



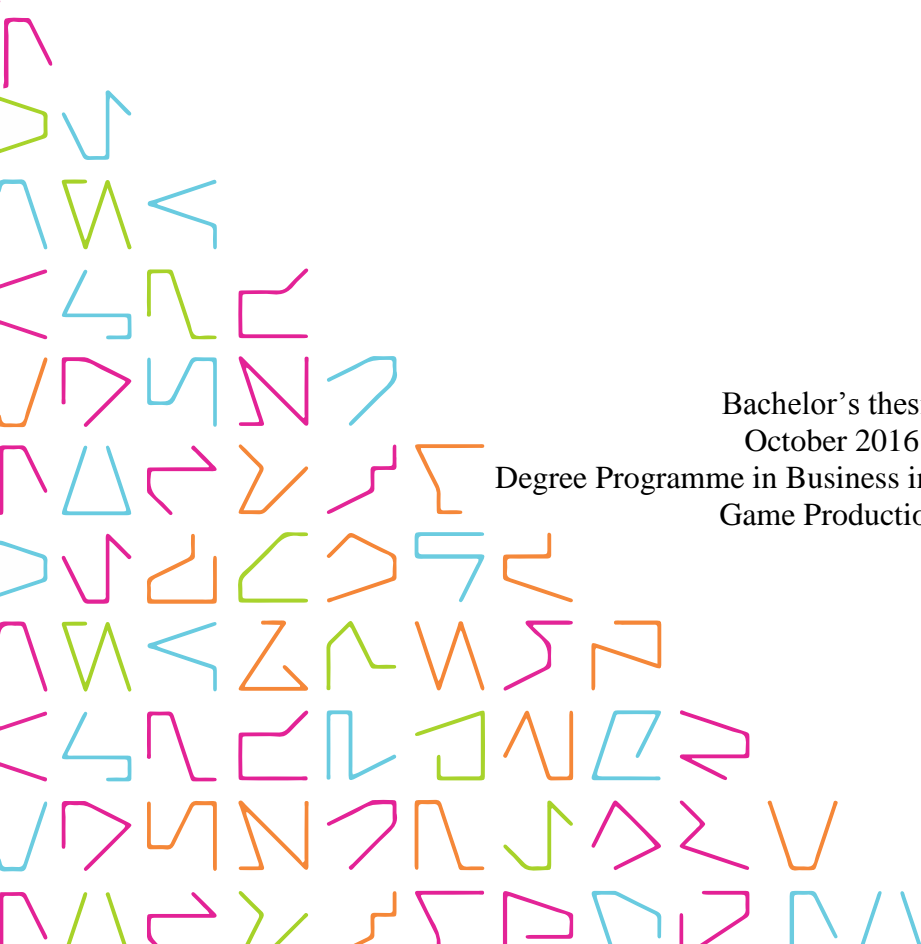
TAMPEREEN
AMMATTIKORKEAKOULU

Designing a Guiding and Tutorial Free Beginning for a 3D Role-Playing Game

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Bachelor's thesis
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Degree Programme in Business information systems
Game Production



ABSTRACT

Tampereen ammattikorkeakoulu
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Designing a Guiding and Tutorial Free Beginning for a 3D Role-Playing Game

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This thesis focused on designing the start to a game and tools that make that possible in the best way. The main goal was to design a guiding start to a game, also known as the tutorial. Instead of using prompts or windows on the screen that block the player's view, the goal was to teach the player how to play the game without using any things that take the player out of the game.

Instead, this was done with different kinds of hints such as using audio or the game environment and art that also add to the experience itself. The main problem was that all the design was theoretical and no actual playable game was made as that would have been out of the scope of this thesis so there was no way to test the systems that were designed.

Results of this thesis consist of design for the game's core which includes mechanics, art, audio, narrative and level design. The main focus was directed at level design because it would provide a sound basis for further design of the other elements.

The goals set in the beginning were met and the game's core was designed into a working system whose elements work together smoothly. This core is then easy to take further and expand upon to create a full game.

