



The Designing Gameplay of Spiritual Journey Augmented Reality Board Game to Enhance User Motivation

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ABSTRACT

Games and augmented reality (AR) are among the technologies that are now gaining a place in the hearts of users, using the latest user interaction (UI) and capable of providing an interactive and extensive learning environment, this is proven by the increasing number of studies. Previous studies have shown that these two technologies can improve and motivate students and make the learning process more unique and fun. However, user acceptance of interface design augmented reality board games (ARBG), features and interface elements that can increase player motivation is still underexplored and its development model is diversified. Therefore, in order to realize the objective, the use of verses from the Qur'an that have been selected and screened that contain motivational verses have been adapted into this ARBG. The statement was confirmed as a result of our initial investigation through a previous study which revealed that there is still no study using Al-Quran Verses as a medium in ARBG, especially in increasing user motivation. In order to realize the goal, the use of the U2SIC Model, the combined results (UTAUT model, usability model and intrinsic model) have been used as a guideline. Therefore, a total of 100 University Sultan Zainal Abidin student respondents were selected and asked to do a post-test evaluation of our ARBG Spiritual Journey prototype. Where, this ARBG Spiritual Journey is a board game that requires players to identify and match visual images with the translation of Al-Quran verses that have been categorized into 3 fractions namely caution, prayer and alert. Therefore, in order to give space to players to further increase their intrinsic motivation, this ARBG was developed without having time and score records. Therefore, it is hoped that the combination of ARBG technology that applies the verses of the Qur'an will be a source of inspiration, a spark of ideas, able to attract students' interest, improve the identity of users, motivate and further inspire researchers to explore more areas of technology along with the Qur'an in future.

Keywords:

Game design; augmented reality board game; Quranic verses; intrinsic motivation; student engagement

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1. Introduction

The integration of games and augmented reality (AR) has transformed education, offering engaging and motivating tools for improved learning outcomes [2,13]. While widely studied in educational contexts, the incorporation of Quranic verses as motivational elements within AR-based educational games (ARBGs) remains underexplored. Previous studies highlight the Quran's role in character education, promoting values like honesty, discipline, hard work and mental well-being.

Findings from the study (N=100) revealed that 86.2% of participants strongly agreed that motivational translations of Quranic passages provide enlightenment and boost motivation. Similarly, 86.8% of participants strongly agreed that these translations foster inner tranquillity. This underscores the potential of Quranic verses to enhance motivation and well-being within ARBGs, paving the way for further research.

Table1

Descriptive statistics of the users' perception on the efficacy of Quranic verses usage in the ARBG prototype

Item ID	Item	mean	S.D.	%
MT1	I can become enlightened by using motivational translations of Quranic passages.	4.31	0.76	86.2
MT2	I can be motivated by the usage of inspirational translations of Quranic texts.	4.31	0.79	86.2
MT3	The usage of motivational translations of verses from the Quran can give me tranquilly.	4.34	0.73	86.8

(n=100)

Our preliminary research, which involved a review of existing studies, revealed a notable gap in the literature. To our knowledge, no previous study has examined the use of Quranic verses as a medium to increase user motivation in the context of ARBGs. Furthermore, the broader exploration of motivation enhancement within this intersection of technology and spirituality remains relatively uncharted territory for researchers. Therefore, this study aims to bridge this gap by leveraging the potential of gamification and augmented reality to incorporate motivational Quranic verses, creating what we refer to as the "Spiritual Journey" ARBG.

To guide our research and development process, we will employ the U2SIC Model (Figure 1), which offers a structured framework for questionnaire development, design and implementation. By integrating ARBG technology with Quranic verses, we seek to pique the interest of students, enhance their sense of identity and inspire further exploration of this innovative field by researchers. Our study explores the synergy between technology, spirituality and education, with the hope of fostering a deeper understanding of how these elements can converge to enhance the learning experience and motivation of students. As we embark on this journey of exploration, it is our belief that the intersection of gamification, augmented reality and Quranic verses holds great promise for educational innovation. This research endeavours to shed light on the potential benefits of this integration and inspire future endeavours in this evolving field.

