to an object (Sumantri & Sumadewa, 2020).

Animation is often used as a visual medium to convey information, such as learning materials, advertisements, and announcements, in an interesting and easily understandable way for the audience. Animation combines sound, images, and audio to make it easier for the audience to understand something. Examples of the application of animation are 2-dimensional (2D) animation and 3-dimensional (3D) animation, both of which have differences because 2-dimensional (2D) animation can only move on two sides (x, y), while 3-dimensional (3D) animation can move on all sides. Apart from that, the purpose of creating animation is to display images sequentially, giving the impression of movement or motion to the audience (Zebua et al., 2020).

The conclusion is that animation is an image with the illusion of systematic movement, giving the impression of life to objects used as supporting media for representing information, making it easier for others to understand.

3 Dimensions (3D)

3-dimensional (3D) images have three physical dimensions: width, height, and depth. This image has advantages in its appearance because the 3-dimensional (3D) display resembles the original form and looks real, while animation involves moving an object statistically to make it look alive. So 3-

Dimensional (3D) Animation is an image that moves sequentially to create a lively and realistic impression, making the audience more interested in watching it and easier to understand the message conveyed (Sumantri & Sumadewa, 2020). 3-dimensional (3D) animation can be seen from all directions; for this reason, 3-dimensional (3D) animation is often used as a learning medium because it has a flow that can stimulate students' minds in understanding the material presented, so that learning objectives can be achieved more optimally (Hidayah & Subarkah, 2019).

METHODOLOGY

The development method used is the Luther Sutopo method, which includes 6 (six) stages. The following is an explanation of the stages of developing learning media using the Luther-Sutopo method:

a. Concept

The Concept Stage (Concept) involves determining objectives, target users, and features presented, among other things.

Title : Learning Media for Introduction to Movements and Readings of Obligatory Prayers Based on 3-Dimensional (3D) Animation

Objective : To present learning materials on the introduction of movements and readings of obligatory prayers based on 3D animation. (3D)

Genre : 3D Animation

Platform : Desktop

Players : Single Player

Target Users : Children aged 4-6 years

Graphics : 3 dimensions (3D)

Features : 3D animated images introducing the movements of obligatory prayers, text and audio of obligatory prayer readings, obligatory prayer materials, and 5 short surahs for learning materials.

b. Design

The Design Phase (Planning) involves preparing program architecture specifications, styles, and displays to describe the learning media workflow before entering the Assembly phase. The role of the learning media to be created is in the form of:

- Use Case Diagram
- Activity Diagram
- Sequence Diagram
- Class Diagram
- Wireframe Design
- Interface Design

c. Material Collection (Material Collection)

The Material Collection Stage (Materials Collection) involves gathering the materials needed to develop learning media. The materials needed to develop this learning media are fardhu prayer learning materials from books, audio materials, texts, and assets.

- Guidebook for Obligatory Prayers

This Fardhu Prayer Guidebook is intended to convey the material on fardhu prayers, which will serve as a reference for compiling learning materials on prayer movements and readings, ensuring they are appropriate.

- Audio Material

The audio materials use a volunteer's voice recording of the obligatory prayers, as outlined in the guidebook. Additionally, voice recordings explain the obligatory prayers and recite five short surahs included in the learning materials.

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- Assets

Asset collection is required in the developed learning media, through graphic asset provider platforms such as Freepik, Sketchfab, and so on.

d. Assembly (Manufacturing)

The Assembly (Creation) stage involves creating learning media, which includes design phases like wireframing and interface design. During this stage, audio recordings are matched to the textbook, and the necessary assets are animated using Blender. The collected assets are then designed in Unity according to the design phase plan for developing learning media.

e. Testing

The testing phase (testing) is the stage where learning media is tested to ensure all features function properly. The testing method used is the Black Box method to ensure the learning media functions correctly and produces output that meets its objectives.

f. Distribution (Distribution)

After the learning media passes the testing phase, the final step is distribution. At this stage, the learning media is distributed by providing the product to parents through a Google Drive share link, which they can use with their children to introduce them to the movements and readings of the obligatory prayers.

RESULTS

The following is the implementation result of the 3D Animation-Based Learning Media System for Recognizing Movements and Readings of Obligatory Prayers, which was developed by the author based on the plan in the previous chapter. The result is the implementation of the previously designed interface. *The following is the implementation result of the program*

Home Page View

Page The beginning is shown on figure.1 as following :



Figure.1 Appearance Page Beginning

Picture 1 is the page that appears first when opening the system. It displays the application title and a "start" button to begin learning. On this page, users can press the "start" button to access the Page Menu.