Key words: game design, tutorial, script, level design

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Tämä opinnäytetyö keskittyi pelin alun suunnitteluun sekä työkaluihin, joilla sen toteuttaminen onnistui parhaiten. Tarkoituksena oli suunnitella pelille sujuva ja johdatteleva alku, eli tutoriaali. Sen sijaan että ruudulle ilmestyy ikkunoita jotka kertovat pelaajalle mitä tehdä, tarkoituksena oli opettaa pelaajalle, miten pelata ilman asioita, jotka katkovat pelitilannetta.

Tämä tehtiin erilaisten vihjeiden avulla, jotka koostuivat esimerkiksi äänistä, ympäristöstä tai grafiikasta. Näillä voitiin myös lisätä peliin sisältöä, samalla kun opetetaan pelaajaa etenemään. Isoin ongelma oli, että peliä ei pystytty tekemään pelattavaksi tai testattavaksi resurssien ja ajan riittämättömyyden vuoksi, niinpä peliä ei voitu testata.

Työn tuloksena saatiin pelin pääpiirteet, jotka koostuvat mekaniikoista, grafiikasta, äänistä, tarinasta sekä kenttäsuunnittelusta. Pääosin keskityttiin kenttäsuunnitteluun, koska siihen voitiin tukea muutkin osa-alueet, jotta saatiin pelin alusta toimivampi kokonaisuus.

Tavoitteet saavutettiin ja pelin alku saatiin suunniteltua ja kaikki osa-alueet toimivat yhdessä. Tästä voi jatkaa eteenpäin koko pelin työstämisessä. Pelin osa-alueita voi jatkaa helposti, koska päärakenteet ovat jo suunniteltu.

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1 INTRODUCTION

Tutorials in games can be incredibly difficult to get right, especially when using on-screen prompts that can block the view and be annoying in general. Most of the time players just want to get to the actual gameplay as quickly as possible and they have little to no patience when it comes to learning every single possible action right at the start of the game.

Tutorials can be helpful when the game has a lot of different, complicated systems that the player needs to be familiar with in order to succeed. For example in many strategy games one must be able to control their troops while building a base and managing their resources all at the same time. However, for most games that fall under the genre of role-playing games, the actions that the player must perform are not as complicated, especially when it comes to single-player role-playing games where the player only has one character to control at any one point in time. Therefore the tutorial system can be a discouraging experience to the player if it keeps them from getting to the gameplay for too long and especially if all they learn from it is how to do things they have already learned to do in countless other games, as games in the same genre tend to use similar button-schemes for doing similar actions (Rogers 2014, ch. 7).

This thesis will explore the possibility of having no tutorial at the start of the game in the general sense and still teaching the player all the basics they need to know. The start of the game will be designed in a way that guides the player through the map and introduces situations which require the player to reflexively press buttons as they generally do when in danger in a game, which will lead to the player noticing and learning which button does which action.

The main goal is to let the player discover the controls, how to navigate the world and how the combat works on their own, in order to maximize the Eureka effect and the satisfaction they get from playing the game. This will hopefully lead to a positive experience with the game which is the main goal of any game out on the market. Positive experiences will lead to positive reviews and more copies sold or downloaded which then leads to a profitable game. A technique that makes the tutorial itself a positive ex-

perience and hooks the player in before they even start the game completely can be a valuable tool for game companies around the world.

A big challenge will be preventing scenarios where the player will get lost in the game world without knowing where to go next. This can be circumvented by visual, audio and level design but it will have to be subtle enough so the player will not pick up on it and if it is too noticeable, the beginning of the game might start to feel like a tutorial.

There is no client for this thesis and it will be independent because the subject is quite specific and only works for 3D role-playing games of a certain type. Generalizations can be made and many of the techniques have been used in many games but the goal is to gather all of these techniques together and make a complete and dynamic whole. The design process that is made in the thesis is also only for the starting part of a game which means it would need much more work before it was a fully working game and finding a client that is planning on creating a game of the same subject and genre is nearly impossible.