2. Related work

In examining the integration of Augmented Reality (AR) into the gaming industry, this section explores the evolution of AR technologies and their transformative impact on gaming experiences [12,14,21,24]. Notable successes, such as Pokémon GO [25] and Ingress, serve as case studies to illustrate the compelling fusion of physical and digital worlds, revealing how AR enhances user engagement and motivation through immersive gameplay. While, for board games have long been recognized for their educational value, offering cognitive benefits and fostering learning outcomes

through interactive play [13,15,19]. This study investigates historical studies that demonstrate the effectiveness of board games as a tool for education and personal development, setting the stage for exploration of how AR technology can be used in the game board.

The narrative power of games that combine spiritual themes (Al-Quran verse) [20.23], adventure and motivation are analysed, highlighting how storytelling and immersive environments contribute to an immersive gaming experience. This section describes a spiritual journey game that utilizes the concept of AR technology to attract user engagement through a narrative enriched with interactive elements. Because of that, the key design principles for AR gaming are outlined, emphasizing best practices for integrating AR with game mechanics in a manner that enriches user experience (UX) [22]. This includes addressing the unique challenges of melding AR technology with physical game components, such as those found in board games, to enhance player immersion and motivation. Therefore, what is trying to be revealed in this paper is the design of a game with several gameplays that have been produced.

3. Design

To design the proposed approach, a spiritual journey adds a reality board game to increase intrinsic motivation, a model of instructional design. Known as (U2SIC Model in Figure 1) is used to provide guidelines in carrying out the development process, design and development of the questionnaire. Thus, the use of the UTAUT Model in 2003, from Venkatesh, Morris and Davis, successfully developed the Integrated Technology Acceptance and Use Theory (UTAUT). A model to unify eight leading models of previous user IT adoption and use. The UTAUT model can account for 70 percent of the variance in usage intention, which is found to be better than any user acceptance model [13]. This is because, we only use the elements: intrinsic, behavioural intention, performance expectations, social influence associated with experience, gender and age shown in (Figure 1). Therefore, it is expected that this combination of ARBG technology that uses the application of the verses of the Quran can attract students' interest, improve user identity and further inspire researchers to explore this field in the future. Therefore, the next subsection describes the steps involved in this study.

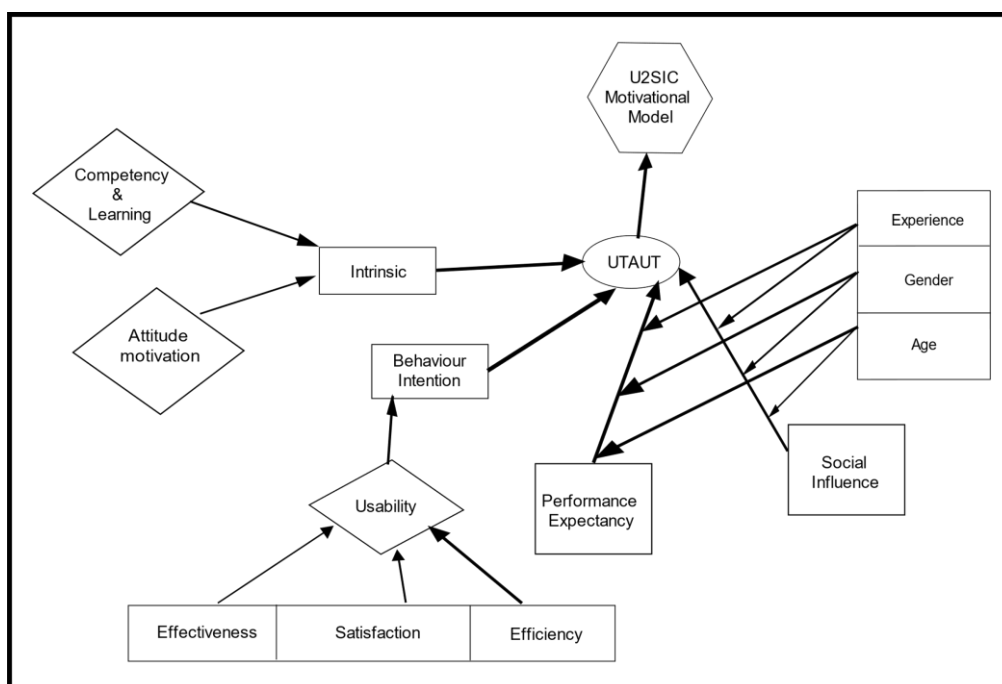


Fig. 1. Proposed model user acceptance component U2SIC motivational model

3.1 Module of Spiritual Journey Prototype Design

The interface for the board game is displayed in Spiritual Journey's main module. Each board is divided into four sections, each containing the numerals 1 through 10 in various colour configurations. This indicates that the player has ten tasks to finish and the colours beneath the box stand for the different categories of Quranic verses that must be finished before pressing the start button. The Spiritual Journey board game's interface is seen in Figure 2.



