

BETUL SAF SOLAT: GAME OF COMMON MISTAKES IN SAF SOLAT

*Muhammad Nurhazim Haridan¹, *Muhammad Hamiz Mohd Radzi², Fadhlina Izzah Saman³,
 Mohammad Bakri Che Haron⁴

¹²³⁴Universiti Teknologi MARA Cawangan Melaka Kampus Jasin

*Corresponding author's email: hamiz9620@uitm.edu.my

ABSTRACT

Covid-19 pandemic hits us all with new normal being practiced. As to control the virus from spreading, all religious activities are advised to be done at home including Muslim Prayers. Muslim prayers also known as *Solat* is a form of meditation, and Muslims are asked to pray five times a day at specific times of the day. The term of the prayer is, it must meet and obey all the precepts of the prayer and if one of the conditions is not fulfilled, then the prayer is invalid. As we need to learn the correct way to perform *Solat* in our own home, valid resources can be referred such as in books, articles, and journals, but mostly, people will search it online by browsing the official religion department websites. However, most information in official religious websites is in text-based approach which are not suitable for some readers with shortcomings primarily in higher-level systems as they have trouble to understand if there is too much text-related information. To tackle the problem, interactive learning material '*Betul Saf Solat*' game is designed and developed by following the steps in Game Development Life Cycle (GDLC) methodology. Elements of gamification is applied where user can choose the right course of action for 11 levels in *Saf Solat*. Every mistake made by the players will trigger the explanation of the correct action needed to make they learn about the mistake is placing the *Saf Solat* for the characters designed in the game. The game is then evaluated through System Usability Scale (SUS) model. The result of the evaluation shows that 88.75% of respondents found the game is usable. Hence, it can be concluded that the objectives are all achieved, and it is hoped that more mistakes in *Solat* can be added as game features to make it comprehensive rather than only *Saf Solat* is being focused on.

Keywords: Saf, Solat, Mistake, Game, GDLC

1. INTRODUCTION

Covid-19 has been with us for almost 2 years already. There are a lot of new variants being mutated, the spread of infection became the main concern. All religious gatherings were prohibited (Elengoe, 2020) which include Muslim Prayer. Islamic prayer, usually defined by the Arab word *Solat*, is a form of meditation (Alwasiti et. al., 2010), and Muslims are expected to pray five times a day at specific times of the day. It is a religious physical activity involving different recitations of the *Qur'an* and the performance of specific postural positions such as standing, bowing, prostration and sitting. The terms of the prayer (*Rukun Solat*) are, it must meet and obey all the precepts of the prayer and if one of these conditions is not fulfilled then the prayer is invalid.

There are things that cancel the *Solat*. This means that the prayer is not valid and is invalidated if this behaviour is to be repeated (Jabatan Agama Islam Perak, 2019). There are a lot of questions about *Saf Solat* that has been asked by a variety of people according to official religion department websites. Some of the questions are about how to perform *Solat* with only two people in the *saf* (correct positioning) and how to *Solat* with a chair in the *saf* (Pejabat Mufti Wilayah Persekutuan, 2020). Currently, there are a lot of valid sources that give the information about *Solat* and the mistakes in *Saf Solat* such as in books, articles, journals, and the official religion department website. The figure below is the example of the list of websites that publish the information about the mistake in *Solat* and the mistakes in *Saf Solat*:

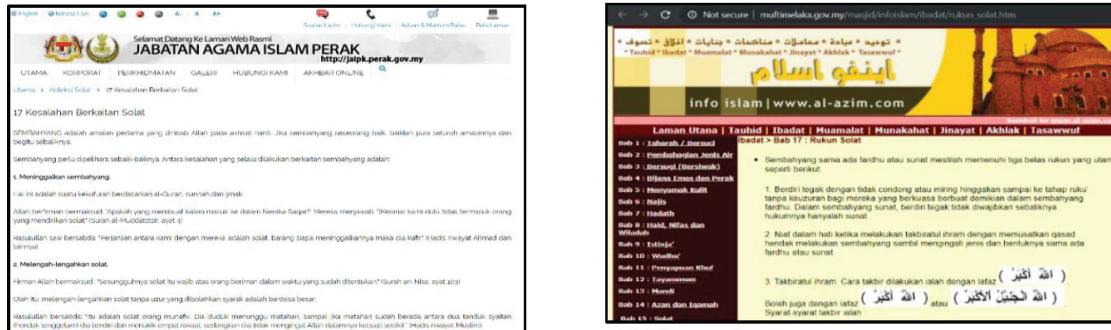


Figure 1. Official Religion Department Website

However, it is all in text-based approach for the user to read. The text-based approach will give some problems to the readers. Readers with shortcomings primarily in higher-level systems, such as executive function abilities, have trouble finding central or main concepts in a text and tracking their understanding. Similarly, weaknesses in other executive functions have been found to contribute to understanding issues in reading. For example, readers with executive function skills deficits demonstrate planning and organizing difficulties (Locascio et al, 2010) and impede reading comprehension, especially when the text at hand is complex and long.

Therefore, one of the ways to tackle the problem is through the interactive learning material. Over the past few years, digital learning games have become a medium of reference in the field of education. Their popularity can be explained mainly by the enormous amount of leisure time children and teenagers spend playing video games (Granic et. al, 2014). Game-based learning is based on entertainment as well as education; it offers new entertainment experiences and uses a delivery mode that is typically paired with other methods (Deterding, 2011). It is therefore possible to develop mistakes in *Saf Solat* with a game-based learning process.

The scope of this project is for the public user especially the *Muslims*. The game is in 2-Dimensional (2D) design with animation. The game covers common mistakes in *Saf Solat* such as the position of standing in congregational prayer, the position of a chair in *Saf Solat* and the priority of *Makmum* in *Saf Solat*. Users will be given a situation during *Solat* and they need to choose the right course of action to gain points. By gaining points, the user will know how much knowledge they acquired about mistakes in *Saf Solat*. This game based-learning application will be using the Malay language for the interface and instruction.

2. MATERIALS AND METHODS

The Game Development Life Cycle (GDLC) was chosen as the method of developing the game. The GDLC is proposed to address the three research questions: which steps are required to develop a game, what performance requirements developers need to consider in each stage, and how to create a good quality game. The stages in GDLC are shown in Figure 2.

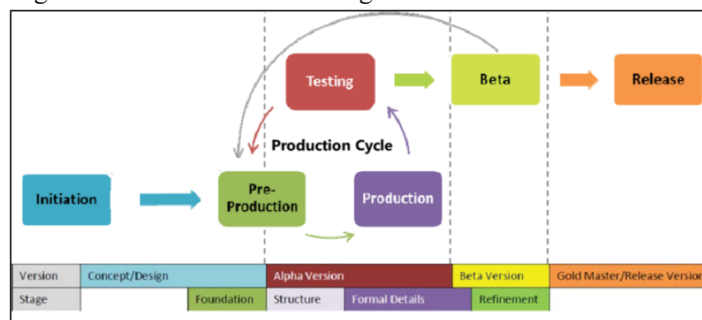


Figure 2. Game Development Life Cycle Stages

The GDLC suggested above is just steps taken to build a game that stops at Beta stage as release means the game is commercially published to the public. The guidelines were made to complement the GDLC request to create and produce the game successfully. It consists of an introduction of game

development, role management, initiation, pre-production, production, testing, beta testing, and release (Ramadan, 2013).

The initiation performance is the definition of the game and a basic explanation of the game. The chapter on initiation provides methods for generating ideas and game theories which when problems are identified, a suitable scope which is for *Muslims* to get to know the correct position in performing *Solat*. Then, in the pre-production stage, the game concept is determined as follows in Table 1.