Many of the references used in this thesis will talk about general ideas for creating games that teach the player different things. They will have to be implemented in a different manner into this specific game so most of the principles and theories will be iterated upon so it fits the specific genre and type of the game better. In general the principles of design when it comes to games can vary greatly depending on the genre so some of the information in the references apply poorly to this specific game.

2 THE KEY ELEMENTS OF GAMES

In order to have a successful game, it needs to cover all the key elements that are required for a fully functioning game and they all need to be of high quality or the player will feel like the overall experience is lacking something, often without being able to point out what exactly that something is. This is because many of these elements are subtle and not directly out in the open for the player to pick up on or even completely hidden in the game's internal mechanisms. Nevertheless, all these different parts are vital to the game and especially so in tutorial that has no on-screen prompts, where everything must work together in order to lead the player forward through the game world while teaching them of what the game has to offer.

2.1 Fun

Most games that are created for the purpose of entertainment have one goal in common and that is for the game to be a fun and enjoyable experience for the player, because unenjoyable and boring games do not fare well in the market. Koster (2013, ch. 2) believes that the best source of fun and enjoyment for the player come from recognizing patterns within the game, learning them and slowly mastering them and it is the process as a whole that makes games entertaining.

All games are built from different kinds of puzzles that the player has to conquer by learning the solution to each one through trial-and-error. These puzzles can be what are normally thought of as such, for example moving blocks in a level to certain locations to open a door, or more abstract puzzles such as a boss fight, where the player must find the enemy's weak point and attack it in order to defeat them. The amount of enjoyment depends on the complexity of the puzzle and in most games the more complex ones are left for later in the game so the difficulty does not discourage new players from playing the game. Ideally a game will get gradually more difficult and at the right frequency, because if a game is paced too slowly difficulty-wise, it is easy for the player to get bored and feel unchallenged. However, if the pacing is too fast the player might not be able to keep up with the difficulty curve and become overwhelmed. (Koster 2013, ch. 3.)

Fun in video games can also stem from uncertainty because when the player does not know what will happen in a game it will give them a thrilling experience filled with different kinds of surprises. It gives a similar effect as gambling and other uncertain forms of entertainment but without the drawbacks that would affect real life. Some forms of uncertainty can have positive effects on the player, rewarding them for playing the game and encourage them to keep going, whereas other forms can have negative effects that give the game the challenge it needs. (Costikyan 2013, ch. 3.)

A popular form of uncertainty is having something randomized in the game, which can lead to a different gameplay experience each time, as well as prevent a player from learning all the patterns in the game or be able to predict what will happen next, both of which can lead to boredom. However, if some things are completely randomized in a game, their effects on the player should not be too great because if the effect is negative, it might discourage the player from continuing and if the effect is positive then the game might start to feel too easy and that can make the player quit the game as well. Randomness can also bring a whole new aspect to the gameplay and pattern-learning for the player, as they will start to learn how to minimize the effect of the random events which can make the game more fun. (Costikyan 2013, ch. 3.)

2.2 Narrative

In role-playing games where one of the main goals is to make the player become invested in their character as well as the game world and its inhabitants, the narrative plays a big part. It gives life to the whole world and the characters inside it, making it possible for the player to become interested in their history and future and want to learn more about them. Narrative can mean two things, one of which is the actual story arc of the game from beginning to end that the player goes through when they play the game, and the second being the player's own narrative of the game which is molded by their adventures in the game world and interactions with the game's mechanics that take place outside of the main storyline. (Ham 2015, ch. 6.)

The narrative of the game can be difficult to get right because it should be enticing, exciting, surprising, thrilling, and overall interesting to the player who goes through it and

because there are multiple types of players, there needs to be multiple different options on how the game's narrative can be experienced. Some players only want to experience the gameplay and do not want separate scenes that take the story further, which means that the vital parts of the game's story should be introduced within gameplay and the rest should be available only to those who seek it out. Additional details on the story can be hidden in parts of the game world where players who do not care for the story will not go, and act as a reward to those who do. (Rogers 2014, ch. 3.)