Fig. 2. The interface Spiritual Journey board game design

While Figure 3 describes the Quranic verse categories and colour categories that the potential player will encounter while completing the job.

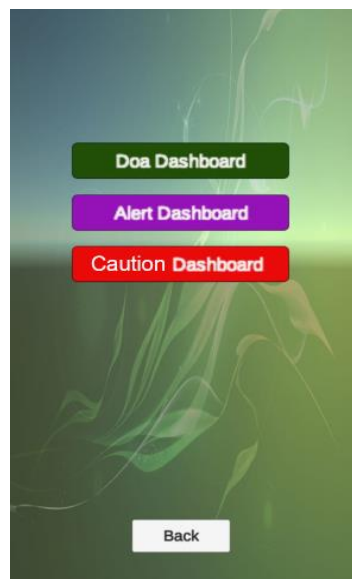


Fig. 3. Colours and the categories of verses of the Quran

3.1.1 Doa's module

The idea of the doa's module, as depicted in Figure 4 and 5, is to connect visuals with verse translations from the Al-Quran. As a result, each icon will be given a label based on the scenario before the students begin the task, which will obliquely help the students find a match. As a result, students must answer seven questions about an interface. The pupils' preferences determine the questions that are chosen at random. After providing an incorrect response, the user will have the option to rephrase the question as many times as they like and select a different one. In the event that the user provides the right response, they will go to the next stage, which can be scanned with a marker to reveal the illustration for the right response and view an AR video or play audio of Quranic verses that indicate which translations are meant. The fact that the user is not assigned a certain amount of time for each level of the game gives them the chance to fully explore and comprehend each sentence's meaning.

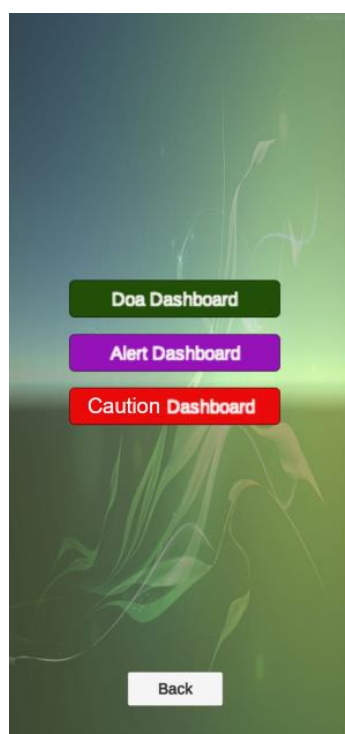


Fig. 4. Colours and the categories of verses of the Quran



Fig. 5. The interface of Do'a dashboard

3.1.2 Alert module

The principle of combining pictures with verse translations from the Al-Quran is still used by the Alert module, as seen in Figure 6 and Figure 7. As a result, each icon will be given a label based on the scenario before the students begin the task, which will obliquely help the students find a match. Students must so respond to seven questions regarding a mobile interface. The pupils' preferences determine the questions that are chosen at random. After providing an incorrect response, the user will have the option to rephrase the question as many times as they like and select a different one.

While for the correct answer, the user will go to the next phase, where the student has the opportunity to scan using a marker that displays the illustration for the correct answer to see augmented reality in the form of a video as in Figure 8 and Figure 9 or can play the audio of the verses

of the Quran which shows the intended verses in the translation. Each level of the game is not given a certain time to the user, this provides an opportunity for the user to dive into and understand more the meaning of the sentence in more detail.

