



# Video Games for Social Change: Representation and Religion through Play

By Tariq Rakha

A Project Report

Submitted to the Faculty

of

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Master of Science

in

Interactive Media and Game Development

May 10, 2021

APPROVED:

Brian Moriarty, Advisor

Yunus Telliel, Reader

Farley Chery, Reader

## Abstract

This project developed a game which attempts to express key ideas of Islamic spirituality. The design is inspired by a Hadith (traditional saying) of the Muslim prophet Muhammad ﷺ (PBUH) which serves as a reflection on life's priorities and a reminder of what is truly important. The application was developed using the Godot game engine, and evaluated based on player feedback and user surveys.

## Acknowledgements

I first and foremost would like to express my ultimate gratitude to God, the Creator of all things, the Merciful, the Compassionate, and my reason for everything I do. Anything good and any benefit from this project is solely from Him, and any errors or mistakes are from myself.

I would also like to acknowledge my mentors and professors Charlie Roberts, Adryen Gonzalez, Ed Gutierrez, Lesley Duffield, Rachel Weaver, and Zach Duer. Their wisdom and advice have always assisted me in many ways.

I would also like to thank my good friend Karim Eltawansy for always inspiring me to be better.

I would of course also like to express my gratitude to my advisor and committee for their extremely hard work in seeing this project come to fruition. My reader Yunus Telli, thank you for your wisdom, for the invaluable knowledge you would share with me, and for making WPI feel like home to me for these past years. My reader Farley Chery, thank you for giving me your vote of confidence in just our first meeting, and for always providing guidance when I needed it. Lastly, my advisor Brian Moriarty, thank you for always giving me your time, for teaching me so much, and for being my good friend throughout my time at WPI.

Lastly, I would like to acknowledge my family. My father, the compass by which I am able to navigate this strange world; my sister, the kindest person I have ever known; my step-mother, an inspiration to myself and anyone who knows her; my tallest step-brother, a true symbol of positivity, my youngest step-brother, a constant bundle of wisdom; my grandparents, the greatest examples of unconditional love and kindness I know; and lastly my mother (may Allah bless her soul), who continues to provide bountiful love, joy, and inspiration from her grave.

I know for a fact that there are names missing from here, and I would like to leave a special thanks to my family, friends, and mentors who have changed my life and allowed this project to be completed.

# Contents

<b>1. RELIGION AND PLAY</b> .....	<b>1</b>
1.1. RELIGIOUS WORLDS.....	1
1.2. THE LIMITATIONS OF LANGUAGE .....	2
1.3. GAME WORLDS .....	3
1.3.1. <i>The black mirrors we peer through</i> .....	4
1.4. RELIGIOUS AND GAME WORLDS .....	6
1.4.1 <i>A new language for religion?</i> .....	7
1.5. RITUALISTIC GAMES.....	9
1.5.1. <i>Worldbuilding</i> .....	9
1.5.2 <i>Ritualistic vs. spiritual</i> .....	10
1.5.3 <i>First-person shooters</i> .....	11
1.5.4. <i>Real-time strategy</i> .....	12
1.6. ANALYSIS .....	17
1.7. SPIRITUAL GAMES .....	19
1.7.1. <i>Distinctions</i> .....	19
1.7.2. <i>Examples</i> .....	20
1.7.3. <i>Conflict within the player</i> .....	21
1.7.4. <i>Ambiguity and confusion</i> .....	23

1.8. ANALYSIS .....	25
1.9. RELIGION AS MECHANICS .....	26
1.9.1. <i>Secular examples</i> .....	26
1.9.2. <i>Religious examples</i> .....	28
1.10. SPIRITUAL JOURNEYS .....	28
1.11. GAMING AS RELIGIOUS EXPRESSION .....	30
<b>2. PROJECT DESIGN .....</b>	<b>32</b>
2.1. FINDING A VOICE .....	32
2.2. INSPIRATION AND CONCEPT.....	33
2.3. EXPERIENCE GOAL .....	35
2.4 MECHANICS.....	37
2.4.1. <i>Exploration</i> .....	37
2.4.2. <i>“Youth before age”</i> .....	39
2.4.3. <i>“Health before sickness”</i> .....	40
2.2.4. <i>“Wealth before poverty”</i> .....	41
2.2.5. <i>“Free time before preoccupation”</i> .....	42
2.2.6. <i>“Life before death”</i> .....	43
2.3. DIALOGUE .....	44
2.4. VISUAL ART .....	45

2.4.1. <i>Environment and Setting</i> .....	45
2.4.4. <i>The Earth and the Heavens</i> .....	47
2.4.5. <i>Portals, doors and wells</i> .....	50
2.4.6. <i>Graveyard</i> .....	53
2.4.7. <i>Hospital</i> .....	54
2.5. CHARACTERS .....	55
2.5.1. <i>Player</i> .....	56
2.5.2. <i>Mother</i> .....	57
2.5.3. <i>Grandma</i> .....	58
2.5.6. <i>Sister</i> .....	59
2.5.7. <i>Uncle</i> .....	60
2.5.8. <i>Father</i> .....	62
2.5.9. <i>Nafs</i> .....	63
<b>3. EVALUATION</b> .....	<b>65</b>
3.1. METHOD AND CONTEXT .....	65
3.1.1. <i>Background questions</i> .....	65
3.1.2 <i>Subjective impression questions</i> .....	67
3.1.3. <i>Gameplay questions</i> .....	70
3.1.4. <i>Progression questions</i> .....	71

3.1.5. <i>Personal response questions</i> .....	72
3.2. CONCLUSIONS.....	74
<b>4. POSTMORTEM</b> .....	<b>75</b>
4.1. FUTURE WORK/IMPROVEMENTS .....	75
4.2. FINAL THOUGHTS.....	76
<b>WORKS CITED</b> .....	<b>77</b>
<b>APPENDIX A: IRB PURPOSE OF STUDY AND PROTOCOL</b> .....	<b>80</b>
<b>APPENDIX B: IRB INFORMED CONSENT AGREEMENT</b> .....	<b>81</b>
<b>APPENDIX C. MOTHER CHARACTER AI GUIDANCE</b> .....	<b>85</b>

# Figures

FIGURE 1. AN UNDERGROUND SECTION OF THE GAME MAP. SOURCE: SCREEN CAPTURE. ....	37
FIGURE 2. AGED YOUNG BOY CHARACTER. SOURCE: ORIGINAL ART. ....	39
FIGURE 3. AN UNDERWATER SECTION OF THE GAME MAP WHILE TAKING DAMAGE. SOURCE: SCREEN CAPTURE. ....	40
FIGURE 4. A SAND DOLLAR WEALTH COLLECTABLE. SOURCE: ORIGINAL ART. ....	41
FIGURE 5. A DESERT SECTION OF THE GAME MAP. SOURCE: SCREEN CAPTURE. ....	42
FIGURE 6. THE MOTHER CHARACTER'S GRAVESTONE. SOURCE: ORIGINAL ART. ....	43
FIGURE 7. A MOSTLY FILLED WORLD MAP. SOURCE: SCREEN CAPTURE.....	46
FIGURE 8. TEXTURE ATLAS OF THE VARIOUS MONUMENT BLOCKS. SOURCE: ORIGINAL ART. ....	48
FIGURE 9. TEXTURE ATLAS OF THE VARIOUS CLOUD BLOCKS. SOURCE: ORIGINAL ART. ....	49
FIGURE 10. DOOR AND KEY SPRITES. SOURCE: ORIGINAL ART. ....	50
FIGURE 11. PURPOSE WELL SPRITE. SOURCE: ORIGINAL ART. ....	51
FIGURE 12. THE PORTAL TO THE FINAL AREA ALONG WITH ITS RIDDLE. SOURCE: SCREEN CAPTURE. ....	52
FIGURE 13. NAFS CHASING THE PLAYER THROUGH THE RU'YA MAZE. SOURCE: SCREEN CAPTURE.....	52
FIGURE 14. THE PLAYER'S FINAL CONVERSATION WITH THEIR MOTHER. SOURCE: SCREEN CAPTURE.....	53
FIGURE 15. THE HOSPITAL ROOM WITH THE PLAYER STILL ASLEEP. SOURCE: ORIGINAL ART.....	54
FIGURE 16. THE FAMILY MEMBERS IN THE REAL WORLD. SOURCE: ORIGINAL ART. ....	55
FIGURE 17. THE YOUNG BOY PLAYER CHARACTER. SOURCE: ORIGINAL ART. ....	56
FIGURE 18. THE MOTHER CHARACTER. SOURCE: ORIGINAL ART. ....	57



FIGURE 19. THE GRANDMA CHARACTER WITHIN THE DREAM WORLD. SOURCE: ORIGINAL ART. ....	58
FIGURE 20. THE SISTER CHARACTER WITHIN THE DREAM WORLD. SOURCE: ORIGINAL ART. ....	59
FIGURE 21. THE UNCLE CHARACTER WITHIN THE DREAM WORLD. SOURCE: ORIGINAL ART. ....	60
FIGURE 22. THE FATHER CHARACTER WITHIN THE DREAM WORLD. SOURCE: ORIGINAL ART. ....	62
FIGURE 23. THE NAFS CHARACTER. SOURCE: ORIGINAL ART. ....	63

# 1. Religion and play

## 1.1. Religious worlds

For as long as humanity has existed, religion has shaped how we view and interact with the world. It is perhaps the greatest influencer of what we see and perceive, from the great moral inquiries to the mundane details of daily tasks and behavior. Even if one does not follow a formal religion, the urge remains within us to find some sort of exterior meaning and reasoning to justify the phenomena we experience. Can humans explain every aspect of life? Can we come up for a cause to every effect? If not, then why do we continue to search for one? What makes us continue to dig deeper and deeper until we are left with no choice but to proclaim a god, science, the self, or nature as the ultimate law of our worlds? Much of the function of religion itself is the development of world perceptions, and to allow humans the ability to attempt to describe the various worlds of our existence.<sup>1</sup>

Almost every aspect of our life consists of a different world. The perceptions and ideas we form around our family life, with different groups of friends, at work, and at school all differ from one person to another. These unique perceptions come together to form the various worlds that we live by. By seeing the world in a certain way, we are in fact creating a new one inside of our minds that we now perceive to be truth.<sup>2</sup> Each world necessitates different behaviors and languages for one to be accepted, and there are subconscious rules to be followed. For example, would we usually act the same at a funeral as we would at a wedding? With different environments comes different actions and rules for that specific world. Going further within this example, would everyone's perception and reactions to the same funeral be

---

<sup>1</sup> Qadhi, Y. (2020, March). Plano, TX. Retrieved from <https://www.youtube.com/watch?v=DCon0Z8z8fQ>

<sup>2</sup> Paden, W. E. (2005). *Religious Worlds: the comparative study of religion*. Boston: Beacon Press.

the same? Will the funeral world existing in the parent of the deceased be the same as that of a distant acquaintance? Will the sorrow and despair in the funeral world of a close friend be the same as the perplexed version inside that of a year-old child? All of these people might attend the same funeral, but their spiritual interpretations might be completely different.

From this we can divide our worlds of experience into the subcategories of 'ritual' and 'spiritual.' Here, 'ritual' refers to the greater world in which various people reside, while 'spiritual' is related to individual, internal perceptions of that world.

## 1.2. The limitations of language

It is difficult for us to find the language to describe these worlds, yet we strive nonetheless. Perhaps the most difficult worlds to describe are the ones of spirituality. Using descriptive language to convey ritual or physical actions is much easier than attempting to describe personal emotions and internal responses. For example, the ritualistic world of Zen meditation may be described in terms of placing one's body in a specific position within a peaceful setting, and the resulting psychophysical responses. Pages of writing, hours of footage, and even gameplay experience could all be effective tools for describing the physical rules of Zen ritual. However, what about the spirituality of a Zen practitioner? Is there any effective way to describe their subjective experience so that anyone might follow along and fully understand the spiritual world residing in someone?<sup>3</sup> Attempts have been made, and there is a surplus of resources available to try and aid in one's search for true Zen. Yet how much can one truly feel by reading about what they are 'supposed' to feel?

Effective language is key, yet this language seems to always evade us. No matter how many words we spill, or how heartfelt our expressions of ideals and love, the torment of being

---

<sup>3</sup> Suzuki Shunryū, & Dixon, T. (1989). Zen mind: beginners mind ; informal talks on Zen meditation and practice. New York: Weatherhill.

never truly able to share our innermost spirituality with others is one that humans seem destined to bear forever.<sup>4</sup> However, language is much more than speech and literature. Films, paintings, sculpture, architecture, drawings, music, games, and sports are all forms of language that one can use to try and express their inner spiritual worlds, and perhaps even induce similar journeys within others.

### 1.3. Game worlds

The language of play is deeply rooted in human consciousness. The religion, it influences our actions and behaviors, and plays a role in the creation and development of the spheres of perception and being in which we live. One might find themselves living in one world of interacting with family, then stepping into other worlds of worship or play.<sup>5</sup>

Many creatures are known to engage in playful behavior. Young kittens will scratch and bite and pounce, but never so hard that it leaves the realm of play. Puppies will pretend to show anger and feign harmful intent as they play for hours on end. These are simple modes of play, with even more advanced forms taking place such as mating rituals within the animal kingdom. There is much theory and debate as to why playfulness is observed in both animals and humans, and what role it serves (if any) in improving their survival.<sup>6</sup>

An evolutionary leap in human play occurred in the past half-century with the wide adoption of digital gaming technology. Our ability to create and explore imaginary worlds within the all-encompassing 'real world' has significantly advanced. *America's Army*, released in 2002 after the 9/11 attacks, became a huge tool for army recruitment and a showcase for

---

<sup>4</sup> Latour, B., & Rose, J. (2013). *Rejoicing: or the torments of religious speech*. Cambridge, UK: Polity.

<sup>5</sup> Abe Kōbō. (1969). *Friends*. Translated from the Japanese by Donald Keene. New York: Grove Press.

<sup>6</sup> Huizinga, J., & Eco, U. (2002). *Homo ludens*. Torino: Piccola biblioteca Einaudi.

America's well-oiled military propaganda machine, powerfully demonstrating the ability of play to shape world culture.<sup>7</sup>

Like meditation or prayer, games can facilitate exploration of both the ritualistic and spiritual worlds.<sup>8</sup> Historically, games such as Senet and Mehen of ancient Egypt served not only as entertainment, but also as experiential metaphors for the journey through the afterlife.<sup>9</sup> How might the immersive technologies of digital play affect the relationship of games and religion? Can games which challenge players to progress through a virtual space offer a means for advancement in the spiritual realm as well? Such a bridge between 'real' and 'virtual' worlds may be the key to realizing both personal and cultural change through digital gameplay.

### 1.3.1. The black mirrors we peer through

By satisfying our instinct to play, the appeal of digital games seems nearly boundless. With the jump to digital, games have become more important to popular culture than ever before. The wide availability of game-making tools has allowed voices to be heard and experiences to be shared in an entirely new and immersive way unlike anything seen before.<sup>10</sup>

Video games provide both a window into a new world, and a mirror that reflects our current one. When we pick up a controller and enter a video game, the world we emerge from will become the one that we bring with us. Someone who perceives their world to be a violent

---

<sup>7</sup> Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.

<sup>8</sup> Spicer, K. (2020, April 13). Culture - How gaming became a form of meditation. Retrieved from <http://www.bbc.com/culture/story/20200409-how-gaming-became-a-form-of-meditation>

<sup>9</sup> Piccione, P. A. (1980). *In search of the meaning of Senet*. New York: Archaeological Institute of America.

<sup>10</sup> Donovan, T. (2010). *Replay the history of video games*. Lewes: Yellow ant.

place will enter a game expecting violence; those who view the world as competitive will seek competition. In this way, video games provide insight into our inner being, and allow us to explore worlds within ourselves that might otherwise lie dormant. Because of this, video games have the potential to transform both ourselves and our society.<sup>11</sup>

Can video games truly change peoples' perceptions and beliefs? Can entertainment be used as an agent of education or social progress? By re-evaluating our beliefs about education and perception, we may discover that video games are in fact perfectly poised to become a potent medium for change. Rather than traditional forms of learning, which feel similar to bank transactions, playful interactivity may hold the key to truly unlocking knowledge and passions. Learning does not merely involve an instructor with knowledge and students who know nothing. This assumption has become a norm of much of traditional education, yet it can be significantly less effective than acknowledging every students' strengths and then allowing them to learn not only by listening to experts, but also by teaching the teacher as well. By allowing students to simultaneously become people of knowledge and knowledge-seeking, one can better inform the perceptions and beliefs of those students.<sup>12</sup> From this standpoint, video games are the perfect balance between providing an intended experience and allowing players to form their own. In this way, players have the capacity to truly form their own paths. This freedom can allow games to become not only a means of play, but also a tool for real spiritual change and growth.

---

<sup>11</sup> McGonigal, J. (2012). *Reality is broken: why games make us better and how they can change the world*. London: Vintage.