Page Menu

Page Menu displayed on figure.2 as following :



Figure. 2 Appearance Page Menu

Figure 2 is a Menu Page that contains four (4) menus provided by the system: Tata Method, Prayer Fardhu, Short Letter, and About. Each of these four menus has its own function. The following is an explanation of their functions:

a. Menu Method Prayer "Fardhu"

The "Procedures for Fardhu Prayers" menu directs users to the page for fardhu prayers procedures, where they can select which fardhu prayers to learn about, order method movement, and read obligatory prayer information in 3D animation.

b. Menu Prayer "Fardhu"

Menu Prayer "Fardhu" used for going to page menu prayer obligatory, where users can learn obligatory prayer material which is displayed in text and audio form.

c. Menu "Letter Short "

Menu "Letter Short" used for going to top age menu letter short, where users can choose short letters to learn about reading short letters displayed in text and audio form.

d. Menu " About "

The About a menu is used to go to the About menu page, which contains a description. Short about system Media Learning Introduction Movement And 3D Animation Based Recitation of Obligatory Prayers.

Page Menu Tata Method Obligatory Prayer

Page Menu Tata Method Prayer Fardhu displayed on figure 3 as following :



Figure. 3 Appearance Page Menu Tata Method Prayer Fardhu

Figure 3 is the Page Menu Tata Method Prayer Fardhu, which contains 5 (five) menu choices: Prayer Dawn, Prayer Noon, Prayer Asr, Prayer Maghrib, and Prayer Isha .On page This users canchoose Wrong One menu choice prayer. It is obligatory to learn the procedures for performing obligatory prayers according to one's choice. Each of the five obligatory prayer menu options has its own function. The following is an explanation of their functions .

Menu "Prayer Dawn"

Menu Prayer Dawn displayed on figure 4 as following :



Figure. 4 Appearance Menu Subuh prayer

Figure. 4 is the Menu Prayer Dawn, which contains a learning order method for prayer movements. Dawn is presented in a step-by-step manner, starting from intention and continuing to Which Served. This is presented in a 3D animation and includes obligatory prayer readings, along with audio readings for each movement.

Menu Prayer MIDDAY

Menu Prayer MIDDAY displayed on figure 5 as following:



Figure.5 Appearance Menu Prayer MIDDAY

Figure 5 is the Dzuhur Prayer Menu, which contains instructions on how to perform the movements. prayernooin a way step by step start from intention until regards Which Served in the form of 3-dimensional (3D) animation and equipped with the recitation of obligatory prayers along with audio recitations for each movement.

Menu Prayer Asr

Menu Prayer Asr displayed on figure. 6 as following :



Figure. 6 Appearance Menu Prayer Asr

Figure. 6 is the Asr Prayer Menu, which contains step-by-step instructions on how to perform the Asr prayer, starting from the intention to the greeting, which is presented in the form of a 3-dimensional (3D) animation and is equipped with the recitation of the obligatory prayers along with audio recitations for each movement.

Menu Prayer Maghrib

Menu Prayer Maghrib displayed on figure 7 as following :



Figure. 7 Appearance Menu Prayer Maghrib

Figure 7 is the Maghrib Prayer Menu, which contains instructions on how to perform the movements. Prayer Maghrib in a way step by step start from intention until regards Which Served in the form of 3-dimensional (3D) animation and equipped with the recitation of obligatory prayers along with audio recitations for each movement.

Menu Method Prayer Isha'

Menu Prayer Isha' displayed on figure 8 as following :



Figure. 8 Appearance Menu Isha prayer

Figure. 8 is the Menu Prayer Isha ', which contains a learning order method. Isha prayer movements are explained step by step, starting from the intention to the greeting. This is presented as a 3-dimensional (3D) animation and includes the recitation of the obligatory prayers, with audio recitations for each movement.

Page Menu Prayer Fardhu

The Obligatory Prayers Menu page contains material on obligatory prayers, including their definition, pillars, and requirements. On this page, users can learn about these three topics on each slide . From the 3rd(three) material prayer obligatory, the own function of each, the following is an explanation of its function:

Material Understanding Prayer Fardhu

Material Understanding Prayer Fardhu displayed in the picture 4.9 as following :



Figure. 9 Appearance material Understanding Prayer Fardhu

Figure 9 is the material on the definition of Fardhu Prayer on the first page of the menu prayer obligatory. On page This provides a brief overview of understanding fardhu prayers and the types of fardhu prayers presented in both text and audio formats.

Material Pillars Prayer Fardhu

Material Pillars Prayer Fardhu displayed on figure 10 as following :



Figure. 10 Appearance material Pillars Prayer Fardhu

Figure 10 is the Material Pillars Prayer Fardhu on the second page of the Fardhu prayer menu. This page contains learning about the 9 (nine) pillars or order of performing fardhu prayers, which are displayed in text and audio form.