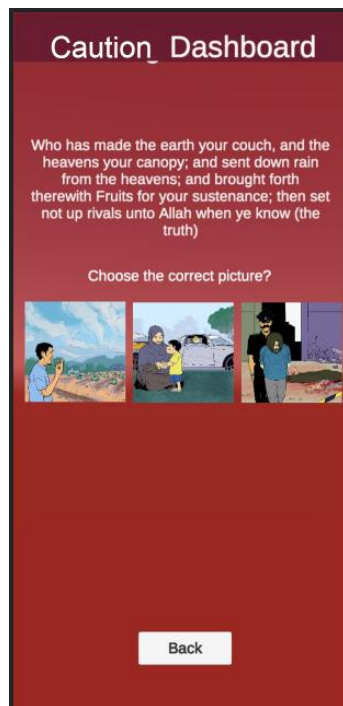


Fig. 6. The pieces then come to choose the correct answers



Fig. 7. The pieces then come to respond the answer and shown augmented reality in audio



Fig. 8. Interface for scan AR and play audio



Fig. 9. The video of augmented reality pops up

3.1.3 Caution module

This Caution module, which is based on matching images with the translations of Al-Quran verses, keeps the same game premise as the prayer and alarm modules. As a result, each icon will be given a label based on the scenario before the students begin the task, which will obliquely help the students find a match. Therefore, there are seven questions for an interface that students must answer. The pupils' preferences determine the questions that are chosen at random. After providing an incorrect response, the user will have the option to rephrase the question as many times as they like and select a different one. The user advances to the following phase if they provide the correct response. Here, they can scan a marker that shows the illustration for the correct answer to view an AR video or hear the audio of Quranic verses that indicate which translations are meant. As the player is not assigned a certain amount of time for each level of the game, they have the chance to fully explore and comprehend the meaning of each text.

4. Feature Potential to Enhance User Motivation

AR, which overlays virtual features on the actual world, has become a popular method for enhancing board game experiences. Including a range of components in an AR board game design can boost player motivation by promoting engagement, enjoyment and a desire to keep playing [17]. These features capitalize on AR's unique advantages, including social connection, personalized experiences and lifelike interactions. By carefully utilizing these elements, designers may create compelling and immersive experiences that motivate players to plan, explore and achieve objectives within the game. Thus, the following characteristics of augmented reality board game design are discussed in this section in order to raise the degree of user motivation:

AR allows players to interact with virtual characters and objects in the real world, creating a more realistic and immersive gaming experience. This realism may increase user motivation by creating a sense of presence and involvement [4]. Personalized ARBG can increase player motivation by giving them a feeling of exclusivity and ownership. These games accommodate player preferences and strengthen the bond between the player and the game by letting players alter game components like avatars, environments or gameplay guidelines. One example of a personalized augmented reality experience is the AR board game "Pokémon Go". Players can customize their avatars, catch and collect Pokémon creatures in various real-world locations and personalize their Pokémon training and battling strategies.

By enabling players to express their personality, customize the gameplay to suit their tastes and forge a distinctive in-game identity, these personalization features boost user motivation [23]. Regarding the Spiritual Journey augmented reality board game, the video projection of reading Quranic verses demonstrates the game's realistic and immersive gameplay experience (Figure 9).

Gamification elements can boost player engagement and motivation in ARBG. These elements consist of leaderboards, rewards and accomplishments. These elements provide goals and challenges that encourage players to continue and improve their performance [1].

Gamified progression systems in ARBG can boost player motivation by clearly defining goals, standards and rewards. Experience points, levels, achievements and unlocked content are common features of these systems that encourage players to keep playing by providing them with a sense of advancement. The ARBG "Jurassic World Alive" is one instance of a gamified advancement method. Players gather virtual dinosaurs, level them up and fight to earn rewards and unlock new features. The game uses in-game achievements, experience points and DNA gathering to incentivize players to explore, gather and progress [6].

However, there are also ARBG like "AR detective mystery" that do not prioritize material gains. Instead of relying on explicit rewards such as points or badges, the game focuses on the intrinsic motivation of the players by immersing them in a captivating narrative and engaging gameplay. The game emphasizes the intrinsic enjoyment of solving the mystery and engaging in the immersive storytelling experience.