<sup>12</sup> Freire, P., Ramos, M. B., Macedo, D. P., & Shor, I. (2018). *Pedagogy of the oppressed*. New York: Bloomsbury Academic

## 1.4. Religious and game worlds

Just as video games have players dive into a smaller realm of world rules and laws, religion tasks humans with the same demands. Surely the comparison between video games and religion is not at all far-fetched, as both worlds come with their own set of rules and language and rituals. One could even argue that some video games have the capacity to be their own religious world, though this has yet to occur on a significant scale. In religion, adherents are given a set of tenets, or rules, that govern its domain. It has a self-encompassing beginning and end, and even uses its own domain-specific language to help followers understand the word of that world's creator, which is its deity. In the same way, video games provide a world with a set beginning, when the player starts the game, and a set end, when the player finishes the game. Just like how death is a part of life, death becomes just a part of the larger game.

The similarities do not stop there, with adherents of both religious and gaming worlds fully diving into the belief system of their respective laws. Religion asks its followers to live by its tenants, and to protect themselves from what is unlawful. In the same way, video games provide players with a set of rules and controls in which to play, and in order to succeed players must avoid what would make them lose. In a game, playing is the ultimate goal, with all other aspects of the gameplay taking a backseat. Even winning becomes a side effect rather than the sole purpose of playing. Religions tend to have different goals, but the commonality of them is that there exists a greater purpose to life. Be that an afterlife, a sense of peace, a truth to learn, or satisfying an urge. In this sense, the similarities between video games and religion runs even deeper. With video games, players also have a greater purpose than living in the existing virtual world, their purpose to enjoy and to play. Both religion and video games provide extensive worlds within the 'real world' itself, and paint life as a means to achieve something greater rather than what might be simply taken at face value and experienced without the greater goal in sight. The Sufi poet Rumi expresses this most eloquently: "There is one thing in this world you must never forget to do. If you forget everything else and not this, there's nothing to worry

about, but if you remember everything else and forget this, then you will have done nothing in your life.”<sup>13</sup>

This being said, there are obvious differences to be found between religion and video games, with perhaps the most significant one being between video games and religions that have the belief of an afterlife. One could say that the ‘video game afterlife’ would be at the point when the player completes a video game and is now stuck in either a never-ending loop of replaying incarnations, or a purgatory space in the game data where they last saved progress but cannot achieve any different result. However, the main point of life in afterlife religions is to achieve an afterlife that reflects the actions and decisions made during the worldly life. Video game afterlives have no such consequences. Upon quitting a game, the rest of one’s life is not shaped by the way they played the game, nor are they held accountable for actions made in the game world. Nonetheless, the similarities between religion and video games holds potential significance. Their shared reliance on world-building suggest that they can both affect the way we perceive and respond to our culture.

#### 1.4.1 A new language for religion?

With the above established, one should also consider the implementation of ritual and spirituality within both religion and games, and observe how they intersect one another like a warm embrace. Just as religion has accepted painting, literature, theater, and films as a language for their medium, making such rituals as hymns, dance, and poetry a major part of a religious world, video games must aspire to reach the same spiritual status to realize their potential as tools for change. Now that digital games play a major role in the daily life and

---

<sup>13</sup> Rūmī Jalāl al-Dīn, & Barks, C. (2002). *The soul of Rumi: a new collection of ecstatic poems*. New York: HarperCollins.



culture of many people around the globe, exploring their intersection with religion could help them become a new voice for change.<sup>14</sup>

Just as religions were transmitted by poetry to poets and by miracles to magicians, the future transmission to masses of society is the use of video games to gamers. 'Gamers' however is an extremely broad term, especially since every human has the innate capacity and desire for play. Therefore, the communication of religion through play is a logical step in reaching a wide audience. In fact, throughout history there are a plethora of instances and rituals where games and religion have coexisted in the form of religious play for people of diverse backgrounds to take part in and enjoy. The jousts of the Romans, the ball games of the Mayans, the Chess games of the Persians, the Gomoku rounds of the Chinese, and the Jewish dreidel all share in the embrace of religion and games. They packaged spiritual inquiry in the form of playful fun, in a way that digital games have yet to truly replicate.<sup>15</sup> When one examines the distinction between ritualistic and spiritual within religious games, the capability and impact of spiritual games, and the mechanical theology of play, one can better understand how video games and religions have a relationship with the potential to truly change the physical and metaphysical worlds.

---

<sup>14</sup> Berkley Center for Religion, & Georgetown University. (n.d.). How Does Video Game Religion Impact Life Off-line? Retrieved from <https://berkeleycenter.georgetown.edu/posts/how-does-video-game-religion-impact-life-off-line>

<sup>15</sup> Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.

## 1.5. Ritualistic games

### 1.5.1. Worldbuilding

Religious games account for a considerable number of popular video games, spanning quite a few genres. However, not all ritualistic examples are only of those which are explicitly advertised as 'Religious Games,' and therefore it is difficult to cover the entire list of games out there with religion as a core part of the game's lore and experience. Religion forms a large part of culture, and thus also provides a great inspiration for artists of all mediums to draw from in their quest for intricate worldbuilding and compelling visuals and narrative. Films such as *Avatar* and *Star Wars* all develop intricate religious lore to not only connect with viewers, but also to make sufficient worldbuilding endeavors more interesting and intricate. They also draw upon many religious narratives and visuals such as the Christian narrative of sacrifice and rebirth, and the animistic tradition of spiritual connectivity.<sup>16</sup>

Examples in video games are also plentiful. Titles like *Skyrim*, *Mass Effect*, *The Legend of Zelda*, and *Castlevania* all draw heavily from real-world religions in developing their own in-game traditions. However, none of these games are advertised as religious in nature or narrative at all. In what sense do they apply to the category of religious games? It stems from the necessity of worldbuilding.<sup>17</sup>

Worldbuilding describes the way in which narratives draw in players, viewers, readers, or listeners. In video games, worldbuilding is an essential tool for creating immersion and developing the emotions and story that players experience. Every piece of the virtual environment and every character must be fully fleshed out and made with a backstory, history,

---

<sup>16</sup> Linnitt, C. (2016, June 17). The Sacred in James Cameron's *Avatar*. Retrieved from <https://digitalcommons.unomaha.edu/jrf/vol14/iss1/14/>

<sup>17</sup> Omeragić, E. (2019). Retrieved from <https://repositorij.unios.hr/en/islandora/object/ffos:4751>

and reason for being. Even if it is subconscious, stories and personalities made for the world around us is what gives us the necessary emotion to care about the games we play, virtual or not.

### 1.5.2 Ritualistic vs. spiritual

To see what the future may hold; one must first consider the past and present relationships between religion and video games. To properly convey this topic, religious video games will be divided into two categories: ritualistic and spiritual. Ritualistic games become the group of religious games that only present theology at the very base level of purely text or visuals rather than true experience. Therefore, spiritual games can be defined as religious games that encompass religion on the spiritual level even, and perhaps especially, when there is no direct relation to any specific religion. These two categories may seem very similar, but the distinction is important, as the subjective game experience is what truly defines a video game as a whole. When developing a video game, the most important aspect, far above visuals, technical specifications, and narrative, is what experience the game invokes in the player through play mechanics.<sup>18</sup>

From this perspective, religious games become something of a large umbrella to place over many kinds of games with varying effectiveness in providing a religious experience. For the first group, ritualistically religious games, we find games such as *Quraish*, *Age of Empires 2*, *Shiva*, *Eternal Forces*, and *Hanuman* which provide players with traditionally entertaining gameplay mechanics but with religious language. Assets, characters, environments, and dialogues all come together to support religious identities and narratives, but the gameplay mechanics themselves are oddly secular.

---

<sup>18</sup> DeMaria, R. (2010). *Reset: changing the way we look at video games*. Place of publication not identified: ReadHowYouWant.com Ltd.

### 1.5.3 First-person shooters

Among the most popular video games worldwide are first-person shooter (FPS) games such as *Call of Duty: Modern Warfare*, *Call of Duty: Black Ops*, and *Halo Reach*.<sup>19</sup> Two of those are based entirely on real-world events and conflicts and people, and are very effective tools for propaganda of increasingly militaristic leaders. It is important to note that although these games are not specifically advertised as religious games, they still fall within that category. *Call of Duty: Modern Warfare* in particular has players navigate through real-world religious buildings and places of worship, while killing a largely Muslim population.<sup>20</sup> There are even distinctions between Shia and Sunni enemies in their dress and weaponry, but these Muslim baddies all have the same stark lack of detail in their models and development.

*Call of Duty* prides itself for its attention to detail, with real cutting-edge graphics technology and real-life war missions for players to enjoy. However, this attention to detail and effort is completely lost on the Muslim enemies. They are all largely faceless, with cloth covering them from head to toe, and the models themselves are strikingly inferior to their American soldier counterparts in almost every way. The language on walls for missions in Pakistan is even in Arabic, while Pakistan is an Urdu-speaking nation. Still, the religious influences are clear, and when one notes that George W. Bush described the war in Iraq as a 'Crusade,' it is clear to see how religion has played a major role in both the real and virtual worlds of war in the Middle East.<sup>21</sup>

---

<sup>19</sup> Morris, C. (2020, January 17). Here are the best selling video games of the past 25 years. Retrieved from <https://fortune.com/2020/01/17/best-selling-video-games-past-25-years/>

<sup>20</sup> *Call of Duty: Modern Warfare 2*, Infinity Ward and Beenox. 2009.

<sup>21</sup> Carroll, J. (2004, September 20). The Bush Crusade. The Nation. Retrieved from <https://www.thenation.com/article/archive/bush-crusade/>

These games are told completely from the West's perspective; however, recently there have been developments from the other side. *Special Forces 2: Tale of the Truthful Pledge*, developed by Hezbollah Lebanon, was advertised as a religious game that tells the narrative of the Israeli Lebanese War from the side of Arabs.<sup>22</sup> It was a direct response to games such as *Battlefield* and *Call of Duty*. Both *Special Forces 2* and *Call of Duty* directly implement real-world politics and religious conflict in the form of a video game, providing players with a very sterilized and misleading glorification of war. While *Call of Duty* became a tool for validation of the American government's aggressive militaristic actions, *Special Forces 2* was developed to counteract this aggression and renew a marginalized group's pride and belief in itself.<sup>23</sup> However, its method for doing this was simply to copy the Western video game industry's own ideals and techniques for religious games. By having players kill enemy soldiers in empty cities with strangely no civilians whatsoever, war becomes glorified, and its effects become obscured from players. It not only copied Western video game aesthetics and mechanics, but even the code was discovered to be a modified version of *Half-Life*, another Western first-person shooter game. This direct mimicry becomes a damning example of the West's cultural authority on the rest of the world. That being said, religious games encompass far more than first-person shooters, and there are further examples of superficially religious games to discuss.

#### 1.5.4. Real-time strategy

Another genre with a large number of religious games comes in the form of real-time strategy (RTS) games such as *Left Behind: Eternal Forces*, *Age of Empires II*, *Quraish*, and *Civilization IV*. All these games task players with either exclusively choosing a religion to build, resource managing a civilization based on world religions, real-time strategic responses to

---

<sup>22</sup> *Special Forces 2: Tale of the Truthful Pledge*, Hezbollah Lebanon. 2007.

<sup>23</sup> Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.

events, or a combination of all of these mechanics. That being said, once again we find that these games do not go deeper than the surface in terms of their actual religious experience. These ritualistic religious games almost follow the same suite of the first-person shooter games, where assets, narratives, environments, and characters all have religious connotations, but the mechanics themselves do not provide any spiritual or internal journey within the player themselves. *Quraish* for example, is a game advertised to be an Islamic strategy game in which players play as an Arab tribe during the time of the Muslim prophet Muhammed ﷺ, with real-life battles and events taking place for the players to respond to. In the end, the player can either decide to join the growing Muslim empire or continue to be independent. The perspective and world building all provide for a very interesting gameplay experience, but there is perhaps not so much of a spiritual or metaphysical reaction within the player other than the usual responses when playing a real-time strategy game. Much like previous examples, we find that games advertised as religious have different assets and names but provide no different of an experience than their secular counterparts.

Although not spiritually religious, these games are still religious in nature, and continue to provide a positive reinforcement of religion and faith within the player. The core difference between a ritualistic game and spiritual game, is the internal journey it takes the player on, and what questions it asks of the player. Ritualistic games provide a self-affirming game, giving players a virtual playground to enjoy their religious identities and renew a sense of pride or community. They are able to enjoy developing a version of their own world religion within a virtual space that is perhaps completely different from their real-world religion's history. Spiritual games on the other hand, inquire the players with self-questioning that they directly apply to their real-world religion either during or after gameplay. They are provided with at least the seeds of a self-discovery journey within themselves by performing the actions of the game.

However, much like anything, the decision as to start this journey or not is solely up to the player, and games that completely change one person's world may have no effect on another person. However, the simple fact that the game attempted to provide such a journey,

with inquisitive questions, is enough for it to be considered a spiritual game rather than a ritualistic one.

### **1.5.5. Role-playing games**

Another major video game genre that contains very apparent elements of religious rituals and transmission is role-playing games (RPG). These games provide players with experiences in exploration, problem-solving, and tactics as their in-game persona develop as the game progresses. In RPGs, players do not just get better at surviving in a particular game world, but their game character becomes stronger also. The world of the video game becomes not only easier to traverse, but also combat and abilities develop, providing players with not only the satisfaction in improvement of their skills, but also in the powerful stance their in-game character now takes. However, a major aspect of any RPG is, exactly as its name suggests, the role-play. To fully provide this experience, there is an extensive worldbuilding and immersive lore that must take shape.<sup>24</sup> Even if not directly communicated to players like in the Dragon Age or Final Fantasy series, the in-game world lore becomes a major part of the RPG genre. Games such as *Dark Souls*, *Shadow of Colossus*, and *God of War*, provide players with large, expansive territories to explore. All the while, game environments, characters, and narrative come together to create a truly immersive experience. However, what does religion have to do with worldbuilding? Religion's role in worldbuilding is one which can truly not be understated. Much of a game world's culture and society ends up being shaped, one way or another, by the deities and beliefs of its people. Even without explicit mention of such deities, game worlds tend to rely heavily on religious themes and motifs to provide reasoning for game

---

<sup>24</sup> Juul, J. (2011). *Half-real: video games between real rules and fictional worlds*. Cambridge, MA: MIT Press.

world events and character choices.<sup>25</sup> Examples of these subtle, yet effective religious implementations within video game worlds include *Horizon Zero Dawn*, the *Elder Scrolls* series, the *Legend of Zelda* series, *Sekiro*, *Mulaka*, the *Assassins Creed* series, and the *God of War* series.

In the *Elder Scrolls* series, specifically *Skyrim*, religion plays a major part of both the gameplay and overarching story. In terms of narrative and worldbuilding, the large conflicts the player is tasked with finding solutions to, are a religious cult's attempt to take over the realm, and a civil war brought by the government prosecuting certain worshippers of an in-game god, Talos. The player makes many choices in their identity by choosing to either align themselves with the government, who are puppets of a foreign regime, or with the rebels fighting for religious freedom, but more morally ambiguous in their methods.<sup>26</sup> In addition to these overarching narrative goals, players consistently are exposed to various religious deities and temples, with worship towards certain gods granting specific in-game abilities or benefits such as better haggling skills, or cure from disease. The world is very real, and players are given an effective sense of immersion through the religious acts and cultural references. *The Legend of Zelda* series tends to follow a similar relationship with religion, as artifacts of ancient temples, goddesses, and demons provide a focal point to the games' narratives, characters, and gameplay abilities. Even the Triforce, the symbolic artifact from which most of games' central

---

<sup>25</sup> Bogost, I. (2010). *Persuasive games: the expressive power of videogames*. Cambridge (Massachusetts, USA): The MIT Press.

<sup>26</sup> Simpson, C. M. (2015). In Another Time With (an)other Race: Representations Of Race And National Narratives In Elder Scrolls V: Skyrim And Fallout 3. In *Another Time With (an)other Race: Representations Of Race And National Narratives In Elder Scrolls V: Skyrim And Fallout 3*. Retrieved from <https://rc.library.uta.edu/uta-ir/handle/10106/25153>



conflicts are centered around, draws significant influences and parallels with real-world Christianity and Buddhism.<sup>27</sup>

The *Assassin's Creed* series is another popular game series that draws very heavily from real-world religions. Narratively speaking, the basic premise has players take control of Hashashin, an order of elite assassins prevalent in the 11<sup>th</sup>, 12<sup>th</sup>, and 13<sup>th</sup> centuries of Syria and the Levant. These Hashashin were formed from a specific religious sect of Shiism properly known as the Nizari Ismailis. Founded by Hasan-i Sabbah, religion played a critical role in both their rise to power in Alamut and Fatimid Egypt, as well as their overwhelming ability to take out targets. Their feared techniques and abilities granted them a pocket of territory in the midst of not only Crusader invasions, but Ayyubid and Seljuk dynastic growth, Mongol incursions, and the waning Abbasid Caliphate.<sup>28</sup>

This history is reflected in the game's environmental setting, characters, and in-game missions. Architecture and worldbuilding played a huge part in this immersion, with cities under Crusader control portrayed with more European style architecture, and Muslim buildings and structures largely destroyed to reflect the brutal foreign invasion. On the other hand, cities like Jerusalem were given a beautiful mixture of architecture and setting to reflect the three major groups of people residing there: Muslims, Jews, and Christians. All three architectures had space to shine, and their in-tact structures were bright and thriving.<sup>29</sup> *Mulaka* is another game where this religious world-building takes a front-row seat, as it is based on the Native Central

---

<sup>27</sup> Cuddy, L. (2008). *The Legend of Zelda and philosophy: I link therefore I am*. Chicago, IL: Open Court.