Even though a role-playing game's focus is not completely on the narrative itself, it should still be designed to be a concise whole with as little loose ends as possible in order to maximize the amount of satisfaction the player gets from finishing the game and making them feel like they did everything they had to do. Any extra details that can be found hidden in the game world should only add to the main backbone of the narrative or open up the history of the world and its characters. However, it should not reveal vital things that should have been in the main story arc as it will be unfair to players who do not want to go through every corner of the game. (Rogers 2014, ch. 3.)

2.2.1 Characters

The game's characters are what take the narrative forward and the medium through which the player gets most of the information in the game so it is important that they are designed well so the player can get attached to the friendly characters they meet during gameplay. A well-designed character reflects the game's world and culture and is complex, much like a real person. The more depth a game character has the more interesting the players will find them and the more likely it is for them to become attached to the characters, which in turn makes the whole narrative of the game have a bigger impact on the player. NPCs, non-player characters, should always serve some sort of purpose in the game world, be it selling inventory items to the player or taking their side in battle, because it guarantees that each encounter the player has with another character will add something to the gameplay experience, keep the game interesting and make the world seem more alive. (Rogers 2014, ch. 5.)

The game's main character is controlled by the player and it is through them that the player experiences the game world so the character's personality can change the way

the player thinks about the game. All small details varying from the way the character speaks to how the character navigates the game world affect the way the player sees the world and how seriously they take what happens in it. If the game strives for realism and seriousness in narrative, the player character needs to reflect that or the player will not respect the story and will think less of the game overall. (Rogers 2014, ch. 5.)

2.2.2 The world

The game world is where the game takes place and it is a defined area where the player can explore the environment. The world includes everything that the game has to offer to the player and more often than not it is divided in some form so the player cannot access all of it right from the start. This is done so the game's narrative can be built to be more structured as well as to keep the player from wandering off to areas that they should visit later on as their character progresses further. In role-playing games the world can be very detailed because one of the main points of games in the genre is to explore the world and what it contains. (Adams 2014, ch. 1; Ham 2015, ch. 6.)

In order to make the world more appealing to the player, it can be influenced by areas in the real world as to appear more believable and easier to approach. The world is reflected by its inhabitant and NPCs from different areas can have different cultures and if the game world itself is influenced by a real location then the characters can take inspiration from cultures that reside in those locations so the player will become more interested in the world because they might have heard something about those locations and want to explore them further through the game. (Ham 2015, ch. 6; Heussner, Finley, Hepler & Lemay 2015, ch. 3.)

The world can also serve as a tool for narrative as it can go through visual changes due to things taking place in the story of the game and it can increase the player's immersion if they can see the characters' and the story's effects in their environment. The game world can also have a long history that can be tied into the game's story and the player can learn about everything the world has gone through and if these events have similar ones in the real world, it can make the whole game seem more realistic and closer to the player's heart, which in turn makes the whole experience more personal and positive. (Rogers 2014, ch. 5.)

2.3 Art

The art of the game is what establishes the general atmosphere and places the game world in a certain time and location. Its main goal is to tell the player what kind of a world the game takes place in and what they can expect to find in it as well as how realistic the game is trying to be. If the art style strives for realism then the player will think of the game as serious, thus affecting their view of the whole game solely based on what kind of art they come across. Different types of art can be associated with different types of assumptions on the players' part, which can be used to increase realism or go against it to create surprising situations (Nitsche 2009, p. 161-163).

The assumption that the player gets of the game should be supported by all parts of the art, such as architecture and the characters' visual design or the player will become confused as to what kind of an impression the game is going for. Some discrepancies can be made intentionally to draw the player's attention and perhaps foreshadow the narrative or just give the game world a hint of flavor, reminding the player that it is not completely realistic but if executed poorly, it can be a jarring experience to the player (Byrne 2004, p. 242-243).

Art can be used as a powerful tool when it comes to leading the player through the game world as varying levels of detail might be subtle enough for the player to be influenced by them but not acknowledge them. It can also act as means for foreshadowing by having imposing art style that stands out from the usual neutral art, warning the player of dangers to come and suggesting them to take an alternative route. However, art alone cannot always affect the player strongly enough to for example deter them from continuing and instead changing direction and it must work together with the other elements the game world has to offer, such as audio. (Rogers 2014, ch. 9.)