This ARBG appeals to players' natural curiosity, problem-solving abilities and narrative involvement instead of depending on outside incentives. Players are motivated by their desire to progress in the tale, enjoy the excitement of solving the puzzles and interact with the demanding and thought-provoking gameplay. This example shows how, without explicitly providing rewards, an ARBG may increase player motivation through captivating gameplay mechanics, engrossing storytelling and the intrinsic joy of unravelling secrets. The "AR Nature Explorer" is another example. In this augmented reality board game, players embark on a virtual exploration to learn about and comprehend the surrounding natural environment. Players can explore and interact with virtual flora, animals and geological features which overlays digital elements over real-world landscapes.

The game's incentive stems from the player's innate curiosity and desire to learn about the natural world. Rather than offering obvious prizes, the game emphasizes inquiry, discovery and educational involvement. Players are encouraged to learn new topics, explore new locations and get to know unusual creatures through interactive AR experiences. Excitement comes from discovering undiscovered species, learning new things and getting a deeper understanding of things. This is one of the elements that the ARBG Spiritual Journey tries to employ. Rather than only offering money prizes, the game emphasizes player motivation through exploration, education and appreciating the beauty and originality of the Quranic verses.

By allowing players to alter game aspects like avatars, backdrops or gameplay mechanics, additional features of ARBG can provide personalized experiences. Because it gives gamers a sense of ownership and individuality, customization empowers them and boosts their motivation. Board games with augmented reality integration often have a multiplayer cooperative or competitive element that lets players work together or against each other. These socializing opportunities create a culture of cooperation, friendly rivalry and teamwork, all of which boost motivation. Playing cooperatively [16]. The explanation of multiplayer cooperative gaming ARBG that promote cooperative multiplayer gameplay may increase user motivation by fostering social interaction, collaboration and shared experiences.

These games foster a sense of camaraderie, engagement and mutual support among players by letting them cooperate to achieve a common objective. "Minecraft Earth" is an ARBG that showcases collaborative multiplayer gameplay. Players can team up with others to explore and build structures in AR, combining their creativity, resources and skills. The collaborative gameplay mechanics in "Minecraft Earth" motivate players by fostering cooperation, promoting social interaction and enabling the accomplishment of shared objectives.

Gamers can engage in dynamic and adaptable gaming with AR, where the game world responds to their decisions and actions. This feature keeps gamers engaged and motivated as they encounter fresh challenges and possibilities [11]. A compelling storyline and other storytelling elements can be found in board games that include AR, engaging players in colourful and captivating gaming worlds. By providing an immersive story experience, AR increases user motivation by inspiring a sense of adventure and curiosity [13].

According to Johnson [8], instructional and learning elements can be added to board games with AR, which makes learning fun and interesting. AR can increase user motivation by creating a sense of accomplishment and knowledge improvement through the combination of instructional content and gameplay. The Quranic verses that provide encouragement are broken down into three categories

by the creator of the ARBG Spiritual Journey: verses that function as notifications, do'a and cautions. Every category was designed to offer the player motivation that they might use in their everyday lives.

Board games with AR capabilities have the ability to project pertinent data, animations or effects in real time onto the board or game pieces. This evident and timely feedback reinforces the player's behaviour, piques their curiosity and increases their desire [5]. The AR board game "Harry Potter: Wizards Unite" is an excellent example of real-time dynamic feedback. The game gives players audio and visual feedback to show how successful their spells and magical artefacts are as they cast them, battle and gather points. Players are motivated by this real-time feedback because it provides them with instantaneous information about their performance, allowing them to modify their strategies accordingly [9]. While it doesn't immediately pique the player's interest in playing more and finding Qur'anic verses for self-defence or increased motivation, the use of visual 2D as a marker in the board game about the spiritual journey using augmented reality does make the player feel excited and interested.

Physical and digital elements are harmoniously combined in augmented reality board games to produce an entertaining and distinctive gameplay experience. This integration increases player motivation by providing them with a fresh and entertaining method to play the game [10]. For a more immersive experience, ARBG can integrate multiple senses, including touch, hearing and sight. By appealing to several senses, AR games increase player motivation and offer a more dynamic and engaging gameplay environment.

Board games with AR components offer a novel and innovative play experience. Novelty can boost user motivation because gamers are often eager to try out and engage with new experiences and technology [12,17].