<sup>28</sup> Ehoward. (2019, November 25). Holy Terror: The Rise of the Order of Assassins. Retrieved from <https://www.historynet.com/holy-terror-the-rise-of-the-order-of-assassins.htm>

<sup>29</sup> Seif El-Nasr, M., Al-Saati, M., Niedenthal, S., & Milam, D. (2008). *Assassin's Creed : A Multi-Cultural Read*. Retrieved from <https://muep.mau.se/handle/2043/12753>

American religious traditions of the Tarahumara. The gameplay plays homage to this real-world religion through player abilities, characters, and mysticism.<sup>30</sup>

## 1.6. Analysis

Although major parts of the world-building and narrative, player actions and experiences once again do not necessarily reflect the religious experience itself beyond physical ritual. In this sense all the above games succeed in many regards but fall short of others. Players searching for a true spiritual journey and metaphysical experience related to religion specifically, may be left disappointed. Nevertheless, the homages to religions as an identity for these games to fall under, is one which is done quite well. Many of the games that are advertised as 'religious games' provide a self-affirmative sense of identity for players, along with a sense of pride and community. As for those games not explicitly trying to be religious, there again can be found a sense of communal identity and self-affirmation. Do religious games truly provide a unifying factor among players? In many cases, they do, with entire websites and databases created to connect Christian gamers for example.<sup>31</sup> Furthermore, in games such as Second Life, full religious communities and practices have been conducted and formed organically. Some players even follow religious rituals such as the Islamic Hajj or Christian Mass all through the digital gaming world.<sup>32</sup>

---

<sup>30</sup> MULAKA THE GAME. (2018). Retrieved from <https://www.lienzo.mx/mulaka/>

<sup>31</sup> Gamer communities: Discovering Spiritual Truths in Video Games. (2021, January 03). Retrieved April 18, 2021, from <https://gamingandgod.com/resources/community/>

<sup>32</sup> Radde-Antweiler, K. (n.d.). Virtual Religion. An Approach to a Religious and Ritual Topography of Second Life. [Scholarly project]. In Heidelberg Journal of Religions on the Internet. Retrieved April 18, 2021, from <https://heup.uni-heidelberg.de/journals/index.php/religions/article/view/393>

The similarities between these games and real-world rituals are plentiful, and thus the category of ritualistic games is fitting. However, what distinguishes these games from more spiritual media and form? If all the ingredients are present to make a spiritually stimulating game, what makes these games remain ritualistic? For the vast majority of the games listed above, the core aspects that lacked religious activity was the gameplay itself. Even in game where religious plays a large role in player abilities or powers, the religious aspects of gameplay mechanics themselves were lacking the spiritual half of the equation. Ritualistic in nature, almost mathematical in their approaches, one can clearly describe and define how a specific in-game religious activity leads to a specific in-game religious outcome. Worshipping to this god grants the player better health, climbing atop this minaret grants the player experience points, and so on. All good mechanics, but these tangible causes and effects are what remove any room for spiritual thought and ambiguity.

Most real-world religions strive for the balance between commands and emotions.<sup>33</sup> For example, in Christianity there are the Ten Commandments and lawful rulings of what is right and wrong. However perhaps even more prevalent is the concept of love and emotional attachment to their lord and Church. Followers are not asked to sing hymn or recite verses just to check it off a list, but instead to feel something within themselves that grants them a higher sense of belonging and unification.<sup>34</sup> As stated in the introduction section however, the description of such other-worldly feelings is one which truly evades speech. Try as we might to describe such feeling, the experience is often lost to others. In this sense, the ritualistic video games find themselves at this juncture. The juncture of having players immersed in religious

---

<sup>33</sup> Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. Oxford University Press.

<sup>34</sup> Sanders, J. T. (1971). *The New Testament christological hymns: their historical religious background*. Cambridge: Univ. Pr.

language and settings and even performing religious activities, yet for the sole gain of in-game worldly benefits. In the *Legend of Zelda*, players do not pray at the Temple of Time because they love the goddess Hylia.<sup>35</sup> Nor in *Call of Duty* are Masjids visited because there is a sense of peace to be found there. Instead, each one offers some sort of direct benefit to the player's game-world persona. Additional health or stamina, a strategic advantage, or simply because the game necessitates it to move forward. These are all worldly goals that do not reach the metaphysical essence within us, and thus fail in developing a true spiritually stimulating experience which religious ritual strives to create.

## 1.7. Spiritual games

### 1.7.1. Distinctions

Homing in specifically on spiritually religious games, one can better understand what potential lies within this genre, and how religion and video games can continue to utilize each other in their respective worlds. It is important to first understand what exactly makes a religious game become distinctly spiritual rather than ritualistic. As stated above, video games provide a world with set rules and language that is understood and developed between the game and the player. Often these rules and languages overlap greatly with the player's 'real world.' Examples of this include the above mentioned ritualistic religious games, as well as any game that directly implements places, stories, and characters from the 'real world.' However, another overlap may take place even if the game itself is completely make-believe and doesn't expressly utilize any real-world religions or narratives. This second overlap is a spiritual one where through gameplay, the player achieves a self-reflective journey that can then be directly applied into their real-world lives.

---

<sup>35</sup> *The Legend of Zelda Breath of the Wild*. Nintendo. 2017.

This phenomenon is not only limited to video games, but has been applied in films, books, and religion itself. For example, there are verses of holy books that express the rules of prayer and how they are to be physically performed. However, then there are verses that express the innate feeling and reactions that these prayers should induce. These feelings are very rarely explicitly stated, but rather they are alluded to and felt by the practitioners of the faith on their own. In a sense, the physical rituals provide the correct frame of mind and environment for the person to achieve this spiritual state and journey. However, the rituals on their own do not achieve any such spirit and must be combined with the person's own spiritual receptibility.<sup>36</sup> Spiritual video games share the same principle, with players tasked with specific play mechanics, narratives, and decisions, which all combine to form a journey that takes the player within themselves. Ritualistic games, like the ones described in the previous chapter, also attempt to provide the player with aspects from their religion, but only in the form of ritual without the spiritual essence necessary to truly change perspectives and by extension, society as a whole.

### 1.7.2. Examples

It is worth noting that much of the video games that successfully induce a spiritual journey within players and provide a truly religious experience, are in fact not advertised as religious games at all. This in fact leads to some rather peculiar dichotomies where the video games expressly advertised as religious games fail to provide what seemingly secular games succeed in developing. Whether or not avoiding directly expressing that a video game is

---

<sup>36</sup> Omar, S. (2019, April). Lanturna The Years of the Beloved. LANTURNA The Years of the Beloved. Blacksburg.

religious ensures that the game in question has even a chance of becoming spiritual is up for debate, and there is not enough evidence to truly support or deny such a claim.<sup>37</sup>

However, spirituality is subtle. It cannot be forcibly induced within anyone, let alone someone simply searching for a video game to play as simple entertainment. Even so, we find plenty of games that successfully employ a wide array of methods and techniques for spiritual development within the player.

### 1.7.3. Conflict within the player

One such game is *Passage*, developed by Jason Rohrer.<sup>38</sup> It is an artistic game that attempts to portray life within the 'real world' in the form of a poetic side-scrolling video game. The player is presented with a basic 2D world made up of varying colors and designs. Exploration is basic in nature with a point system that rewards collecting treasure and traversing further through the world, but the score really doesn't matter in both contexts of the 'real world' and the game world. The game ends in the player's death after exactly five minutes every time it is played, no matter what decisions are made. This death, however, is alluded to throughout the game, as the player slowly but surely ages both visually and mechanically. Hair is lost and then becomes whiter, movement becomes slower, and progression is harder to achieve. Finally, if the player chose to find love, their wife's avatar will be replaced by a simple tombstone. The player then will join their wife shortly afterwards. Although constant and starting without delay, the aging process still takes the player by surprise, as the subtlety and slow-changing process takes a while for the player to recognize. It mimics real-world events, like waking up one morning to find that you no longer recognize your own reflection or seeing

---

<sup>37</sup> Plate, S. B. (2011). Religion is Playing Games: Playing Video Gods, Playing to Play. *Religious Studies and Theology*, 29(2). doi: 10.1558/rsth.v29i2.215

<sup>38</sup> *Passage*, Jason Rohrer. 2007.

your son one day from a new angle that suddenly you have found he is no longer a boy, but a man. It is this reflective nature that allows *Passage* to be a spiritual path within players. Playthrough is meant to be repeated, and with each new game, players discover more about this world, and in turn perhaps discover new things about their own tendencies in the 'real world.' Does choosing to find love at the cost of easier exploration make the player more sentimental in nature? Does choosing to move forward rather than explore make the player more driven at the cost of missing out on something worthwhile? These questions and more are what develop spirituality, as the game provides inquiry rather than affirmation.

Another game that successfully implements spirituality is *Undertale*, developed by Toby Fox.<sup>39</sup> It is a largely mainstream game that has become so well known that even large franchises such as Nintendo have implemented *Undertale* game characters within their roster for *Super Smash Bro's*. It is proof that spiritual games do not necessarily have to fit within a small, confined niche, but can also be widespread and target a large and diverse audience. The game implements an enthralling narrative with engaging mechanics, but what is most unique is its ability to develop conflict within the player themselves and fully break the barrier between the game world and the 'real world.' This merge is sudden and shocking, with the player suddenly forced to come to terms with themselves and their own actions within the game. Every single decision the player makes is one which is taken into account as the game's narrative unfolds, and the ending is achieved.

The basic gameplay involves players traversing an underground world in an attempt to escape back to the surface. However, standing in their way is an array of characters and enemies which will all eventually come into conflict with the player. There are always multiple choices to take in these conflicts such as to fight, to talk, to act, to do nothing, to show mercy, or to kill. With the game narrative subtly changing according to the player's own decisions, a

---

<sup>39</sup> *Undertale*, Toby Fox. 2015.

spiritual journey within the player becomes ever present. However, it is at the game's climax that players are truly put into conflict with themselves. Final judgement is enacted upon the player, and the player must then decide whether their final actions will spell the doom of the entire game's world, or spell doom for the player alone. Whatever the decision is, the game directly confronts the player with characters from the game closing the game itself, deleting save files, and imploring the player to either restart their game or never leave. Players are forced to continually make difficult decisions, and the consequences of those actions are directly seen within the game. This fading of division between what is real and what is virtual, becomes a true instigator for spiritual thought within the player. Contemplation and reflection of their actions and speculation of future decisions, arrive at the forefront of players' minds. Their real-world actions then adapt to reflect the changes they made in the game world.

#### 1.7.4. Ambiguity and confusion

Not all spiritual games have to create conflict or moral battle within players, however. Examples of games without conflict tend to fall into the category of 'walking simulator' games, which have historically had a bit of a negative reputation among gamers.<sup>40</sup> However, it cannot be denied that some of the greatest examples we have seen of spiritual journeys and expressions can be found within this more niche genre that seems to defy much of what video games stand for. Usually without any violence, or much action more than regular real-world daily activity, these games tend to muddle the line between the 'real world' and game world in a much more real sense. Players are usually not tasked with saving the world, but more saving their world. It is a subtle distinction, but one which creates a more relatable narrative and experience. Nevertheless, many gamers find these games 'boring,' 'pointless,' and 'not real

---

<sup>40</sup> Zimmerman, F., & Huberts, C. (2019). From Walking Simulator to Ambience Action Game: A Philosophical Approach to a Misunderstood Genre. *Press Start*, 5(2). Retrieved from <http://press-start.gla.ac.uk/index.php?journal=press-start>



games.' This is largely due to the balance these games must strike between being a strong narrative and a strong gameplay experience. Many times, relying too heavily on the story, games of this genre are sometimes dismissed as interactive stories rather than video games.<sup>41</sup> Nonetheless, their impact on the video game medium and society is one which cannot be understated, with certain titles making a real splash within the gaming community and world at large.

One such example is the title *What Remains of Edith Finch*.<sup>42</sup> This game employs dialogue and narration that the player cannot skip, however they do interrupt the gameplay experience itself. Narration overlays the action, rather than acting as a forced cutscene or break from it. On-screen text does not interfere with players' views, but instead compliments the various environments and sometimes even interacts with them. Both the gameplay and story is rather ambiguous, with players not fully sure of what abilities they have and what goal the game world tasks them with completing. There are no explicit tasks or checkpoints for players to strive towards, and thus can be confusing to some players. Nevertheless, the game still manages to feel intimate and familiar through environmental language and the gameplay generally taking place within the confines of real-world logic. This ambiguity also develops the experience further, keeping players engaged despite the lack of 'action' gameplay many players might be expecting.

---

<sup>41</sup> Clark, N. (2017, November 12). A brief history of the "walking simulator," gaming's most detested genre. Retrieved from <https://www.salon.com/2017/11/11/a-brief-history-of-the-walking-simulator-gamings-most-detested-genre/>

<sup>42</sup> *What Remains of Edith Finch*, Giant Sparrow. 2017.

Another example is *Journey*, which utilizes slow, somber movement with an eerie and mysterious narrative that remains calming to tap into players' spirituality.<sup>43</sup> There are not really many objectives or any enemies typical of traditional video games, yet it keeps players engaged. The music plays a huge part in this, as it effectively sets the mood and tells much of the emotional narrative.

## 1.8. Analysis

These games all have the internal journey between real-world and virtual-world unconfined by the ritualistic actions or names of real-world religions. However, they all implement real-world religious ideals and spirituality with striking success. It becomes apparent that religious worlds do not necessarily need to be named as religious worlds for them to exist. For example, meditating or having a thoughtful conversation with a loved one can become truly religious actions, while praying or meditating while one's mind is not present can become secular or even unreligious in nature. If the words spoken reach no deeper than our throats, then the heart and mind are not truly stimulated to achieve spirituality.<sup>44</sup> It is in this contradictory realm that we find religious video games. In this chapter we find games that spiritually quench the thirst of the soul, but no religion or culture is directly able to stake claim over them. Even with clear influences from real-world religions, one can find that spirituality does not depend on the inherently religious names given to assets or environments, but to the actual journey and thoughts provoked by the game.

The conversation between video games and players is what facilitates or voids the desired nature of religious games. It is in that middle space that one can find true spiritual inquiry, or

---

<sup>43</sup> *Journey*, Thatgamecompany. 2012.

<sup>44</sup> Latour, B., & Rose, J. (2013). *Rejoicing: or the torments of religious speech*. Cambridge, UK: Polity.

empty confirmation. It is only through conflict can one find resolution, and it is only by asking questions of oneself can one reveal the answers.

## 1.9. Religion as mechanics

Above, one can find information on what kinds of games provide a religious experience, and the distinctions between some of the languages they use, but it is also important to break down the mechanics and actual actions the player is presented with to achieve such religious experiences. In its purest form, video games are nothing but mechanics. When the visuals, music and sound, graphics, programmed bells and whistles, and narrative are all stripped away, we are left with the mechanics and form of the game itself. This is the strongest tool for achieving one's experience goal and is the clearest distinction between video games and other mediums. Only in video games does the user have complete control of what actions to take, within the bounds of the game world of course, much like real-world actionability. The visuals and above-mentioned aspects of video games are all important, but a game can exist without them. The only thing a game cannot exist without is the mechanics and rules of play, the gameplay itself.<sup>45</sup> So how can gameplay become a reflection of religion, and develop a spiritual journey within players? One can attempt to answer this question by examining the balance between rules and freedom of play.

### 1.9.1. Secular examples

Games such as *Minecraft* or *Skyrim* give the player extreme freedoms with minimal handholding but are very different in their relationships between this freedom and the rules of the game itself. For example, *Minecraft* starts the player with very little knowledge or instruction of where to even begin, but procedurally generates items or enemies to appear to

---

<sup>45</sup> McGonigal, J. (2012). *Reality is broken: why games make us better and how they can change the world*. London: Vintage.

the player that would help the player develop their game world knowledge much further. These encounters are largely randomized, and one player playing for one hour could end up learning far more than another player playing for six hours simply because of these chance encounters. For example, if the player playing for just one hour were to encounter a human village early on, they will now know that there are other people to interact and trade with, which will allow them to get more materials to build stronger tools and structures, leading them to become much further along in the game's overall quest. For the player playing six hours, they could encounter no other lifeforms except for enemies, so will spend much of their time just trying to survive rather than learn more recipes or develop more tools. In a way, this is a reflection of real-world religious followers. Some adherents will have the luxury of being born into a secure and wealthy environment where they can research and learn deeper knowledge of their religious world. While other adherents will be born into less secure lifestyles and have minimal energy or time to be developing their religious knowledge further than what they see in front of them.