Table 1. Game Concept

Criteria	Criteria
Genre	Puzzle Games
Theme	Situation in <i>Solat</i>
Content	Game-based learning for <i>Saf Solat</i>
Gameplay	Drag and drop player in the right place to get score and proceed to next level
Challenge	To choose the right course of action
Platform	Computer game

The production stage focuses on programming and the creation of resources. The guidelines include different types of assets, methods for achieving defined performance requirements, and examples of game architecture changes. All of them are listed in a checklist that is accessible. The software that was used for this project is Adobe Animate, Unity and Blender. Adobe Animate can be used to design 2D characters, meanwhile, Unity and Blender can be used as the game development. The programming language for Adobe Animate, Unity and Blender are ActionScript, C++ and C#.

For testing, in each prototype stage and example of each test method, the test chapter provides test methods related to each quality criteria. Testing in this context means testing the usability and playability of the game internally. In the Beta stage, it discusses the significance of beta testing, beta testing style, and provides the playtesting methods, checklist, and questionnaire sample which for this game, the evaluation model that is used is System Usability Scale (SUS) model. This model will be used to evaluate the usability testing in-game.

3. RESULTS AND DISCUSSION

The characters are designed which include 4 main characters, male and female adult and a boy and a girl. Figure 3 below shows one of the character developments processes and its main menu.

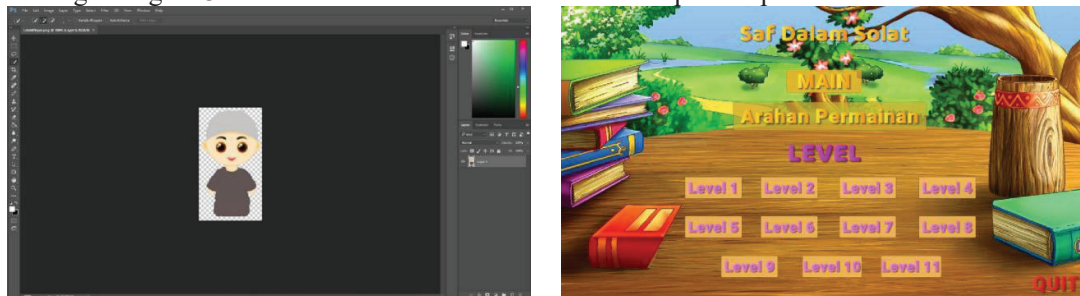


Figure 3. A boy character design process and main menu screen.

There are 11 levels in this game which each level will have a different situation on placing the characters into the correct *Saf Solat*. The user needs to drag the character in the correct place as required in *Rukun Solat*. If the user answers it wrong, the correct information will be given to them as the knowledge that they can acquire regarding the mistake in *Saf Solat* as shown in Figures 4 and 5.



Figure 4. Instruction is given to the user, and they can drag the character into the correct *Saf Solat*.

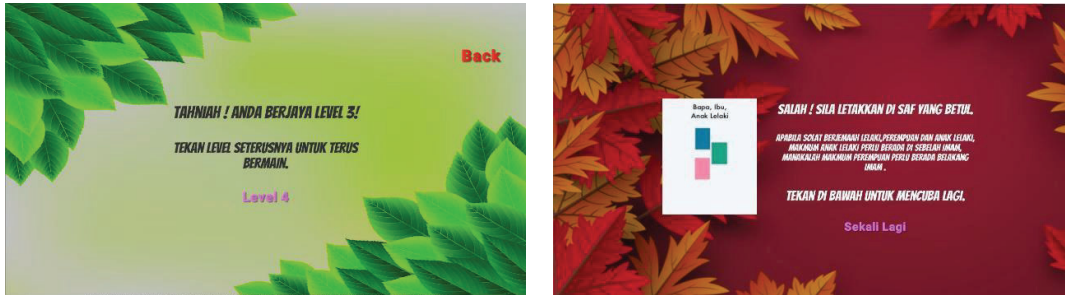


Figure 5. Successful/Failed message is given if they drag the character into the correct/incorrect *Saf Solat* position.