Board games with AR can provide a variety of gameplay experiences, guaranteeing consistency and lowering the possibility of boredom. AR games can keep players interested across several play sessions by offering a variety of challenges, game styles or random factors [17]. ARBGs can promote cooperation and social connection among players through cooperative gaming or by offering social features and communication. These social components foster a feeling of belonging and common experiences, which in turn aids in user motivation [9,10].

5. Gameplay of Spiritual Journey ARBG

AR overlays sound, video and graphics to the current environment while it is visible in real time. Computer images are placed over the perspective of the actual physical environment, altering how reality is perceived in a variety of contexts [2,12,18,25,26]. Augmented reality [8,20] as well as one of the technologies that has attracted a lot of interest, excitement and attention recently is AR, which extends our physical experience by adding layers of digital information to it. According to earlier research, the developed application is more than just an interactive one; it also satisfies the goals and requirements of the user. These criteria are integrated into the ARBG through the process of matching each criterion into the spiritual design of the Journey game through the preparation of specifications. In Spiritual Journey ARBG, the first step user must:

- i. Download this link: <http://greenskill.net/innovaton/spiritual>
- ii. Physical board is available. Throwing the dice will be done to get the number and colour of the box that will be determined. after identifying the number and colour of the box, the user will browse the application and be ready to check the application.

- iii. There are 3 categories that need to be selected visually to match, namely Caution (Red), Alert (Purple) and Prayer (Green). for example: if the user gets a green box (prayer) then the user will make a choice of situation and then read excerpts of interpretations of verses of the Qur'an and try to match them with the given visuals.
- iv. After the user selects the appropriate visual, the application will provide feedback indicating the correct answer. If the user's answer is correct, the user will then have the option to either scan the marker to display AR as a video or press the play and stop buttons to display AR as an audio display (given at random).

6. Interactive

The term “interactive” refers to any digital content or technology that allows for two-way communication or engagement between a user and a computer program or interface. Interactive technologies enable user to actively participate in the experience [7]. Interactive in ARBG design refers to the ability for players to engage with the game and its components in a virtual, three-dimensional space. ARBG use a combination of physical game pieces and a digital overlay to create an immersive gaming experience that allows for unique interactions and gameplay mechanics [3].

Players can engage with the game directly through the spiritual trip board game design by utilizing a mobile device. If they respond erroneously, they will be told right away and if they answer correctly, they will be able to see and hear the Quran being read aloud in both audio and video format. The player can choose the next interface and search for an AR display by manipulating and controlling the consistent use of buttons and icons. The mobile interface display is 1440 x 2960 pixels, using bright colours able to attract interest and increase user motivation, easy to understand and suitable for the level of the target group. In addition to the use of a background colour that is opposite to the colour of the writing, it is hoped that players will be able to clearly see the input presented (Figure 10).