To contrast this, in *Skyrim* players are given extreme freedom, but with a narrative guidance that points them towards certain key events and places for players to seek out. It is worth noting that technically all these key settings are optional, but if the player wishes to complete the game's story and 'beat the game,' they must eventually follow the path that is developed for them. Players who explore before following the narrative will find the game's scripted challenges to be easier, since they are attempting them at a more developed point of their game than the game world had anticipated. This again reflects real-world religions. Real knowledge does not truly stick until it is backed up by experience. Simply because someone is well-read does not mean that they are well-informed. This is an interesting dichotomy that finds itself in many religious traditions. For example, Islam describes it as علم (knowledge) versus عقل (intellect), in which one needs at least one of these to truly avoid falling into جهل

(ignorance). Ignorance in Islamic tradition contains many meanings, but perhaps most clearly is its definition as an opposite of restraint, knowledge, and intellect.<sup>46</sup>

### 1.9.2. Religious examples

Further analysis can be made when examining spiritually religious games such as *Before Eternity*.<sup>47</sup> Utilizing a stunning musical score and abstract dialogues and visuals, the tone of the game becomes extremely conducive to a spiritual state of mind. Journeying through a lifecycle and conversing with the various characters, players find themselves immersed in a surreal world which touches the heart. The basic mechanics being a trade sequence that leaves little room for error, and the solving of riddles to effectively complete the game and receive the true ending. Multiple playthroughs are likely required to achieve this end, and yet it is a short enough playthrough that it does not seem cumbersome. There are clear Islamic themes, but no explicit religion is mentioned at all. It feels like a Rumi poem expressed through the medium of a video game. The gentle pacing and fluid mechanics give for an experience which pushes players to complete the game, but allow them the time and space to reflect and simply let their thoughts carry them on what the meaning and symbolism might be.

### 1.10. Spiritual journeys

The above analysis further develops the relationship between video games and religion, but what about spirituality? If video games truly have the capability to produce the spiritual journeys that players experience and crave within their real-world religions, then an exploration of those gameplay mechanics is necessary. Generally, it seems that the games that forcibly

---

<sup>46</sup> Ali Khan, N. (2015). Bayyinah Institute Malaysia Tour 2015. Bayyinah Institute Malaysia Tour 2015. Retrieved from <https://www.youtube.com/watch?v=9jqJvzSecWw>

<sup>47</sup> *Before Eternity*, Seyed Siavash Mortazavi Ravari. 2015.

provide slow-paced mechanics such as inability to sprint, forced periods of idle, or ambiguity, tend to have greater effect in getting players in the mood for spiritual self-reflection.

*The Graveyard* for example, has slow, labored maneuverability and concludes with an idle period where the player must literally sit on a bench until they die.<sup>48</sup> Nothing is explained or narrated, and as such there is a clear lack of objective explanation for what the player has just experienced. This ambiguity lends itself extremely well for players to fill the gaps in explanation with their own thoughts and feelings towards the game world they have just explored. This is a key factor in developing gameplay that is spiritually inductive. If a game world overwhelms the player with so much explanation and description, it is harder for the player to put themselves into the experience and then relate it back into their own real-world story.

Nintendo encourages this frame of mind in their *Legend of Zelda* games. Link, the protagonist, is blank-faced and never speaks. Miyamoto, the developer of many Zelda games, explained this as a means for players to truly be able to place themselves into Link's shoes as they play him. The view is that if a game character is completely empty with no personality, then players can more easily place their own personality within the character. This strategy is implemented in many forms of media including novels and films. Much like this is implemented in protagonist characters, it can also be used within world building as a means of allowing the player to come to their own conclusions of what events transpired and why.

It is important to give a player time inside the game world to stop and reflect. It is necessary to not overwhelm the player with so many actions and quick-think decisions constantly, as then the meaning of such actions may be lost entirely. Obviously it is possible and often beneficial to give the player entertaining things to do, but what happens after those actions is equally as important. In *Rime*, every puzzle is followed by a period in which either the

---

<sup>48</sup> *The Graveyard*, Tale of Tales, 2008.

player is idle during a cutscene, or the game changes to be much slower and difficult to navigate, allowing the player to be able to take a breath. Many religious games tend to either get so caught up with trying to appeal to wider audiences that they lose sight of their spirituality. In this loss, they develop games that may be entertaining, but are so fast paced that it appears obvious that the game is attempting to compensate for a perceived lack of entertainment that religion may imply to players. On the other end of the spectrum, many religious games end up falling flat by being far too slow-paced and ambiguous that players get too bored or confused to complete them. This leaves both the game and the player feeling empty. In this sense, it is extremely important to strike the right balance between activity and reflection, between ritual and spirit.

### 1.11. Gaming as religious expression

As shown, the relationship between video games and religion is one which runs far deeper than physical surface. Not only are the required actions similar in nature, but the spiritual and cognitive journeys that take place in video games are one which truly enhance the practices of teachings of real-world religions. As described earlier, the act of play is as old as creation itself, and along with religion, these two innate instincts could continue to shape much of the world as we know it. It is not a new idea to combine play and religion, as throughout human history one can find examples. Theater as part of Christmas celebrations, dreidel games that occur at specific rituals, and ancient jousts and Olympics are some examples. It is important to clarify that even any acting or theatrical activity is considered as play. It is a basic form of play that involves the actor playing the part or changing their mindset to convey a specific idea. The fact that it is role-playing and not 'real,' makes it a form of play

Video games are simply the logical next step from these basic forms. As humans digitized almost every aspect of their lives including communication, manual labor, and teaching, play was no exception. With video games we find a very standardized action of play where one must set the time aside and decide which role they would like to play before

entering their new world. But it is from this entrance that one can truly develop and understand their own subconscious much further than usually possible. In a sense, the individualism and privacy of playing single-player video games lends itself very well to the spiritual nature that one might hope to achieve. Just as meditation and prayer may be communal in physicality but individual in spirit, many video games develop an atmosphere and relationship where every single playthrough for every single player is completely different from the previous iterations. Having this sort of independence and creative freedom leaves much room for introspective thought and developing deeper understandings of oneself, the game world, and the 'real world.' It is by this phenomenon that video games and religion can combine to truly change the world.

Socially speaking, if video game were to be utilized as tools for teaching and developing one's inner self, one could surely find that society would develop and change with them. Of course, culture is not just defined by video games, but their impact cannot be understated. If then combined with religion, the effect could be enormous.<sup>49</sup> Although there is not yet any real-world examples of religious video games having the kind of global impact mentioned here, there is plenty of potential and reason to strive for it. Teachings of peace, submission, and kindness are basic tenants that perhaps are far too easily taken for granted. However, these are foundational elements for which much of our society is built upon, and if those become lost or forgotten, then surely the world would indeed become a much darker place.

It is through video games that religion may find itself a new means for reaching people, society, and the world. By examining the distinction between the ritualistic and spiritual elements within religious video games, the capability and nature of spiritual games, and the gameplay that is capable of theologically feeding the soul, one can better understand how the

---

<sup>49</sup> Dyer-Witthford, N., & Peuter, G. D. (2009). *Games of empire global capitalism and video games*. Minneapolis: University of Minnesota Press.



relationship between religion and video games is one which can strongly influence the world we live in, and more importantly, our own spiritual worlds within.

## 2. Project design

### 2.1. Finding a voice

I always had in my mind that I wished to make artistic media based on my upbringing, culture, and religion. Growing up as a Muslim Arab American, especially in a post-9/11 world, I felt first-hand the effects of media on a population. Friends no longer wished to speak with me and my family, teachers no longer smiled at me, doors were far more often being shut. Along with the rest of the world, I watched the Middle East burst into flames as Western forces lit up the city previously a caretaker of human knowledge, Baghdad, with more submunitions than the population of Washington DC. The terms ‘terrorist,’ ‘towel-head,’ and ‘sand-nigger’ became ever present ringing in my ears. I may not have been in Iraq, but I felt invaded, violated, and humiliated. The images of Abu Ghraib, the news poking fun at us ‘hairy cave apes,’ and the rhetoric of American politicians weighed on my young frame like a noose. A war that was, by all accounts, an illegal and imperialistic massacre on a civilian population, was glorified and cheered on by everyone around me. The only reason those dead bodies piling up weren’t me, my father, my sister, or my mother was simply because we happened to be born on the ‘right’ side of an imaginary line in the sand.

How did this happen? Why did my world turn upside down like this? The media had blasted false news about my religion, my culture, and my people, and the American public soaked it up like a sponge. There was no ‘other side’ to this story apparently, as the then President George W. Bush said, “You are either with us or against us.” Movies now had Muslim Arab terrorists, video games about killing Muslim Arabs became the top-grossing games of all time, and songs became filled with Islamophobic rhetoric. There was no escape from the hatred, unless the TV was turned off. Seeing such power of media, I wondered, why not use that power for good? When given the choice that every game developer or film director has,

why not create something that makes the world brighter rather than continue shrouding it with darkness? Why spread hate when you could instead spread empathy and love? From these questions, my artistic drive was born.

## 2.2. Inspiration and concept

The early concept for the *Before Akhira* project began in my Junior year of undergraduate university. At the time, I was yet to ever make a video game, and was just starting to get introduced to the development pipeline and software such as Unreal Engine 4 and Zbrush. I was absolutely enthralled at the possibilities this knowledge opened to me. I then read *The Little Prince*, a book my mother had always cherished. It showed me a way to tell a story quite deep and dark at times, yet in a very innocent and loving manner.

One night, I had a dream that I was a young child once more, roaming around my old house near the sandy beaches of Ballah village in Egypt. As I roamed around the house, I was searching for something, but I did not know what. One by one, I would run into members of my family and they would join me.

Finally at the end of the dream, I came to a glass door at the back of the house and found my mother sitting peacefully in a chair under the sun as the ocean breeze blew through her long hair. Hair I had not seen in years, for the cancer had taken that victory early on in its battle. She smiled at me and I wanted nothing more than to feel her embrace.

There the dream ended, and I woke up to the cold darkness of my room. It was very quiet as I sat in bed with a feeling of longing, but also gratitude that I got to see my mother again. It had been a few years since she had passed away, and my mind had blocked many memories as a way of sparing me from certain pains that might otherwise interrupt my daily life of school, housework, and a minimum-wage job at the local bookstore. It was at that moment that I realized just how trivial it all was, and just how unimportant the things I prioritized were.

Not long after that, while attending a weekly seminar gathering at the local Masjid, I came upon the following Hadith (a recorded saying or action of the Muslim prophet Muhammad ﷺ):

عن ابن عباس قال: قال رسول الله صلى الله عليه وسلم "اعتنم خمسا قبل خمس: شبابك قبل هرمك و صحتك قبل سقمك و غناك قبل ففرك و فراغك قبل شغلك و حياتك قبل موتك."

*Ibn Abbas reported: The Messenger of Allah, peace and blessings be upon him, said, "Take advantage of five before five: your youth before your old age, your health before your illness, your riches before your poverty, your free time before your work, and your life before your death."*<sup>50</sup>

It all connected in my mind, and I began thinking how a game combining the Hadith and my dream would look. I wanted to make something personal, for it was a very personal experience to me, but also very accessible and inexplicit so that there would be room for players to input their own stories, experiences, and interpretations into.

The purpose of this game is to tell the Hadith through the medium of a video game. However, the narrative and story are more of a personal tragedy that I wished to express. In the game, players assume the role of a young boy hospitalized by a car accident that killed his mother. He has been in a coma ever since. The amount of time that has passed since the accident is not clear, though it is stated that it has been 'years.' Players must navigate the boy's dream world so they can awaken and rejoin the 'real world.' In order to navigate this dream world, the young boy's family members provide gifts such as the ability to fly, extra speed, and cheaper prices. The family members also provide pieces of the Hadith, with each of them telling him another part of it until by the end, the full Hadith is revealed.

---

<sup>50</sup> Shu'ab al-Imān, Hadith Number 9575.

At all times throughout the game, the player is accompanied and aided by the boy's mother, now in the form of a bird. To awaken and leave the dream world, the player must explore every area of the map, which is in the shape of the Hadith in Arabic and the word 'Before' in English. Upon completing the map, the player is transported to the Ru'yah, a mystical realm between dreams and reality in the Islamic tradition. In this space, the player must run through the dark maze while being chased by Nafs, worldly versions of oneself that only seek quick pleasure rather than everlasting truth within the Islamic tradition. This area's dark maze is in the shape of the Arabic word for afterlife, Akhira. At the end of the maze, the player finds his mother at her gravestone, where she tells them the final piece of the Hadith and prompts the final cutscene.

The finale of the game is an animated cutscene where the young boy wakes up in the hospital to the sight of his family happily welcoming him back to 'real world.' A bird is sitting at the boy's window, but once he wakes up it can be seen flying away into the distance. The final image that players are greeted with is the Hadith in its entirety written in both Arabic and English.

### 2.3. Experience goal

The experience goal for this game is to make players feel loss, hope, and reflection. The overarching goal being the transmission of the Hadith and its Islamic wisdom through the medium of a game. I hope this experience helps players reflect on their own life and priorities, and give them a sense of peace in the inevitability of it all; to feel distressed at losing something, but find satisfaction in an alternative solution.

This project is developed in the Godot game engine utilizing its GDScript language.<sup>51</sup> All assets are made in Krita.<sup>52</sup> The game is a 2D platformer consisting of two distinct levels and one animated cutscene. The decision to make a 2D game was taken for gameplay accessibility reasons as well as personal desire. It was my first project working in Godot and Krita, as well as my first time creating 2D game assets, but I really wanted to learn how to make a 2D game through a large project. Godot was chosen to be our development platform due its lightweight framework, its flexibility, and its exclusive 2D engine. Both Godot and Krita are fully opensource tools, which is another reason for choosing them.

---

<sup>51</sup> Linietsky, J., & Manzur, A. (2014, February). Godot Engine. Retrieved April 18, 2021, from <https://godotengine.org/>

<sup>52</sup> Foundation, K. (2005, June 21). Krita. Retrieved April 18, 2021, from <https://krita.org/en/>



*Figure 1. An underground section of the game map. Source: Screen capture.*

## 2.4 Mechanics

### 2.4.1. Exploration

Exploration plays a major part of the overall gameplay. To progress from the first level, players must explore every area of the map. Family members are sprinkled around the map, which also provide tools to unlock more areas (see Figure 1). There are also plenty of coins to collect which are necessary to beat the game. Players will have to purchase health and time, and the only way to gain wealth is to collect these coins which are hidden throughout. To me, exploration serves as a metaphor for life as we are constantly learning and progressing towards our respective goals. Finding utility in the journey and not just obsessing over the results is a form of thought quite prevalent in this game. Coins tend to be hidden in the corners or nooks of the world, and the extra effort to collect them makes for a more rewarding gameplay experience overall. If the player puts in the work on a consistent basis to collect wealth, they will find themselves hardly in danger of running out. The same can be said of finding family member characters. Searching for them becomes a journey itself, and the reward for finding them is something even greater.

Another aspect of exploration is the process of retracing one's steps and never forgetting the places one has been. Every memory serves as experience that makes us who we are, just as each area of the game world develops the further towards their goal. Remembering one's goal destination, but also enjoying and focusing on the journey is another important attribute of the game's exploration. The player can view the map at any time and could theoretically even play through the entire game just looking at their map. However, the map does not disclose the locations of valuables, such as coins and keys, or obstacles, such as doors. It becomes important to use the map in order to understand the bigger picture, but to explore without it in order to actually reach that big-picture goal.

Player movement itself is quite difficult to navigate and become accustomed to. Walking and swimming is very slow, which causes stress to the player as they see their precious time and health diminish when they are unable to reach their goals. This takes a bit of inspiration from dreams in general, as our dream selves tend to be unable to run or walk quickly. It also forces players to consider each decision, movement, and exploration much more carefully, as there could be a payoff in the form of coins or new discoveries, or it could simply be a waste of time and energy. Flight is also quite difficult to use, as players must take each individual flap of wings slowly and not jump again until the previous jump has reached its peak. It's a bit reminiscent of the floaty jumping in Kirby games, but also a reminder for players to take things slowly and see them out rather than rushing to the next jump.



Figure 2. Aged young boy character. Source: Original art.

#### 2.4.2. “Youth before age”

The first thing that the Hadith says to take care of, is one’s youth. The way this is conveyed in the gameplay is to have the player start young, but subtly age as throughout each Life. Age effects the player’s movements, flying ability, and appearance (see Figure 2). Much like the game *Passage*, I intended to implement an aging system that was very subtle, much like real life. Often, we don’t notice how much time has passed until we look in the mirror one day and see that our hair is white, or we look over to our children and notice that they are taller than us. In much the same way, the aging in *Before Akhira* is subtle, until suddenly it becomes obvious, as previously accessible heights become impossible to scale, and a previously youthful face becomes wrinkled and aged. The mother character noticeably stays the same age and does not change with the player, which is a subtle hint that she is in fact already dead and therefore cannot age.

The message of taking care of one’s youth before their age is conveyed by the player’s grandma. The grandma character gifts the player with the ability to fly, which makes aging much more bearable. Now, instead of only five jumps, the player can perform fifty jumps



before having to rest on the floor. It makes the decrease in players' jump height much less of an obstacle, but still an inevitable factor to consider throughout their exploration.