Material Condition Obligatory Prayer

Material Condition Prayer Fardhu displayed on figure 11 as following :



Figure. 11 Appearance material Condition Prayer Fardhu

Figure 11 is Material Condition Prayer Fardhu on page final from fardhu prayer menu. This page contains learning about the requirements for performing fardhu prayers, which are displayed in text and audio form.

Page Menu Short Letter

Page Menu Short Letter displayed on figure 12 as follows :



Figure . 12 Appearance Page Menu Letter Short

Figure 12 is the Short Letter Menu Page, which contains 5 (five) short letter menu options, namely Al-Ikhlâs, Al-Falaq, An-Nas, An-Nasr, and Al-Ashr. On this page, users can select one of the short letter menu options to learn to read short letters according to their choice.

Of the 5 (five) short letter menu options, each has its own function. The following is an explanation of the function:

Menu Al-Ikhlās

Menu Al-Ikhlās displayed on Figure 13 as following :



Figure 13. Appearance Menu Al- Ikhlās

Figure 13 is the Al-Ikhlās Menu, which includes learning to read Surah Al-Ikhlās. It displays each verse in both running Arabic and Latin writing and is equipped with audio reading.

Menu Surah Al-Falaq



Figure 14. Appearance Menu Al- Falaq

Figure 14 is the Al-Falaq Menu, which includes instructions for reading the Al-Falaq letter. Each verse is displayed in both Arabic and Latin scripts and is accompanied by audio of the reading.

Menu An- Nas

Menu An-Nas displayed on figure 15 as following :



Figure. 15 Appearance Menu An- Nas

Figure 15 is Menu An-Nas Which containing learning reading letter An-Nas displays each verse in the form of Arabic and Latin script that runs and is equipped with audio readings.

Menu An- Nasr

Menu An-Nasr displayed on figure 16 as following :



Figure. 16 Appearance Menu An- Nasr

Figure 16 is the An-Nasr Menu, which includes learning to read the An-Nasr letter. Each verse is displayed in both Arabic and Latin scripts and is accompanied by audio of the reading.

Menu Al-Asr

Menu Al-Asr displayed on figure 17 as following :



Figure. 17 Appearance Menu Al- Assyria

Figure 17 is Menu Al-Asr Which containing learning reading letter al-ashr which displays each verse in the form of running Arabic and Latin writing and is equipped with audio readings.

Page About Menu

Page menu About featured on figure 18 as following :



Figure. 18 Appearance Page Menu About

Figure 18 is the About Menu Page on the Learning Media for Introduction to Movements and Readings of Fardhu Prayers Based on 3 Dimensional (3D) Animation, which contains a description of the system that has been made, and which serves as a form of text and audio.

DISCUSSION

Based on the results of blackbox testing, all features in the learning media system can run at 100% efficiency. This learning media system is considered capable of presenting learning material that introduces movements and readings of obligatory prayers using 3-dimensional (3D) animation.

The challenge was the inability to add supporting images as backgrounds to the 3D animation, which can rotate 360 degrees. The author found a solution to this problem by replacing the background of each obligatory prayer option with a color that corresponds to the prayer time, differentiating them. As a result, this 3D animation-based learning media for the movements and recitations of obligatory prayers was successfully implemented.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of blackbox testing, all features in the learning media system can run at 100% efficiency. This learning media system is considered capable of presenting learning material that introduces movements and readings of obligatory prayers using 3-dimensional (3D) animation.

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FURTHER STUDY

Based on the results of the research conducted, for success in learning the rules of obligatory prayer for children, collaboration with schools and early childhood education services is needed to provide policies related to religious

learning for early childhood which are applied to early childhood education and kindergarten schools.

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REFERENCES

- Caprara, GV, & Zimbardo, PG (2004). Personalizing politics: A congruence model of political preferences. *American Psychologist* .
<https://doi.org/10.1037/0003-066X.59.7.581>
- Diener, E. (2000). Subjective Well-Being: The Science of Happiness and a Proposed National Index. *American Psychologist* .
<https://doi.org/10.1037/0003-066X.55.1.34>
- Haerani, S., Parmitasari, RDA, Aponno, EH, & Aunalal, ZI (2019). Moderating the influence of age on personality and behavioral drivers on driver outcomes. *International Journal of Human Rights in Health Services* .
<https://doi.org/10.1108/IJHRH-08-2017-0040>
- Lusardi, A., Mitchell, O.S., & Curto, V. (2010). Financial literacy among young people: Evidence and implications. *National Bureau of Economic Research* , 358–380. Retrieved from <https://www.nber.org/papers/w15352.pdf>
- Sabri, M.F., & MacDonald, M. (2010). Saving Behavior and Financial Problems Among College Students: The Role of Financial Literacy in Malaysia | Sabri | Cross-Cultural Communication. *Cross-Cultural Communication* .
<https://doi.org/10.3968/j.ccc.1923670020100603.009>