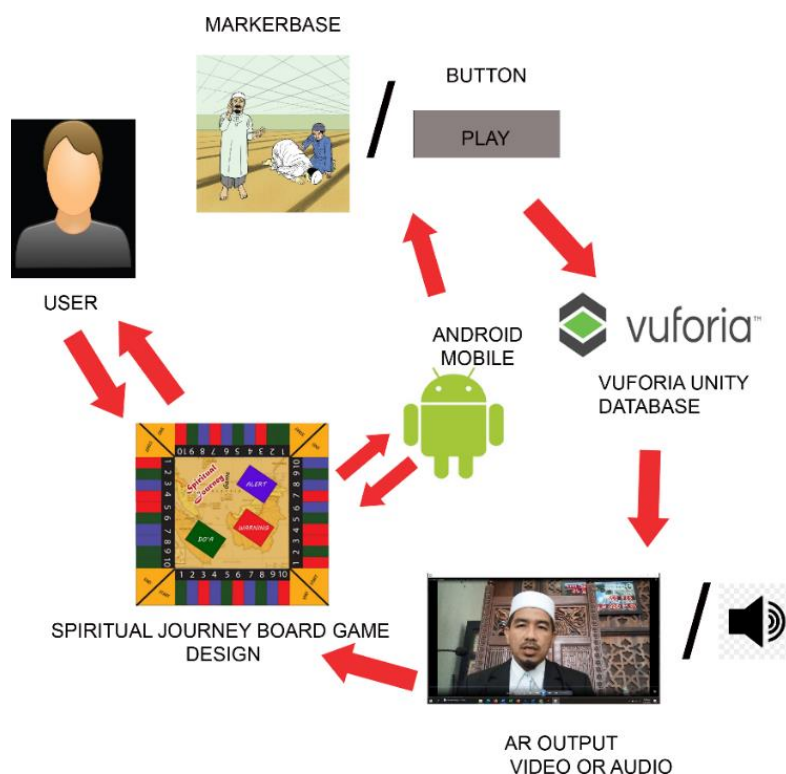


Fig. 10. Output in video or audio augmented reality board game design

7. Element Intrinsic Motivation

The intrinsic motivation element consists of seven criteria, namely intention, al-thabat (belief), devotion and appreciation, al-'afaf, autonomy, mastery and purpose. The Table 2 looks at how those criteria are integrated into the design of the Spiritual Journey ARBG design.

Table 2

The element intrinsic motivation in spiritual journey augmented reality board game design

Intrinsic motivation item	Description	Applied in augmented reality spiritual journey board game
Autonomy	Allow players to have a sense of control and choice within the game. This can involve giving them the freedom to make decisions, choose strategies and explore the augmented reality environment at their own pace.	No Score, no time setting is placed on the interface.
Challenge and Mastery	Design the game to be challenging but achievable. Players should feel a sense of accomplishment and progress as they develop their skills within the augmented reality environment. Gradually increasing the difficulty can maintain engagement.	Players need to read and understand the meaning of the translation of the Qur'anic verse and try to match it with the given visuals.
Curiosity and Exploration	Create an immersive and intriguing AR environment that encourages players to explore and discover. Incorporate hidden elements, Easter eggs or unexpected surprises to spark curiosity and keep players engaged.	Included with the use of augmented reality in the form of audio and video placed randomly in each category to be interesting and immersive.
Social interaction	Foster social connections within the game. Incorporate multiplayer features or collaborative elements that allow players to interact with each other. Social engagement can enhance the enjoyment of the game.	Gives the freedom to play individually or in groups.
Feedback and recognition	Provide immediate and constructive feedback on players' actions and achievements. Recognition of accomplishments, whether through virtual rewards or praise, can contribute to a positive gaming experience.	Provide immediate and constructive feedback on players' actions and achievements by giving notification results and allowing players to use a marker to view the reading video as well as press a button to listen to the recitation of the Al-Quran verse that is chosen to match the player's right or wrong.
Storytelling	Develop a compelling narrative that ties the gameplay together. A well-crafted story can provide context, purpose and emotional engagement, making the augmented reality board game more meaningful for players.	Storytelling based on pieces of interpretation of Al-Quran verses that have been included in 3 modules, namely: Do'a, Alert and Caution module.
Intrinsic reward	Focus on intrinsic rewards such as a sense of accomplishment, personal growth and enjoyment. While some external rewards can be integrated, the emphasis should be on the inherent satisfaction derived from playing the game itself.	Through the verses of interpretation of the Quran itself which has as a sense of accomplishment, personal growth and enjoyment.
Surprise and novelty	Infuse the game with surprises and novel elements to keep players engaged. This could involve unexpected events, dynamic changes in the augmented reality environment or periodic updates that introduce fresh content.	With the presence of augmented reality in the form of audio and video that displays the correct and accurate reading of the verses of the Quran.

immersion	Maximize the immersive qualities of augmented reality. Utilize AR technology to create a seamless blend between the virtual and physical worlds, enhancing the overall experience and making it more captivating for players.	
Flow state	Design the game to induce a state of flow, where players are fully immersed and focused on the task at hand. Balancing the difficulty of challenges with the skills of the players can help achieve this optimal state of engagement.	Players need to focus and understand the written and implied meaning of the interpretation verses before making actions to match the visuals.
Continuous learning	Design the game to facilitate continuous learning. Provide opportunities for players to acquire new skills, knowledge or tactics throughout the gameplay, ensuring a sense of progression and intellectual stimulation.	New skills, knowledge, do'a or tactics throughout the gameplay, ensuring a sense of progression and intellectual stimulation and enhance intrinsic motivation.
Community engagement	Create a community around the game where players can share experiences, tips and achievements. This social aspect can contribute to a sense of belonging and connection, reinforcing players' commitment to the game.	Players can share experiences, knowledge, tips and achievements.
Real-world integration	Integrate real-world elements into the game experience. This could involve using location-based AR features, incorporating physical objects into the gameplay or tying in elements from the player's environment to enhance immersion.	Marker-base usage and augmented reality technology.
Relevance to real-life skills	Connect games to real skills or knowledge. If players can see the practical application of what they learn or experience in the game, it adds to and fosters intrinsic motivation.	Connect the gameplay to real-life skills or knowledge.