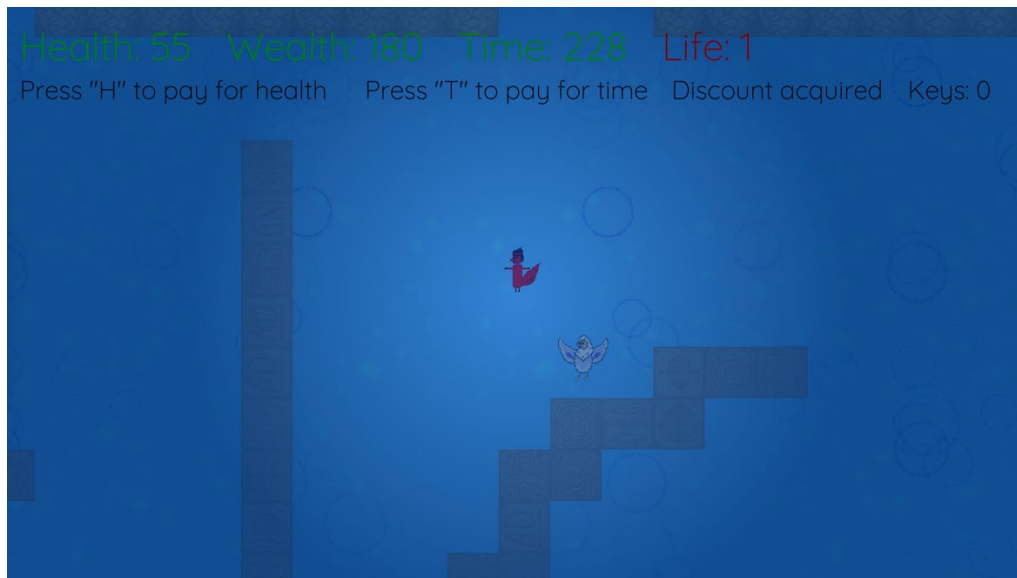


Figure 3. An underwater section of the game map while taking damage. Source: Screen capture.

### 2.4.3. "Health before sickness"

Health plays a major role in exploration and unlocking certain areas of the map to the player. In the beginning of the game, diving into water becomes an almost certain death as health is diminished very quickly (see Figure 3). This keeps the explorable area quite small to start off and guides the player towards the first door since no other path is possible. Then, once the player reaches the sister character, they will be gifted the ability to swim and lose health only incrementally while in water. Health now becomes a factor of stress while swimming, since players must now keep track of both health and time in these areas. Additionally, health is twice as expensive as time.



*Figure 4. A sand dollar wealth collectable. Source: Original art.*

#### 2.2.4. “Wealth before poverty”

As mentioned above, wealth plays a major role in both exploration and properly navigating the game. Coins in the form of pink sand dollars can be found in almost every section of the map and are used to purchase health and time (see Figure 4). Players will find themselves seeking out wealth, but also faced with the dilemma of whether collecting certain wealth is useful. Players might find themselves spending more time or health to collect a coin than that coin is worth. Also, the use of wealth is solely to be spent, but choosing when to spend that wealth also becomes extremely important. If players are so old that their jumping ability is not strong enough to reach any new areas, is there any point in buying more health and time to stay alive? Or is it simply better to pick a quiet place to die so that players can resume exploration in the next life? These questions become a part of the gameplay experience, and the stakes only become higher as they progress.

The family member that gifts this part of the Hadith to the player, is the player's uncle. He also gifts players with a discount that makes all prices half as expensive. This effectively makes wealth a much less stressful commodity while still being a major part of the gameplay mechanics.

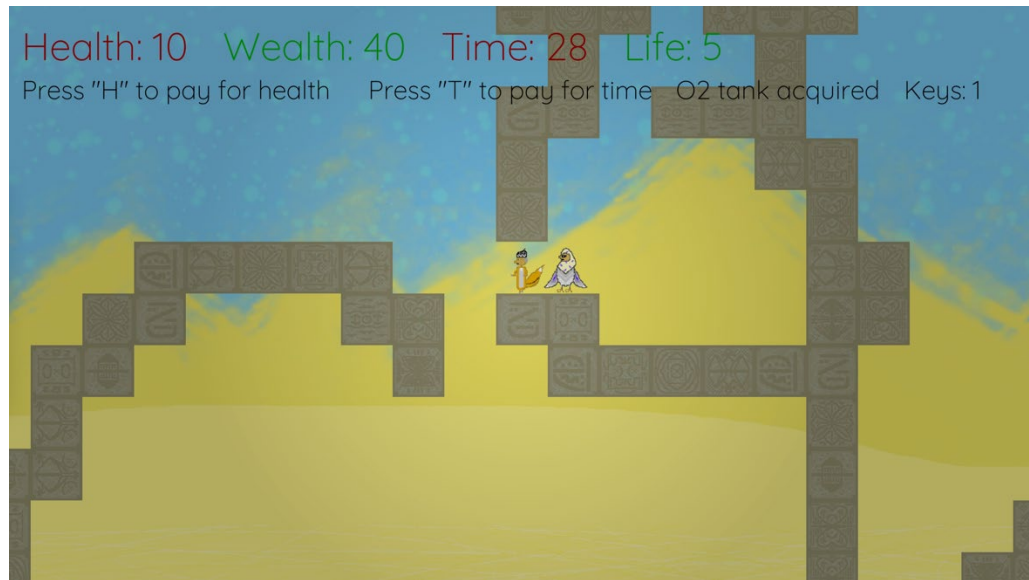


Figure 5. A desert section of the game map. Source: Screen capture.

### 2.2.5. "Free time before preoccupation"

Time plays a very large role in the design and mechanics of *Before Akira*. Players start with 300 seconds for each life and can buy more time at the price of 20 seconds per sand dollar coin. Starting with so much time, players will not really feel much pressure until suddenly there is not much left. It stays consistent with the themes of subtle and incremental loss in this game. All the signs are there that the player should take care of their time, but until the timer gets below 100, players will likely not heed the warnings as much (see Figure 5).

The player's father gifts players with extra speed which makes horizontal movement much faster and easier to execute. The timer still continues to tick at the exact same pace, but

players can now move and accomplish their goals much faster. This makes the game significantly easier, so this powerup becomes the very last one that players receive.



*Figure 6. The mother character's gravestone. Source: Original art.*

#### 2.2.6. "Life before death"

Players start out with five lives and there are no extra lives to collect to increase this number. Each life becomes a full cycle of full youth, health, and time, while the player's wealth carries over from the previous life. Progress is saved between lives, and players will restart from the last checkpoint that they have reached. Additionally, each life represents a time cycle between the five daily prayers in Islam. This is shown through the varying levels of light and darkness to signify dawn, afternoon, daytime, evening, and night. Once all five lives are used, players will be greeted to a Game Over screen that does not save any progress made. At this point, players must restart the game and begin the dream all over once again. Death becomes an unavoidable hazard of the game, as there is no way to complete the game without losing at least one life. In this sense, death becomes an unavoidable part of the game, just like death in real life (see Figure 6).

The character that symbolizes and gifts this portion of the Hadith is the player's mother. She is the last character that the player interacts with in the dream world and gifts the player with the full Hadith and thus the ability to return the real world.

### 2.3. Dialogue

The dialogue in this game was implemented by utilizing the GodotTIE and serves as the primary explicit storytelling device.<sup>53</sup> The first dialogue that greets players is the first part of the Hadith itself, "Take care of five before 5..." After that, the rest of the Hadith are given to the player in pieces from each of the family members. Family member dialogues consist of their specific part of the Hadith such as, "Take care of your youth" or "Take care of your health." While also having some interpretations on what that statement might actually mean. For example, the father talks about time being a finite commodity that always comes to an end and thus should be enjoyed, but never wasted. He gifts the player with extra speed to be able to accomplish more with the same amount of time, but also states that one should remember to, "Stop and smell the flowers every now and then, for the flowers that you have yet to smell tend to be the sweetest!" The same can be said of all the family members, where the emphasis is on using one's youth, health, wealth, time, and life to the fullest, but also enjoying and appreciating it while you have it.

Other than the themes of the Hadith itself, the dialogue tends to be quite mysterious and subtle in its narrative devices. For example, most of the family members will mention that they are missing both the player and the mother, and that the player should wake up and return to them. The player is never told outright that this world is a dream nor that the mother is dead, but upon a second playthrough, players will notice many more hints and narratives that may

---

<sup>53</sup> Henriquelalves. (n.d.). GodotTIE. Retrieved April 18, 2021, from <https://github.com/henriquelalves/GodotTIE>

have gone above their heads the first time. At the end of the game, it is revealed that the mother is dead by the mother character herself. She is standing by her gravestone and tells the player to take care of their life before their death, thus completing the Hadith. She also states explicitly that she cannot return to the real world once the player wakes up, for she is already dead and has thus woken up from her dream already. This phrasing comes from the Islamic faith, as our life on earth is consistently compared to a dream, while the afterlife becomes the point when we all wake up to the truth. After this conversation, the player will then be transported to the final cutscene in which the context of everything is more fully revealed. The player has been in a hospital in a coma for the past years, the mother died in the same accident that hospitalized the player, and all the family members reminisce about the mother's funeral burial.

The only other in-game dialogue is that of the portal which transports players to the Ru'ya level. This portal presents players with a riddle to help guide them on their journey, and essentially gives the overarching goal of the gameplay which is to explore every area of the map. The message is, "Explore and fill the dreamer's map, this portal then can them back. Back from the life they thought was true, what matters most is what you do." Once players explore all areas of the map, this message will no longer be visible, and the portal will be activated to transport them away.

## 2.4. Visual art

### 2.4.1. Environment and Setting

Every element of this game tells its own story or carries its own theme related to the Hadith this game is based on. It was important for me to put meaning behind every decision and leave nothing just as a default implementation with no real reasoning behind it. Therefore, when designing the environment, characters, and assets, I took into account many of my own personal feelings and emotions as well as the themes this game attempts to convey.

### 2.4.2. Overworld

The Overworld will be labelled as the main level in which players will play through. This level is where players jump, fly, swim, and meet with family members as they navigate and explore a world while also taking care of their five before five.

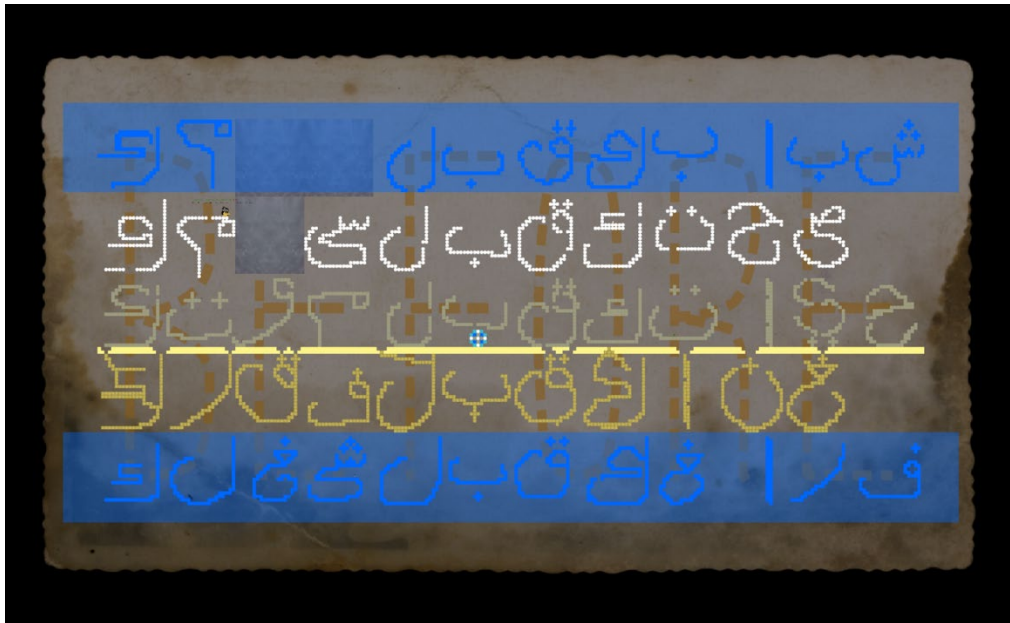


Figure 7. A mostly filled world map. Source: Screen capture.

### 2.4.3. Map

The map and layout of this overworld took a lot of consideration, and the final product is one which spells out the Hadith in Arabic, as well as the English word, 'Before' (see Figure 7). I knew that I wanted the map to take the shape of Arabic lettering, but I was not sure exactly how I wanted to implement it. In the end, the letters are drawn with ancient monuments, clouds, underground paths, and ancient underwater structures. Since there are five parts of the Hadith, the map becomes divided into five rows of either eleven or twelve columns, where each grid is an Arabic letter. Starting from top to bottom, the Arabic lettering are: Your youth before your age, Your health before your sickness, Your life before your death, Your wealth before

your poverty, and Your free time before you work. The message of life and death takes the middle row due to its overarching and encompassing significance. The other ordering is due to the length of letters of each phrase. In Arabic, “Your youth before your age,” “Your life before your death,” and “Your free time before your work” are all twelve letters long. While the other two phrases are eleven letters long. Thus, it made sense to order the phrases from top to bottom in a pattern of twelve-eleven-twelve-eleven-twelve. This effectively creates an English letter, ‘E’ at the far right-hand side of the map, which lends itself well to the spelling of the word, ‘Before’ that the map takes. The English lettering comes in the form of the actual paths that are open to players in the map. Essentially, the world is a grid of Arabic letters that are fully walled off from each other except on sides that will shape out the English word, ‘Before.’ Players start in the far-right hand side, as Arabic is written from right to left, and everything starts from the right in the Islamic tradition. Also, players start in the middle phrase of ‘Your life before your death’ due to its significance, and its placement in the middle of the map.

#### 2.4.4. The Earth and the Heavens

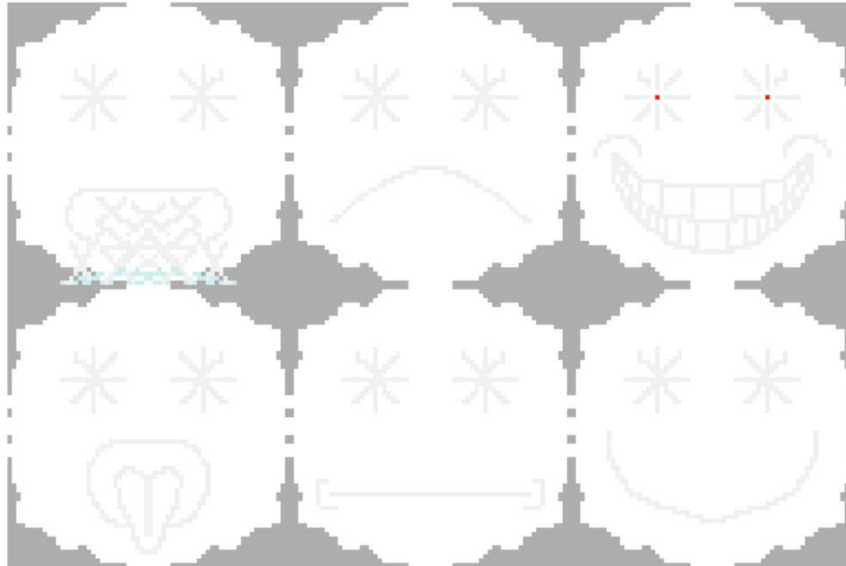
The environments of the overworld include deserts, underground caverns, clouds in the sky, and underwater oceans. As stated above, each row of Arabic letters is a phrase from the Hadith, and each of these rows is a new environment. The whole world becomes a mirror image with water both at the very bottom and very top of the map. The desert takes its place in the middle row, the underground caverns become the row underneath the desert, and the sky and clouds become the row directly above the desert. In each of these environments, the obstacles take different forms, with monuments, clouds, and earth becoming the sole structures.





*Figure 8. Texture atlas of the various monument blocks. Source: Original art.*

The sprites for the monuments were created from fragments of my own memories drawn in abstracted forms (see Figure 8). Images of a veiled figure holding out her arms for an embrace, the sandy beaches of Egypt, the cold snows of Canada, and a warm bowl of spaghetti are all depicted in the monuments. The reasoning behind this decision was to put personal memories into the dream world, as if the player character himself is dreaming up a world based on his own memories. It also adds a much more personal touch, but in a very subtle and abstract sort of way that most people will only see hieroglyphic-style art and architecture and perhaps not see much else in it. However, this also lends itself to players to freely study the designs and create whatever shapes they wish to see within the illustrations.



*Figure 9. Texture atlas of the various cloud blocks. Source: Original art.*

The clouds also have some designs in them, but in the form of faces (see Figure 9). It is intentionally quite subtle and is only implemented in the large areas of clouds that are not Arabic lettering. The faces drawn include happy, sad, and playful, and are meant to represent the kind of range of emotions the young boy may be feeling as he dreams. There is a face that is quite dark and evil which is meant to remind the player that this world is not a place one should wish to stay in. I felt it important to provide a bit of eerie undertones at times to fully convey the experience goal and hint to players that something much deeper lies beneath the surface.

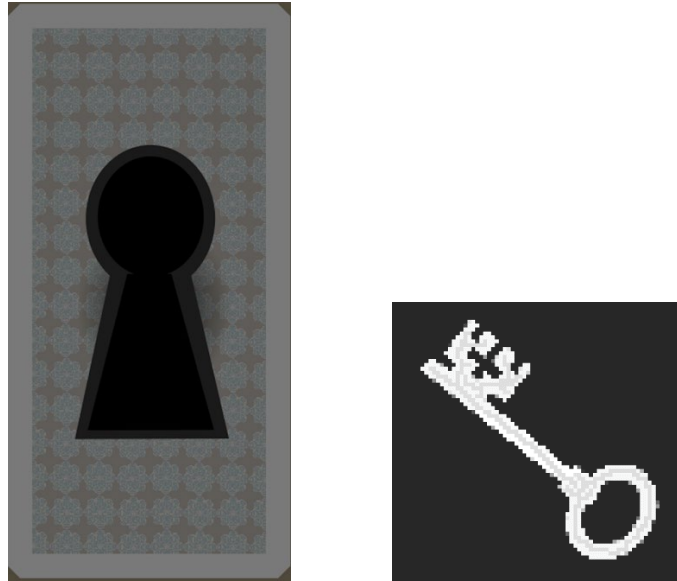


Figure 10. Door and key sprites. Source: Original art.