2.4 Audio

The main role for sounds in games is to enhance the emotion that the current scene of the game is trying to portray and make the overall playing experience more exciting. This can be done with the use of the underscore, which is the ambient music or sounds in an area and it mostly works on the subconscious level so it does not stand out from

the gameplay but rather compliments it. It can either amplify the current emotion of the situation or foreshadow something that is yet to come. (Sweet 2014, ch. 1.)

If an underscore is very repetitive or lasts for a long time without changing, it can start to stand out from the gameplay in the negative sense and annoy the player and to prevent this, the underscore can consist of multiple different pieces of music that are mixed together or alternate. Audio can work well combined with art as people can associate certain types of music with certain periods of time in history or certain environments. This can lead to the player expecting to see specific types of environments upon hearing a certain piece of music. (Sweet 2014, ch. 1.)

Music can indicate changes in game states, informing the player and preparing them for the coming change and over time the player can differentiate between the different pieces of music and subconsciously start preparing for them, making the gameplay feel more fluid. Tempo can increase the intensity of any scene and can warn the player of enemies or their attacks. Musical exclamation points are short, usually sharp sounds that attract the player's attention to something important through the gameplay and its purpose is to take the player away from the situation and focus on something else so they do not miss it. (Sweet 2014, ch. 1.)

3 DESIGNING THE GAME ELEMENTS

3.1 Narrative

Even though this thesis focuses mostly on the beginning of the game, it is important to at least have knowledge of the full story of the game as sometimes it can be beneficial to the story to add foreshadowing or hints of the future in the narrative already at the start of the game. The overall story can also help shape the other elements in the game, such as the theme of the art. Before being able to determine good designs and locations in the game levels, one must first have created the backbone for them and in order to do that there should be a narrative for the game as the level design can be influenced by different elements of the story, such as period of time, culture and the architectural design norms that come with those two things. The way the levels are designed can also take inspiration from the game's story, for example the areas can be connected to each other in a manner that allows the story to be told in the best possible way.

The game will take inspiration from ancient Egypt and the narrative will be heavily influenced by it and it will focus on the extensive death rituals and the believed life in the Underworld where the person is transferred after death (Ruiz 2001, p. 97). The story and overall theme will aim for near-realism in the sense that most big ideas and concepts are accurate, but as there is so much information available about ancient Egypt that it is nearly impossible to have all fine details portrayed correctly and it would be out of the scope of this thesis to do so. The game's story will take place completely in the Underworld that was believed in by ancient Egyptians but most of the environments will represent Egypt with a slight otherworldly touch as there is magic in the game, so laws of physics will be bent slightly but otherwise the game will try to seem realistic in terms of character movement and combat.

The environment and the game world itself will be the main narrator for the story and it will reflect all the events that take place during the narrative and reflect death and destruction in visual and auditory ways, letting the player know of what is happening all around them as they progress through the game. Some NPCs will be seen along the journey but they will only chit-chat for a little while and offer miniscule hints through dialogue, telling the player where to go and what to do, but it will not be much. The

bulk of the storytelling will come from playing the game and not through in-game dialogue because sometimes it can be much more powerful in effect and it makes the game seem cleaner overall. Telling the story this way also gives power to the player in the sense that they can make what they want from the story for the most part which in turn gives a unique experience for all players playing through the game. It also makes the scenarios where NPCs do talk about the narrative more powerful as it will be out of the norm for them to do so which will then draw the player's attention.

3.1.1 Characters

There will be neutral, helpful and aggressive NPCs in the game, the helpful being kind to the player and granting access to tools that help with progression, such as merchants of miscellaneous goods, trainers of magic and vendors for weapons. These NPCs will be scattered around the world but overall are very scarce as the game aims for as little assistance as possible, but some character interaction is positive for the gameplay experience because it brings some variation and breaks the action, giving the player some time to breathe in between gameplay.