Discussion of the findings of the Spiritual Journey ARBG design prototype development study. The summary of the findings of the Spiritual journey ARBG prototype development study is as follows:

- i. The criteria for the design of the Spiritual journey ARBG have been produced and integrated into the design process of the Spiritual journey ARBG. These criteria consist of three elements namely: games, intrinsic motivation and user acceptance.
- ii. Methodology for the development of spiritual journey ARBG design through adaptation of the motivation model and UTAUT model (U2SIC Motivation Model).
- iii. ID model in the form of a conception model has been produced for the development a spiritual journey AR model of board game design.
- iv. A prototype spiritual journey ARBG design has been developed online which is a game compendium consisting of 3 three modules. It can be reached anytime with fast access due to light file size and small game engine. In other words, students can increase their motivation and inspiration at any time by playing spiritual journey AR. model of board game design.

8. Students' Acceptance of Spiritual Journey of ARBG Design

The findings of the study found that a total of 52 female students and 48 male students showed that they expressed 96% agreement that the use of this ARBG can increase motivation. Meanwhile

for performance improvement it shows that the performance of the players can be improved by the use of ARBG, that is 92 people expressed their agreement while the rest were in a natural state, while there were no statements of disagreement.

Therefore, the findings of the study show that students have an interest in ARBG, which is 40% and think that this game is not difficult. In addition, it was found that 83% have played ARBG even if not every day. While for the background of storytelling, it shows that the background of the concept of sport and work environment is more preferred by students, 84%. This finding shows that this group of students has simple knowledge and has not yet received much exposure regarding the development of ARBG.

The results of the study on students' acceptance of the design of the Spiritual Journey ARBG revealed that students felt positively about the usage of the game and that the user was really happy and at ease when doing so. Thus, Table 3 presents the survey findings, indicating that majority of the respondents agreed with the assertion that users appear to be at ease interacting with the game's interface design, while the remaining respondents disagreed.

Students' intention to utilize the ARBG is the primary criteria, according to the evaluation factor for user approval. The factors that determine interface qualities and efficacy in raising student motivation come next. The majority of them are significant, according to this finding and the correlation value is significant at the $p < 0.01$ (2-tailed) level. This section presents the comments that players of the spiritual journey ARBG have provided during the distribution of questioners and the observation phase. Consequently, Table 3 displays the study's findings.

Table 3
 The users respond about spiritual journey ARBG design

Respondent	Respond and feedback from respondent
P2, P16, P22, P23, P71	Improve the interface with attractive colours, enjoy the button and background
P5	Enter surah translation in the video
P8, P68	More interesting colour combination
P9, P69	Put more multimedia element animation- graphic, multifunction button, multi-language
P21, P51	Add more clear instructions, add dual languages
P25	Overall, very good and very motivating
P27, P28	Hopefully the application size is less than 100MB
P29	More interesting UI
P42	Very interested because it is related with motivation, good content
P69	Very interesting, AR needs to come out through the card not the screen and there is a 3d image that can move according to instructions or according to the camera on the phone
P74, P77, P95	Add level
P89, P90	Enhance can be used on I-phone

9. Conclusion

Board games become more engaging and attract more participants when AR is used. One advantage of augmented reality is that it is less intrusive than video games other than critics and creative [15,21]. This implies that one player can play the board game itself without any enhancements while another player can employ AR elements if they so choose. Thus, the game can be tailored to the player's preferences. This important aspect is maintained along with the digitization of some game elements by incorporating AR into board games. Players can engage in a wide variety of potentially infinite ways using augmented reality games. The game gains additional value as a result of the AR implementation. Our goal is to enhance the gaming experience by fusing the finest elements of vintage video games with board games. As a result, by combining these two elements, the game will draw in players and make them feel the message being conveyed. It will also strengthen

user identity and pique the interest of researchers who want to investigate this area further in the future.

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