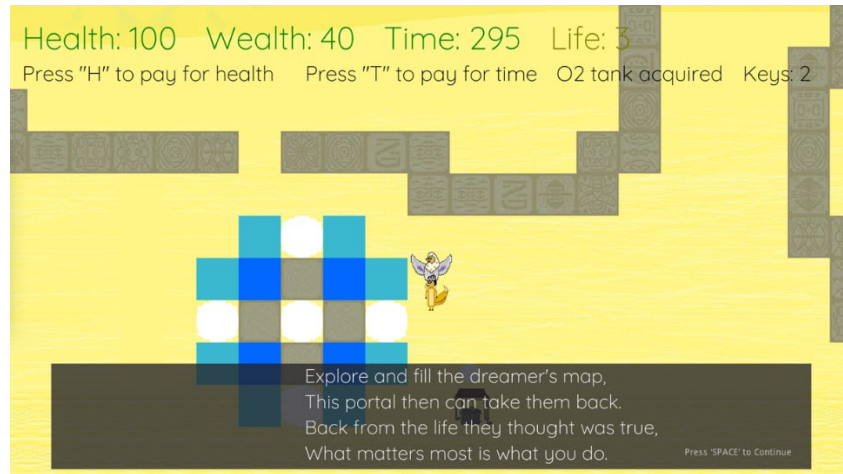
#### 2.4.5. Portals, doors and wells

Other than the obstacles and environments, the main objects that players will find are doors, keys, wells, and the portal to take them into the next level area (see Figure 10). The doors represent obstacles in life that cannot be scaled as easily as flying over them and must instead have a specific tool at one's disposal. They also provide a way to narrow the map and split up the explorable areas to more manageable chunks for the player. There are a total of five doors in the game, which is a significant number in the context of the Hadith and the Islamic faith. Keys can be found throughout the world, but mostly can be found underwater which signifies the plunge one must take to solve life's obstacles. The design for the door sprites were done utilizing an Islamic art tile maker tool.



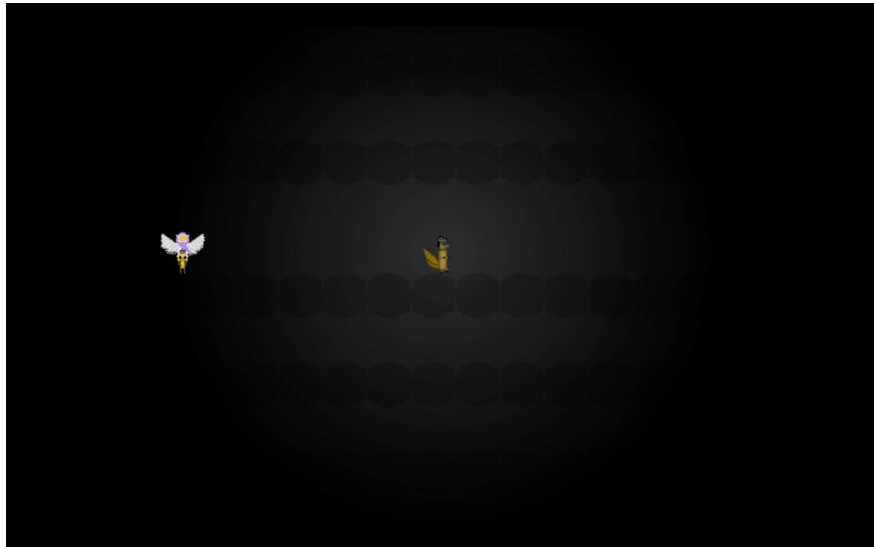
Figure 11. Purpose well sprite. Source: Original art.

The wells are called ‘Purpose Wells,’ and serve as a metaphor for one to stop and replenish one’s purpose and reason for doing (see Figure 11). Wells tend to be at significant locations such as beside family members, in front of doors, or beside the portal. Just as one must refill water at a desert oasis, one’s resolve and inner purpose must also be replenished, which is the symbolism behind these assets. It also pays homage to a quote from *The Little Prince*, “What makes the desert beautiful is that somewhere it hides a well.”



*Figure 12. The portal to the final area along with its riddle. Source: Screen capture.*

The portal visually is a collection of different materials and objects such as clouds, monument blocks, and water (see Figure 12). When players have fulfilled the riddle and discovered all places on the map, the portal will start emanating bright white light, and become an activated portal for player to be transported to the next level, the final area.



*Figure 13. Nafs chasing the player through the Ru'ya maze. Source: Screen capture.*

#### 2.4.6. Graveyard

As with the overworld, the final area's layout is that of Arabic text. This level's map takes a much more abstracted calligraphy in its Arabic, however, with the general shape being more of a spiral than a grid. The level spells out the Arabic word 'Akhira' which means 'afterlife' in English. The spiral shape the text takes becomes a reference to labyrinths and the internal journeys many people take.

In this level, the core mechanics become navigating a maze while being chased by the Nafs (see Figure 13). The player's visibility is very low since the level is dark and the only light present faintly emanates from the player. Once players reach certain points of the maze, Nafs creatures will spring into the light and chase the player wherever they go. If the player is reached by Nafs, they will restart at the beginning of the level. There is no health, time, youth, wealth, or lives in this level. There is only the player fleeing from their Nafs, and trying to reach the end of the path in front of them.

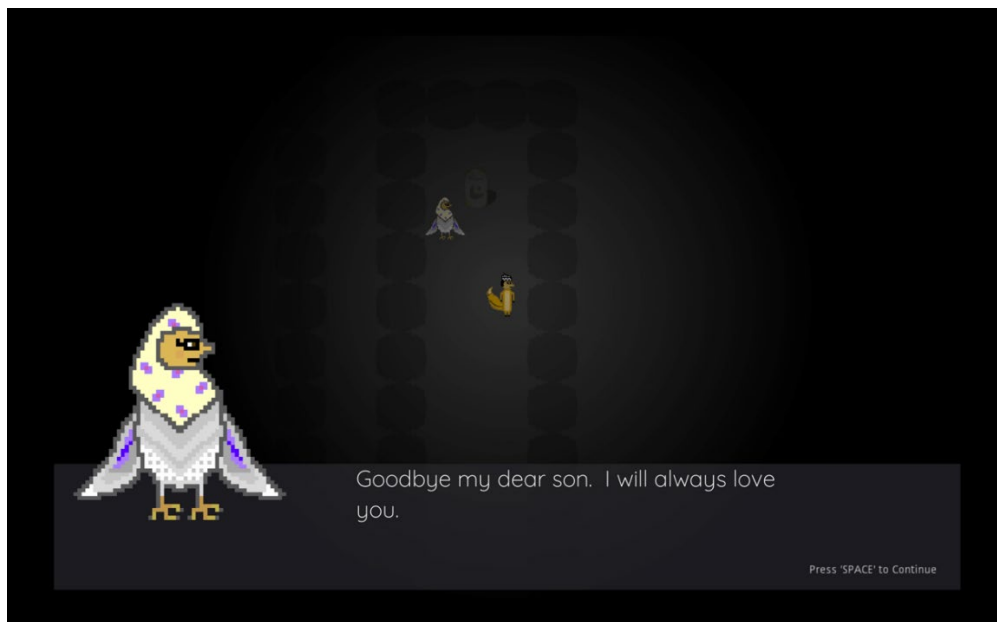


Figure 14. The player's final conversation with their mother. Source: Screen capture.

At the end of the maze, an invisible barrier will block Nafs from chasing the player any further, and the player will reach the mother character standing beside her gravestone (see Figure 14). At her gravestone, she will tell the player that she is already dead, that the player is asleep and can now awaken, and to take care of their life before their death. The purpose of this dialogue is to gift players with the final portion of the Hadith, to say goodbye to the mother character, and to reveal some of the mysteries of the game's narrative.



*Figure 15. The hospital room with the player still asleep. Source: Original art.*

#### 2.4.7. Hospital

The final cutscene of the game takes place in the hospital and begins with players seeing the young boy still asleep, hooked up to various machines (see Figure 15). All of the family members except the mother can be seen at the foot of the boy's bed, and they begin to reminisce about the mother's death and burial. The context of her death is revealed to be an accident that also put the young boy into a coma, and they all begin to wonder if he will ever wake up at all. The boy opens his eyes, and all the family members cheer his arrival while a bird previously on the windowsill flies away into the distance.

The bird is a reference to the mother character in the dream world, as well as the bird that the family members describe had begun to sing at the mother's funeral. Aesthetically, the bird is the same sprite as the mother character, but without a human head. All the family members in this scene are now fully human rather than animals with human heads since this scene now takes place in the real world.



Figure 16. The family members in the real world. Source: Original art.

## 2.5. Characters

There are many characters in *Before Akhira* and a couple different forms of each one (see Figure 16). For example, in the dream world, family members are depicted with human heads and animal bodies. This is a reference to ancient Egyptian art where depictions usually include human bodies with animal heads. The decision to switch it to human heads on animal bodies was made to convey that the human soul remains the same, as the face represents the soul more than the body. The bodies then become a representation of the personality and



worldly forms of the characters while maintaining their metaphysical attributes. The eyes on characters are also drawn with kohl around them, paying homage to the desert Bedouin of the Arab world.



*Figure 17. The young boy player character. Source: Original art.*

### 2.5.1. Player

The player character is an unnamed young boy with olive skin, black hair, and hazel eyes. In the dream world, he is manifested with the body of a desert fox, and is wearing a black and white Kufi, an Islamic prayer hat (see Figure 17). His personality is never quite revealed, but since he is the sole playable character, he largely takes the personality of whoever is playing the game. The player character's age is never specified, but he is quite young, likely around 16 years old by the end of the game. Largely expressionless and with no written dialogue, the

young boy personifies the role of the player and leaves plenty of room for the player to input their own personality and emotions into the character.

The decision to use a desert fox as the player's body was a reference to *The Little Prince* as well as to convey the shifting personality that this character takes due to him being playable. The fox also represents a mystical being, and one that is quiet and timid until familiarity is reached.



Figure 18. The mother character. Source: Original art.

### 2.5.2. Mother

The mother character is depicted with the body of an unidentified grey bird with purple streaks. She also has olive skin, but with dark brown eyes and a yellow-white Hijab with purple and pink flowers on it (see Figure 18). Purple plays a significant role as it was my mother's favorite color and one which always reminds me of her. The mother character does not have

any explicit dialogue until very late into the game, with her conversation being the final one before the animated cutscene that completes the game.

Her personality is shown to be caring and kind, as she journeys with the player throughout the entire game. In her farewell at her gravestone, she shows compassion and love for her son, and a maturity in her view on the inevitability of death. She does not despair in the face of reality, but instead finds hope and comforts those around her.



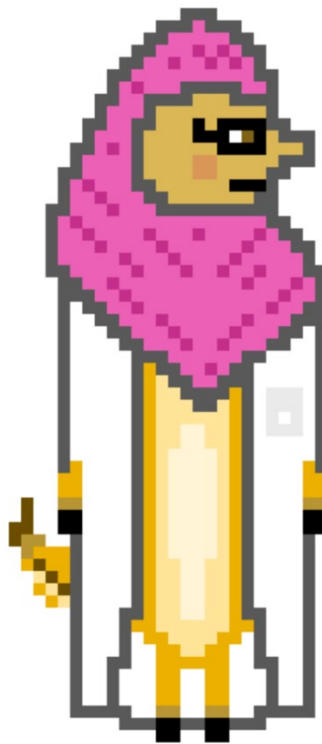
*Figure 19. The grandma character within the dream world. Source: Original art.*

### 2.5.3. Grandma

The grandma character is depicted with wrinkled, olive skin and brown eyes. She is wearing a black Hijab with bright yellow patterns on it and dark green highlights. In the dream world, she has the body of a desert tortoise, and is holding a wooden walking stick (see Figure 19). In the real world, she is wearing a black abaya with dark green highlights. Her body shape is

consistent with the Arab women of her generation who have carried the emotions of oppressed peoples on their shoulders without complaint. Her clothing choices represent the sense of mourning she still carries for losing her daughter, the mother character, but with bright yellow patterns to signify the warmth and hope that she still carries for a brighter future.

The grandma's personality is one of witty humor and teasing. She teases the player about their animal body and keeps a light, positive outlook on the problems that persist in both her and the player's lives. There is also a deep sadness and understanding within her that shows in her wish to see her daughter alive once more.



*Figure 20. The sister character within the dream world. Source: Original art.*

### 2.5.6. Sister

The sister character is depicted with olive skin, dark brown eyes, and a pink Hijab with dark pink patterns. She can also be seen wearing a lab coat, as she is currently a medical

student doing her rotations (see Figure 20). Beneath her coat, she wears a blue denim skirt and a dark pink sweater. In the dream world, she has the body of a gazelle to represent her innocence and majestic way of holding herself. Her personality is defined by her compassion, as she wishes to take care of everyone around her. She is always looking out for others, though sometimes at the expense of looking after herself.



*Figure 21. The uncle character within the dream world. Source: Original art.*

### 2.5.7. Uncle

The uncle character is depicted with olive skin, light-colored sunglasses, and black hair. His hair is heavily styled, and his beard is geometrically and consciously trimmed. In the dream world, he has the body of a camel and can be found smoking a cigarette (see Figure 21). When in the hospital, he substitutes his cigarette for a steaming cup of coffee. The uncle character's

style shows his personality as someone who puts a lot of thought and effort into how they look, while also giving him a trendy vibe. His smoking habit is one which plagues much of the Arab world, and the substitution to coffee symbolizes his internal struggle. The uncle's beard becomes a symbol of internal struggle as well. While keeping a beard is part of the Islamic tradition, the obviously painstaking manner in which he styles and shapes it is away from the essence that the beard symbolizes in Islam.

His personality is one of someone trying their best to be calm and cool, but often losing themselves in emotion and getting flustered. He has a witty sense of humor, but also enjoys exaggerating and making a big show out of things. Overall, he is very kind and humble, but displays a very outgoing and over-the-top persona to mask some of his tenderness. The camel body he has in the dream world is one that represents business and being casual. Camels tend to eat and act in a manner that is oblivious, and they also have historically represented wealth due to their roles in trading caravans in Arabia.



*Figure 22. The father character within the dream world. Source: Original art.*

#### 2.5.8. Father

The father character is depicted with olive skin, hazel eyes, a bald scalp, and a full beard. His beard has a strip of grey hair, as the sprinkles of age begin to show on him. In the dream world, he takes the form of a cheetah holding a watering can. He can be found watering the ground in an effort to sprout flower seedlings, signifying his strong work ethic and kind heart (see Figure 22). In the real world, he is wearing jeans and an orange and maroon shirt, a reference to my hometown of Blacksburg, Virginia.

The father character's personality is soft-spoken but tender. He talks the least of all the family member characters, yet still says just as much. In the hospital cutscene, he is seen further from the bed than everyone else, for he is not someone who pushes himself into space and is perfectly content to simply watch and take care of everyone away from the spotlight. He is also the only character who notices the bird that flies away from the windowsill, symbolizing his never-dying love for his lost wife.



Figure 23. The Nafs character. Source: Original art.

### 2.5.9. Nafs

The Nafs character appears in the final area as a ghostly version of the player and mother character. He has no face, symbolizing his simple bodily desires, and he is forever attached to the mother sprite which symbolizes his selfishness and inability to let go (see Figure 23). Originally, the Nafs character was to have a much more major role in the game's narrative. However, his role diminished as the game's true experience goal began to take shape. Currently, the Nafs character serves as a very abstract mechanic of *Before Akhira*. There is no dialogue or explanation for his existence in the game world, nor is there any actual description of who or what he is.

In Islam, Nafs represents the worldly desires of oneself. The almost animalistic urges and instincts we inherently have. For example, when we are hungry, we eat, but Nafs would have us eating whatever is around us in whatever way we see fit, like eating someone else's spaghetti with our hands. It is on the Ruh, or soul, of us to curb the Nafs and eat in a more



fitting way, such as eating our own spaghetti with a fork. In this sense, Nafs is neither good or bad, it is simply a part of being human and something we listen to, but should keep in balance so that we do not offend God or other people.

In *Before Akhira*, the Nafs character does not wish to wake up from the dream world, for he wants to stay with the mother character forever. To this end, he tries to stop the player from reaching the mother character. It is no coincidence that the only point in the game in which the Nafs character shows himself is when the player is separated from the mother character. At this point in the game, the Nafs character is desperate to keep the player in the dream world forever because in the real world, the mother character is dead. As the player, we realize that the dream world is just that, a dream. Thus, waking up is truly the only logical path one should pursue. This completes the overall metaphor of this game: that just as the young boy is dreaming and must eventually awaken to the real world, all of our lives are but a dream that will end with us waking up in Akhira, or afterlife.