The game is evaluated by using SUS to determine whether the game is used for learning. All the testers have been briefed and a demo will be shown before they start testing the game to run successfully for the project testing. Desktop machines are set up to test the game for the 10 testers to play check immediately before the game end. For testing the game about 2-5 minutes per tester. Once the students had played the game, they were given a collection of System Usability Scale (SUS) model questionnaires to measure the usability. The result is tabulated in Table 2.

Table 2. Total score and mean value for each item

Item	Scale					Cumulative Score	Mean Value
	1	2	3	4	5		
Q1	0	0	6	16	20	42	4.2
Q2	7	6	0	0	0	13	1.3
Q3	0	0	0	16	30	46	4.6
Q4	8	4	0	0	0	12	1.2
Q5	0	0	0	12	35	47	4.7
Q6	7	6	0	0	0	13	1.3
Q7	0	0	0	24	20	44	4.4
Q8	7	6	0	0	0	13	1.3
Q9	0	0	3	28	10	41	4.1
Q10	7	6	0	0	0	13	1.3

The overall SUS score is determined to assess the acceptability of the game's usability. The result produces a value of 88.75 for the SUS score. This shows that 88.75% respondent agree that this game fulfills the usability testing evaluation which to determine the usability of the learning in the game.

4. CONTRIBUTION AND USEFULNESS/COMMERCIALISATION

The contribution of this *Betul Saf Solat* game is, the users can gain knowledge while playing the game to know the correct *Saf Solat* position. This game has the potential to be commercialized especially to those who are at the beginning stage of learning *Saf Solat* correct position. This game can be included in the official religion department website where the user will have options to read the information given or to test their knowledge on the *Saf Solat* position by playing the game before or after reading as the game will also provide some information if needed. It will both benefit the users and the developer of this game.

5. CONCLUSION

In conclusion, *Solat* is important as a *Muslim* as it is compulsory to be performed daily at a certain time. *Solat* will be invalid if there is a mistake done while performing it such as wrong positioning in *Saf Solat*. Hence, from the development of the game, instead of having the text-based knowledge from the official religion department website, the users who want to gain the knowledge can get it interactively by using the digital learning alternative. As the game is providing information, it can be used as digital learning material that can be embedded in the official religion department website. As the usability result is considered useful, it can be used to be commercialized with the good purpose of gaining knowledge interactively.

REFERENCES

- Alwasiti, H. H., Aris, I., & Jantan, A. (2010). EEG activity in Muslim prayer: A pilot study. *Maejo International Journal of Science and Technology*, 4(3), 496–511.
- Deterding, S., O’Hara, K., Sicart, M., Dixon, D., & Nacke, L. (2011). Gamification: Using game design elements in non-gaming contexts. *Conference on Human Factors in Computing Systems - Proceedings*, (May 2014), 2425–2428. <https://doi.org/10.1145/1979742.1979575>
- Elengoe A. (2020). COVID-19 Outbreak in Malaysia. *Osong public health and research perspectives*, 11(3), 93–100. <https://doi.org/10.24171/j.phrp.2020.11.3.08>
- Isabela Granic, Adam Lobel, and Rutger C. M. E. Engels (2014), The Benefits of Playing Video Games, *American Psychological Association* 0003-066X/14/ Vol. 69, No. 1, 66 –78 DOI: 10.1037/a0034857
- Locascio, Gianna & Mahone, E & Eason, Sarah & Cutting, Laurie. (2010). Executive Dysfunction Among Children With Reading Comprehension Deficits. *Journal of learning disabilities*. 43. 441-54. 10.1177/0022219409355476.
- Pejabat Mufti Wilayah Persekutuan - AL KAFI #912 : SIAPAKAH YANG SEPATUTNYA MENGISI KEKOSONGAN SAF. (n.d.). Retrieved July 14, 2020, from <https://muftiwp.gov.my/en/artikel/al-kafi-li-al-fatawi/2794-al-kafi-912-siapakah-yang-sepatutnya-mengisi-kekosongan-saf>
- Ramadan, Rido & Widyani, Yani. (2013). Game development life cycle guidelines. 95-100. 10.1109/ICAC SIS.2013.6761558.