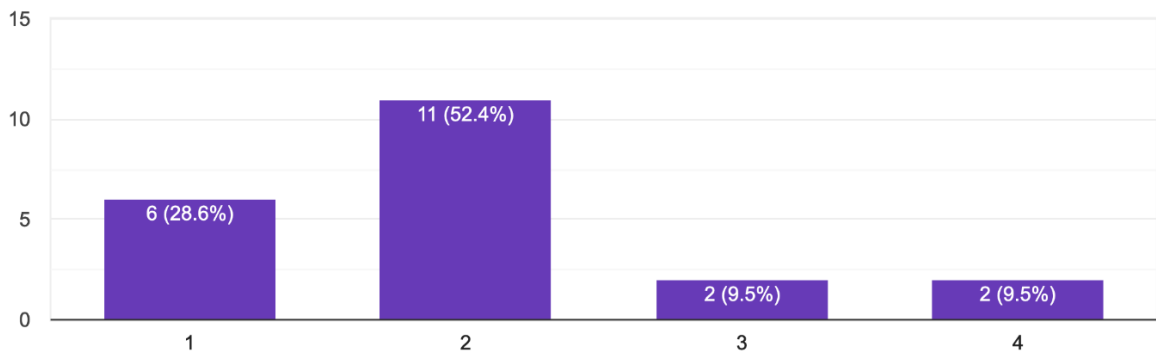
### 3. Evaluation

#### 3.1. Method and context

For this round of testing, we collected data from students of a video game design course at Worcester Polytechnic Institute. Upon reading and signing the consent agreement, students were directed to play *Before Akhira* for 30 minutes. This game takes a total of 35 minutes to complete for me as the developer, with the expected time to complete the game as a player to be 90 minutes. Therefore, we did not expect anyone to fully complete the game, which makes experience data for this game a bit less informative. Since the narrative and explanation for this game large takes place in the final dialogues and cutscene, the focus of this round of testing was to see how well the game performed in a short gameplay session. Even so, we had one play tester complete the game, which was very good to see. Upon completing the gameplay session, students then filled out a Google survey, the results of which are summarized below.

How familiar are you with the Muslim Prophet Muhammad ﷺ (peace be upon him)

21 responses



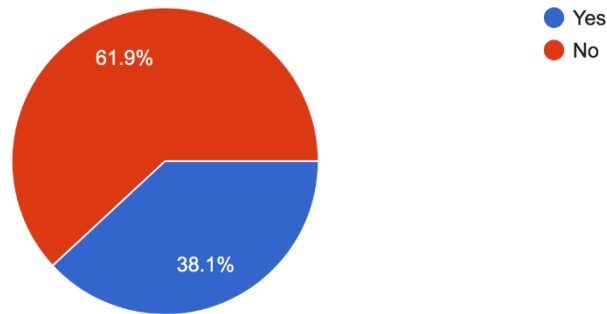
##### 3.1.1. Background questions

This question was framed in order to gauge the general demographic of play testers and see if they were actually familiar with Islam and the Muslim Prophet Muhammad ﷺ (peace be

upon him). The responses we got largely fit with our expectations, with the majority of players having 'Not at all' or one level above that on the spectrum.

Have you ever come across any of his quotes or sayings?

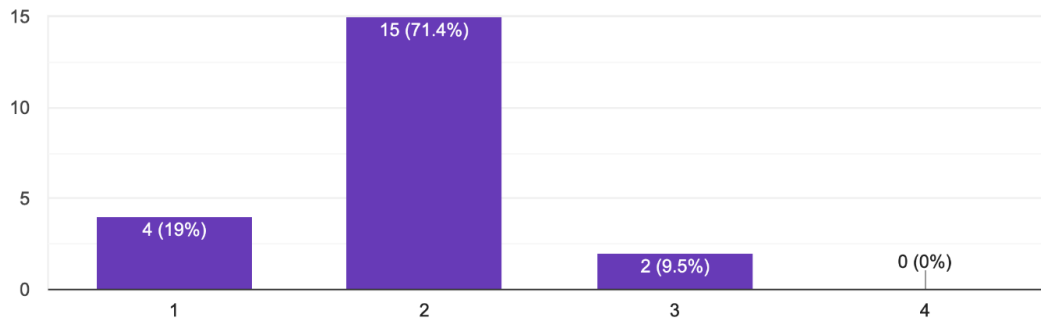
21 responses



Continuing from the previous question, most players had never come across any of His ﷺ quotes or sayings either. This is important in the context of the Hadith that players were presented with through this gameplay.

How much do you think this game experience would be spoiled by revealing the Hadith (quote this game is based on) in its entirety before gameplay begins?

21 responses



The data here indicates that most players wished to have more context when starting the game, and have the Hadith presented to them before beginning the play session. Our

reason for not showing them the Hadith before the play session was fear of discrimination or base assumptions that players might bring to the game if they knew that it was intended to have Islamic themes.

### 3.1.2 Subjective impression questions

**Q1: When you first began playing, what were your impressions?** (selected short answers)

*“It definitely had an arab color pallette, I noticed the topee (prayer cap) the UI seemed a little hard to read and I was confused about my objective. The jumping is very different than what I have experienced in the past.”*

*“I liked the art and the tiny bit of mystery.”*

*“I assumed it was a game based in Egyptian mythology”*

*“The art style was unique, I liked the large blocks in comparison to the smaller, pixelated avatars. The mechanics were also good, I liked that you begin with a decent amount of jumps”*

*“Slow horizontal movement speed, good vertical movement. Didn't really know where to go.”*

*“I was somewhat confused about what to do.”*

Overall, the first impressions of most players were a general confusion of where they should go and what exactly this strange world was. This fit with the experience goal and the themes of the game, because the player is supposed to be confused between the lines of dreams and reality. There was also a lot of feedback on the art style, which most people seemed to enjoy and elicited an Arab or Egyptian vibe.

**Q2: Did these impressions change as you got further through the game?** (selected short answers)

*“The further along in the game I got, the more I understood the connections between all of the pieces and the symbolism behind all the little details. It felt like the longer I played, the more I discovered. It was so beautiful and profound, and each time I played, I understood something new.”*

*“As I played more, I came to respect the map layout more, but player movement was still very slow and hard to predict at first.”*

*“As I played more, there was a definite feeling that there was some sort of spiritual element to the game.”*

*“My impressions changed as I got used to how to control the main character and unlocked the flying ability. This made moving around a lot more enjoyable. I also really grew to like the art style.”*

*“I honestly got distracted by the slow horizontal movement speed and deaths to water.”*

*“Once I figured out you could fly I got the hang of it.”*

Overall, players seemed to have a much more positive impression of the game as they continued. There were still reflections on the slow and almost sluggish horizontal movement, but players started to actually enjoy the vertical movement and exploration, especially as they received the flying upgrade from the grandma character. It is worth noting that the father gifts a horizontal movement upgrade, but only the player that completed the game actually reached the father character to receive it. The player who completed the game did not have any comments on the horizontal movement.

**Q3: In your own words, what do you think was the story of this game?** (selected short answers)

*“It is about a boy trying to find his family who have all been transformed in some way. (I didn’t get through the whole game so this could be completely wrong)”*

*"I think the story of this game was to "complete" a dream by the main character given the surreal setting and how they encountered many people familiar to them. I am unfortunately not too familiar with the story this game is based on so I don't think I can fairly comment on how well-fitting it is with those themes."*

*"A young boy and his mother get into a car accident, and his mother does not make it. In his comatose state, the boy learns to cope and accept his mother's passing through a whimsical, metaphorical dream. In the dream, he receives love and wisdom from his other family members who are with him and waiting for him to awaken, and through his mother herself who gives him the last bit of wisdom he needs to eventually join her in the afterlife (akhira). At the end of the game, he wakes up to his family, and carries these lessons with him."*

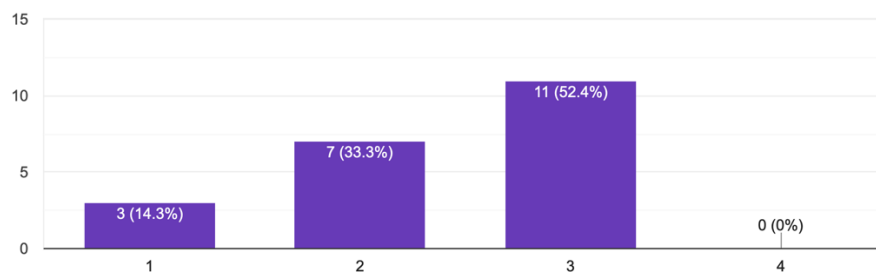
*"A story about remembering your life experiences while you are in the afterlife"*

*"I noticed Muslim symbolism, but I could not connect really formulate a story based on the gameplay. I know I was trying to do something and was running out of time, unsure of what the message was."*

*"A celestial entity guiding someone."*

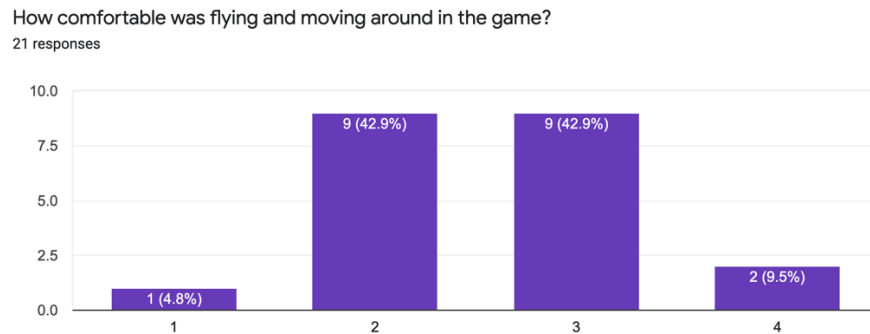
Most players seemed to grasp many of the symbolic and thematic elements of this game even without completing it. The player who completed the game had the most complete narrative description and got it spot-on. It was really great to see that players picked up on certain elements that I worried might not be apparent without completing the game.

How well did you feel that you knew your gameplay goals?  
21 responses



### 3.1.3. Gameplay questions

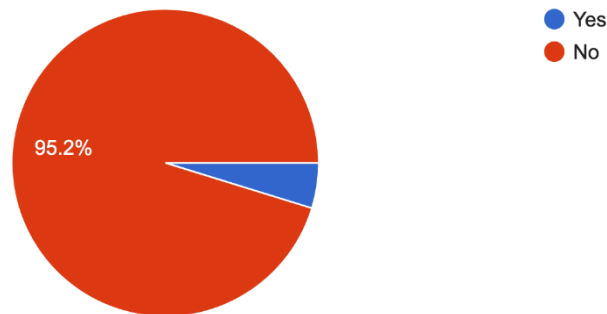
The results here were split pretty much down the middle on whether players felt they had a grasp on the gameplay goals or not. Most responses fell directly between 'Not at all' and 'A lot.'



In terms of actual physics gameplay, opinions were split, but the fact that not many people felt completely comfortable may be a telling data point. The movement of this game was intentionally difficult and slow to encourage more thoughtful exploration. However, from the responses here and other questions, we can learn that horizontal movement was far too slow and difficult, while vertical movement such as flying had an appreciated level of difficulty and technique.

Did you complete the game?

21 responses



### 3.1.4. Progression questions

As expected, most players did not complete the game within 30 minutes. There was just one play tester who completed it, but the amount of time it took them to do so is unknown. As stated above, it is estimated that it would take around 90 minutes to complete the game for the first time.

**Q2: If no, describe how far into the game you had gotten?** (selected short answers)

*"I got to the portal"*

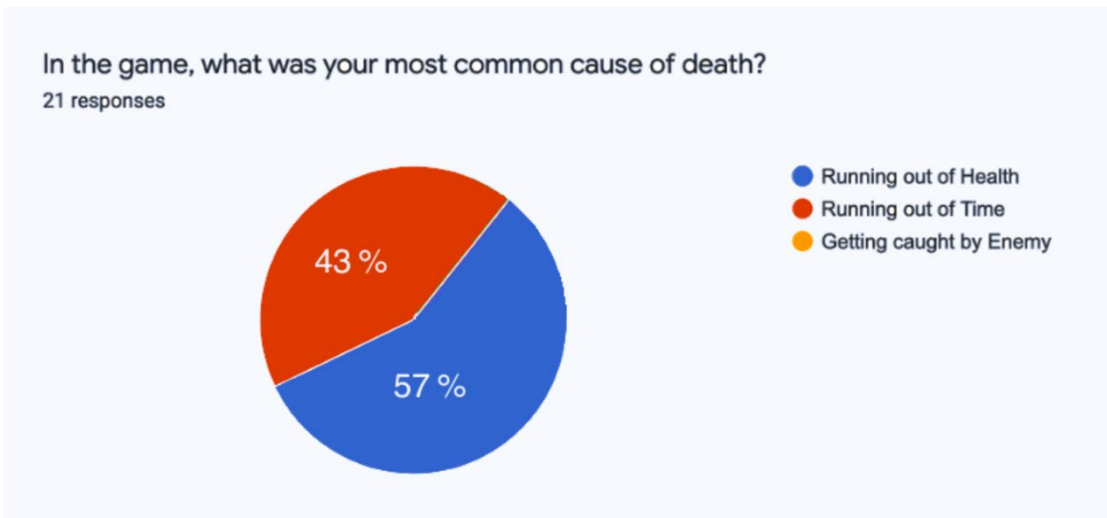
*"I kept dying in the water - both the water up above the clouds and in the dirt below. I got the coins between the two though :)"*

*"Where that portal was, and to the left of it was (i believe) the third lock"*

*"I was able to find the portal and fill out two thirds of the map before getting a game over."*

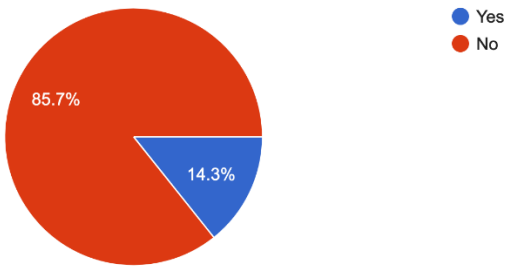
Most players reached the first portal by the end of the 30 minutes, which is about one third of the full game. This was expected, and it was good to see that players were able to make it that far at the intended pace.





Most players died from running out of health. Something to note is that a few players input their own responses, which results in a death due to lack of health. For example, a few player input ‘drowning,’ which is simply a means for the player to lose all their health. This informs us that the health diminishing while in water was not shown clearly to players, and thus the UI HUD should be updated to avoid this confusion.

Were there any parts of this game that you felt related back to your own life?  
21 responses

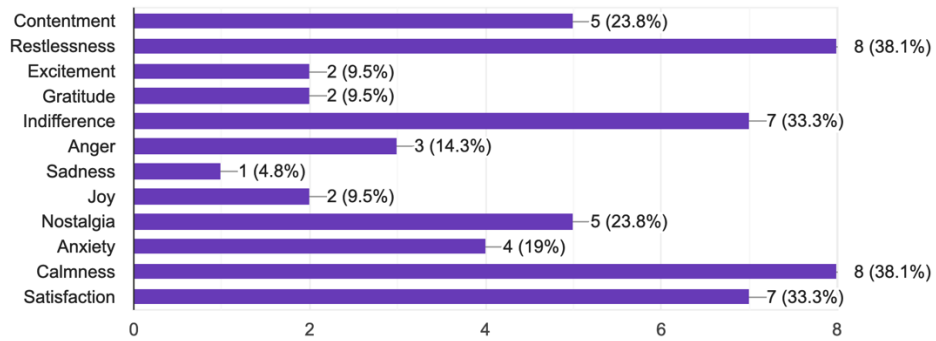


### 3.1.5. Personal response questions

Even without completing the game, the goal was for this game to be more relatable to player’s real world lives and personas. However, it is quite clear from this data that most players did not feel this way at all. Whether or not completing the game effects these results is

unclear. Though it is worth mentioning that the one player that did finish the game input 'Yes' for their response to this question. It is evident that this game is quite abstract and surreal to most players, with the only explicit connection to real-world events coming at the very end of the game.

What emotions did this game elicit in you? Check any that apply:  
21 responses



The results for this question were quite surprising. The experience goal of this game is to elicit emotions such as contentment, nostalgia, sadness, and restlessness. All four of these emotions had differing results and levels of success. Contentment and nostalgia were chosen by a fairly large number of play testers, and restlessness was tied for the most responses. However, sadness was not something really felt by most players. This may largely be due to the fact that any sadness would tend to be felt at the end of the game when players say goodbye to the mother character rather than while exploring or navigating the dream world. The high number of players that felt indifference is quite concerning, and a possible solution is to give players more context before and during gameplay. For example, showing players the full Hadith at the start of the game might go a long way to building up emotion and getting players in a more thoughtful frame of mind. Music is another huge factor in this, as currently the game has no sound or music at all, which drastically reduces any emotional storytelling.

**Q3: Please leave any additional comments or suggestions below.** (selected short answers)

*"I think the vertical movement was fun, well animated, and had some technique to it that'd enable you to maximize height, which was neat. Horizontal movement felt tantalizingly slow."*

*"I think the speed of the avatar can be increased a bit, some sections drag and it made me hesitant to backtrack since I was slow with a set time limit"*

*"I was very curious about the game, but it was a bit confusing and I didn't have the context to want to move forward. Starting with something explaining the context or hinting at what's going on would be great."*

*"This is such a beautiful game. It obviously comes from the heart, and touches the hearts of those who play. The amount of imagery and symbolism is incredible, every detail is important. It is a beautiful tribute to those we love and to who we would like to become."*

*"I think this game has potential to be very meaningful and has a unique message. Good job."*

### 3.2. Conclusions

The game was received reasonably well, as most players had at least one positive thing to say about it. The most common annoyance or grievance was the horizontal movement speed. The art style tended to be appreciated, and the feeling that there may be a deeper context to the game was a prevalent thought among players who did not yet complete the game. It was great to see helpful suggestions for improvement as well as general response to *Before Akhira*.

## 4. Postmortem

### 4.1. Future work/improvements

The most glaring aspect of this game which is missing is sound. Currently there are no sound effects or music, which significantly decreases the ability of this game to properly tell its story and achieve its experience goal. Adding these items will take the top priority in the coming weeks.

Another very important update will be to overhaul and clarify the HUD (heads-up display) that is currently present. The labels and indicators for health, wealth, time, and life are all barebones, and player feedback indicated that they were not clear enough for players to fully understand when they were taking damage. Updating this and the overall UI (user interface) will become the next steps to implement.

The final goal for this project was to publish it on markets such as Steam, so marketing videos and written descriptions will also need to be developed.

## 4.2. Final thoughts

All in all, this project has been truly a pleasure to work on. Developing a game with open-source tools, and one which keeps the balance between traditional gameplay and spiritual mechanics, has been a great learning process and experience. I am very grateful for the opportunity given to me to work on this game, and to do so under the tutelage of Brian Moriarty.

I will always cherish the time spent on *Before Akhira*, and I pray that this game reaches the hearts of others as much as it did mine. It was a very healing journey for me to make this game, and I view it as an art piece abstracting my own experiences with spirituality, life, and death. May Allah bless all of us, and grant us a contentment and peace of mind in this life and the next.

## Works cited

1. Shu'ab al-Imān, Hadith Number 9575.
2. de Saint-Exupéry, A. (1943). *Le petit prince [The little prince]*. Paris, France: Gallimard.
3. Taniguchi, Jiro (1992). *The Walking Man*. Japan: Kodansha.
4. *Knytt*, Nifflas. 2006.
5. *Rakuen*, Laura Shigihara. 2017.
6. Qadhi, Y. (2020, March). Plano, TX. Retrieved from <https://www.youtube.com/watch?v=DCon0Z8z8fQ>
7. Paden, W. E. (2005). *Religious Worlds: the comparative study of religion*. Boston: Beacon Press.
8. Suzuki Shunryū, & Dixon, T. (1989). *Zen mind: beginners mind ; informal talks on Zen meditation and practice*. New York: Weatherhill.
9. Latour, B., & Rose, J. (2013). *Rejoicing: or the torments of religious speech*. Cambridge, UK: Polity.
10. Abe Kōbō. (1969). *Friends*. Translated from the Japanese by Donald Keene. New York: Grove Press.
11. Huizinga, J., & Eco, U. (2002). *Homo ludens*. Torino: Piccola biblioteca Einaudi.
12. Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.
13. Spicer, K. (2020, April 13). Culture - How gaming became a form of meditation. Retrieved from <http://www.bbc.com/culture/story/20200409-how-gaming-became-a-form-of-meditation>
14. Piccione, P. A. (1980). *In search of the meaning of Senet*. New York: Archaeological Institute of America.
15. Donovan, T. (2010). *Replay the history of video games*. Lewes: Yellow ant.
16. McGonigal, J. (2012). *Reality is broken: why games make us better and how they can change the world*. London: Vintage.
17. Freire, P., Ramos, M. B., Macedo, D. P., & Shor, I. (2018). *Pedagogy of the oppressed*. New York: Bloomsbury Academic
18. Rūmī Jalāl al-Dīn, & Barks, C. (2002). *The soul of Rumi: a new collection of ecstatic poems*. New York: HarperCollins.
19. Berkley Center for Religion, & Georgetown University. (n.d.). How Does Video Game Religion Impact Life Off-line? Retrieved from <https://berkeleycenter.georgetown.edu/posts/how-does-video-game-religion-impact-life-off-line>
20. Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.
21. Linnitt, C. (2016, June 17). The Sacred in James Cameron's Avatar. Retrieved from <https://digitalcommons.unomaha.edu/jrf/vol14/iss1/14/>
22. Omeragić, E. (2019). Retrieved from <https://repozitorij.unios.hr/en/islandora/object/ffos:4751>

23. DeMaria, R. (2010). *Reset: changing the way we look at video games*. Place of publication not identified: ReadHowYouWant.com Ltd.
24. Morris, C. (2020, January 17). Here are the best selling video games of the past 25 years. Retrieved from <https://fortune.com/2020/01/17/best-selling-video-games-past-25-years/>
25. *Call of Duty: Modern Warfare 2*, Infinity Ward and Beenox. 2009.
26. Carroll, J. (2004, September 20). The Bush Crusade. *The Nation*. Retrieved from <https://www.thenation.com/article/archive/bush-crusade/>
27. *Special Forces 2: Tale of the Truthful Pledge*, Hezbollah Lebanon. 2007.
28. Campbell, H. A., & Grieve, G. P. (2014). *Playing with religion in digital games*. Bloomington: Indiana University Press.
29. Juul, J. (2011). *Half-real: video games between real rules and fictional worlds*. Cambridge, MA: MIT Press.
30. Bogost, I. (2010). *Persuasive games: the expressive power of videogames*. Cambridge (Massachusetts, USA): The MIT Press.
31. Simpson, C. M. (2015). In Another Time With (an)other Race: Representations Of Race And National Narratives In Elder Scrolls V: Skyrim And Fallout 3. In *Another Time With (an)other Race: Representations Of Race And National Narratives In Elder Scrolls V: Skyrim And Fallout 3*. Retrieved from <https://rc.library.uta.edu/uta-ir/handle/10106/25153>
32. Cuddy, L. (2008). *The Legend of Zelda and philosophy: I link therefore I am*. Chicago, IL: Open Court.
33. Ehoward. (2019, November 25). Holy Terror: The Rise of the Order of Assassins. Retrieved from <https://www.historynet.com/holy-terror-the-rise-of-the-order-of-assassins.htm>
34. Seif El-Nasr, M., Al-Saati, M., Niedenthal, S., & Milam, D. (2008). *Assassin's Creed : A Multi-Cultural Read*. Retrieved from <https://muep.mau.se/handle/2043/12753>
35. MULAKA THE GAME. (2018). Retrieved from <https://www.lienzo.mx/mulaka/>
36. Gamer communities: Discovering Spiritual Truths in Video Games. (2021, January 03). Retrieved April 18, 2021, from <https://gamingandgod.com/resources/community/>
37. Radde-Antweiler, K. (n.d.). *Virtual Religion. An Approach to a Religious and Ritual Topography of Second Life*. [Scholarly project]. In *Heidelberg Journal of Religions on the Internet*. Retrieved April 18, 2021, from <https://heiup.uni-heidelberg.de/journals/index.php/religions/article/view/393>
38. Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. Oxford University Press.
39. Sanders, J. T. (1971). *The New Testament christological hymns: their historical religious background*. Cambridge: Univ. Pr.
40. *The Legend of Zelda Breath of the Wild*. Nintendo. 2017.

41. Omar, S. (2019, April). Lanturna The Years of the Beloved. LANTURNA The Years of the Beloved. Blacksburg.
42. Plate, S. B. (2011). Religion is Playing Games: Playing Video Gods, Playing to Play. *Religious Studies and Theology*, 29(2). doi: 10.1558/rsth.v29i2.215
43. *Passage*, Jason Rohrer. 2007.
44. *Undertale*, Toby Fox. 2015.
45. Zimmerman, F., & Huberts, C. (2019). From Walking Simulator to Ambience Action Game: A Philosophical Approach to a Misunderstood Genre. *Press Start*, 5(2). Retrieved from <http://press-start.gla.ac.uk/index.php?journal=press-start>
46. Clark, N. (2017, November 12). A brief history of the "walking simulator," gaming's most detested genre. Retrieved from <https://www.salon.com/2017/11/11/a-brief-history-of-the-walking-simulator-gamings-most-detested-genre/>
47. *What Remains of Edith Finch*, Giant Sparrow. 2017
48. *Journey*, Thatgamecompany. 2012.
49. Latour, B., & Rose, J. (2013). *Rejoicing: or the torments of religious speech*. Cambridge, UK: Polity.
50. McGonigal, J. (2012). *Reality is broken: why games make us better and how they can change the world*. London: Vintage.
51. Ali Khan, N. (2015). Bayyinah Institute Malaysia Tour 2015. Bayyinah Institute Malaysia Tour 2015. Retrieved from <https://www.youtube.com/watch?v=9iqJvzSecWw>
52. *Before Eternity*, Seyed Siavash Mortazavi Ravari. 2015.
53. *The Graveyard*, Tell Tale Games. 2008.
54. Dyer-Witheford, N., & Peuter, G. D. (2009). *Games of empire global capitalism and video games*. Minneapolis: University of Minnesota Press.
55. Linietsky, J., & Manzur, A. (2014, February). Godot Engine. Retrieved April 18, 2021, from <https://godotengine.org/>
56. Foundation, K. (2005, June 21). Krita. Retrieved April 18, 2021, from <https://krita.org/en/>
57. Henriquelalves. (n.d.). GodotTIE. Retrieved April 18, 2021, from <https://github.com/henriquelalves/GodotTIE>



## Appendix A: IRB Purpose of Study and Protocol

### **Study Protocol/Research Methods**

#### **Title of Research Study: IMGD MS Thesis - Before I Go**

#### **Purpose of study**

To obtain user feedback in order to determine if experience goals are being achieved, locate operational bugs, and identify opportunities for design improvement.

#### **Study protocol**

Participants are directed to a Web URL where they view the Opening Briefing (below), complete the Informed Consent Agreement and download the game software.

After completing the game, participants are directed to another URL and asked to fill out a short survey to characterize aspects of their subjective experience and solicit suggestions for improving the experience.

#### **Opening briefing for testers (provided online):**

“Hello, and thank you for volunteering to test our project. Before we begin, could you please read and sign this Informed Consent form? [Tester signs IC form.] Thank you. When your session is complete, we will ask you to complete a brief survey about your play experience. At no point during your test session, or in the survey after, will any sort of personal and/or identifying information about you be recorded. Please begin playing when you feel ready.”

## Appendix B: IRB Informed Consent Agreement

### Informed Consent Agreement for Participation in a Research Study

**Investigator:** Brian Moriarty

**Contact Information:** [bmoriarty@wpi.edu](mailto:bmoriarty@wpi.edu)

**Title of Research Study:** *Before Akhira*

**Sponsor:** WPI

**Introduction:** You are being asked to participate in a research study. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

**Purpose of the study:** The purpose of this study is to obtain feedback on the project in order to facilitate design improvements and find/address operational bugs.

The project itself is a 2D platformer game that has core gameplay aspects of exploration, simple physics-based puzzles, and time-based challenges.

Participants will sit down and play through the game at their leisure, and then answer a few survey questions in order for developers to improve gameplay and narrative aspects. More details below.

**Procedures to be followed:** You will be asked to play a brief game. After completing the game, you will be asked to complete a brief, anonymous survey describing aspects of your subjective experience.

The game is a 2D platformer game, rated E for everyone. Participants will play as a young boy who is in a dream world that he must awaken from. To do so, players will explore the 2D world and platform their way to different family member characters in order to receive items so that they can proceed further.

The basic gameplay is exploration and platforming. Gameplay has an emphasis on platforming and exploration rather than combat.

Any computer with a working WiFi connection will be acceptable for this study. The game will be accessible via a link provided to participants, with the after-game survey appearing on the same page.

The game will take about an hour to play through, but there is no requirement for you to actually finish the game. The goal of this study is simply to see how far players get, how difficult the gameplay is, and how players respond to the overall narrative.

The survey will be brief, and will likely take no more than 10-15 minutes.

Gameplay instructions will appear in the game itself, so there is no prior reading material required. The currently supported input method is a computer keyboard. There is no mouse input.

We hope you enjoy playing our game!

**Risks to study participants:** There are no foreseeable risks associated with this research study.

**Benefits to research participants and others:** You will have an opportunity to enjoy and comment on a new game under active development. Your feedback will help improve the game experience for future players.

**Record keeping and confidentiality:** Records of your participation in this study will be held confidential so far as permitted by law. However, the study investigators and, under certain circumstances, the Worcester Polytechnic Institute Institutional Review Board (WPI IRB) will be able to inspect and have access to confidential data that identify you by name. Any publication or presentation of the data will not identify you.

Compensation or treatment in the event of injury: There is no foreseeable risk of injury associated with this research study. Nevertheless, you do not give up any of your legal rights by signing this statement

For more information about this research or about the rights of research participants, or in case of research-related injury, contact: The investigator of this study (Brian Moriarty, Email: [bmoriarty@wpi.edu](mailto:bmoriarty@wpi.edu) ), the IRB Manager (Ruth McKeogh, Tel. 508 831-6699, Email: [irb@wpi.edu](mailto:irb@wpi.edu)), and the Human Protection Administrator (Gabriel Johnson, Tel. 508-831-4989, Email: [gjohnson@wpi.edu](mailto:gjohnson@wpi.edu)).

Your participation in this research is voluntary. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit.

By signing below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure that your questions are answered to your satisfaction before signing. You are entitled to retain a copy of this consent agreement

Study Participant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Study Participant Name (Please print): \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Person who explained this study: \_\_\_\_\_

APPROVED BY WPI IRB 1 3/11/21 to 3/10/22

## Appendix C. Mother character AI guidance

```
1 extends KinematicBody2D
2
3 #CONSTANTS
4 const SPEED = 150
5 const POS_ARRAY_MAX = 100
6 const ALPHA = 0.03
7
8 #PUBLIC VARIABLES
9 onready var player = get_parent().get_node("Player")
10 onready var playerSprite = player.get_node("Sprite")
11 onready var playerSpriteOld = player.get_node("SpriteOld")
12 onready var levelFloor = get_parent().get_node("TileMap")
13
14 #PRIVATE VARIABLES
15 var velocity = Vector2.ZERO
16 >| #bool indicator for if player is in radius of npc
17 var inRadius = false
18 >| #array of player positions
19 var posArray = []
20 >| #target position for npc to reach
21 var targetPos = Vector2.ZERO
22 >| #how many steps behind will the npc be from the player
23 var STEPS_BEHIND = 33
24 >| #the smoothed version of STEPS_BEHIND
25 var STEPS_BEHIND_S = 0
26
27 #function called at beginning of play
28 func _ready():
29 >| for i in POS_ARRAY_MAX: #fill array with empty vectors
30 >| >| posArray.append(Vector2.ZERO)
31
```

```
32 #function called every delta frames
33 func _physics_process(delta):
34 >| if $Area2D.overlaps_body(levelFloor): #detect when npc is on floor
35 >| >| #play the correct sprite on the ground
36 >| >| $Sprite.play("walk")
37 >| >| if player.motion == Vector2.ZERO: #dont overlap with the player on the floor
38 >| >| >| return
39 >|
40 >| if player.inWater == true: #if in water, act accordingly
41 >| >| #set the target to be the center of the player node
42 >| >| targetPos.y = player.position.y - 32
43 >| >| targetPos.x = player.position.x
44 >| >| #play the correct sprite
45 >| >| $Sprite.play("fall")
46 >| >| #really lag behind in water
47 >| >| STEPS_BEHIND = 50
48 >| else: #otherwise do nothing
49 >| >| pass
50 >|
51 >| if player.jumpCounter <= 0: #if the player is on the ground
52 >| >| #set the target to be the center of the player node
53 >| >| targetPos.y = player.position.y - 32
54 >| >| targetPos.x = player.position.x
55 >| >| if $Area2D.overlaps_body(levelFloor): #reset to walking when npc is on ground
56 >| >| >| #play the correct sprite
57 >| >| >| $Sprite.play("walk")
58 >| >| >| #keep a good amount behind the player when on the ground
59 >| >| >| STEPS_BEHIND = 33
60 >| else: #if the player is jumping or flying
61 >| >| #set the target to be the shoulders of the player
62 >| >| targetPos.y = player.position.y - 64
63 >| >| targetPos.x = player.position.x
```

```

64 › › ›
65 › › › #play the correct sprite
66 › › › if player.jumpCounter > player.maxJump:
67 › › › › $Sprite.play("fall")
68 › › › else:
69 › › › › $Sprite.play("fly")
70 › › ›
71 › › › #hop on player's shoulders when flying, but transition smoothly
72 › › › STEPS_BEHIND = 0
73 › › ›
74 › › › #add the most current position to the front of the list
75 › › › posArray.push_front(targetPos)
76 › › › #shift the array back so that the position updates
77 › › › posArray.pop_back()
78 › › › #fancy math from Baba (exponential smoothing) which makes a clean transition from jumping to flying to walking!
79 › › › STEPS_BEHIND_S = (ALPHA * STEPS_BEHIND) + (1 - ALPHA) * STEPS_BEHIND_S
80 › › ›
81 › › › if posArray[STEPS_BEHIND_S]: #make sure that the array is valid and filled
82 › › › › #set npc position to smoothed number of steps behind player
83 › › › › position = posArray[STEPS_BEHIND_S]
84 › › › else: #if the array is empty or invalid, then leave
85 › › › › return
86 › › ›
87 › › › if playerSprite.flip_h == true: #flip sprite at appropriate times
88 › › › › $Sprite.flip_h = true
89 › › › #› targetPos.x = player.position.x + 32
90 › › › else:
91 › › › › $Sprite.flip_h = false
92 › › › #› targetPos.x = player.position.x - 32
93 › › ›

```