Neutral NPCs can be found in most locations in the game and will not engage in combat unless the player provokes them somehow, such as by attacking them or destroying something of theirs. These characters act as filler, making the world seem more full and gives the player the option to train their combat mechanics if they so choose. Aggressive characters make up the combat situations in the game, where they will attack the player even without provocation and will force them to respond in some form. Their job is to create tension in the gameplay experience as well as test the player's abilities in the game in the manner of a barrier that must be passed in order to progress.

Even though there are helpful NPCs in the game, none of them will actually help the player in combat directly and even they can be attacked by the player. The combat in the game is supposed to be a solitary experience so the player will only have their own skills to rely on at any point. The player can fight the helpful NPCs if they so choose, as it will bring variety to the game and make the player feel like they have more choice in how they want to interact with the world as a whole. These NPCs can also give different

rewards to the player if they choose to kill them and different ones if they help them or talk to them.

Most of the game the aggressive and neutral characters will have a similar appearance, visually representing a monster-type creature as they are people in the real world that appear as their symbolic representations in the Underworld to the player. Helpful NPCs will appear to the player as regular people or animal forms of the gods of ancient Egypt as they are in the Underworld with the player so they can see them as they are or as they wish to be seen. This distinction is important for the gameplay experience, as the player will start to learn the difference in motive through the difference in appearance and sometimes the player can be surprised by having a seemingly aggressive creature be helpful and vice versa, breaking the norm and bringing variety to the game.

3.1.2 The world

The world will include environments much like those in ancient Egypt and the gameplay will take place in pyramids of the pharaohs, tombs and crypts, the desert and the rivers as well as the Underworld itself. Having multiple different environments will bring variety and even though they will all look a little similar due to the color themes of each environment, there will still be some distinct characteristics for each, letting the player discern between them while playing and know they have done some progress when the surroundings change slightly.

As the game takes place in the Underworld, ties to the rest of the world do not exist in the context of the game, so everything the player will see will have to do with Egypt and Egyptians and nothing else and there will be no other influences for the story. This helps give all the environments a uniform look, making the game feel more of a whole and informing the player of what they should expect to see while they are playing the game. However, it can take focus away from the environment and art when most things in each area seem similar and that is why it is important to give each location distinct characteristics so they differ in some way. The player will still not pay as much attention to everything visual in the game world over time, which helps bring more focus to the narrative of the game as well as the gameplay itself which are the main selling points for the game.

3.2 Art

The visual style of the game will try to highlight and play on the associations that most people have when they think of ancient Egypt, which are the hieroglyphs, gold and the colors yellow and orange, all of which can be seen in buildings and clothing from that time and are heavily connected with the whole culture. Other colors in the visual style will be blue, red and green all of which have a different symbolic meaning in the ancient Egyptian culture and the utilization of these colors can be of symbolic nature or accentuating something important (Baines 2007, p.244-245), drawing the player's attention. Image 1 shows what the player would see around them in the game frequently, architecture with many details that may give them hints if they look more into them. The colors depicted in image 1 are the main colors that can be found in the environment, at least when it comes to structures. Other areas such as nature will have colors matching the environments.



IMAGE 1. Egyptian art and architecture (Agrippina 2013)

The overall visual theme will be quite dark and gray as the game takes place in the Underworld and colors will appear more worn out due to this fact. The dark theme also accentuates the feeling of tension that the player will feel while playing the game and going through all the different areas. This will make the use of lighting more important and it will become a good tool for guiding the player, as lighting will create contrast to the dark surroundings and will draw the player's attention. It is also important to design the areas in the game to be slightly different, because if the theme is consistently dark and gloomy then the game can be perceived as repetitive and dull by the player.

Utilizing lighting and small miscellaneous details will help make the surroundings feel different. Image 2 shows what an area in the game might look like when it comes to lighting. Generally dark but the area has a few light sources to draw the player's attention and guide them around. The details on the pillars will change depending on the environment and will tie in with the area's enemies for example. A good way to go about making the game feel different in each area is to design them to correspond with what is at the end of each area, for example if one area in the game ends with a boss fight against a character heavily connected to water, then the rooms and areas leading to that boss should give hints of what is yet to come by having water incorporated in the level design.



IMAGE 2. Egyptian architecture (RonPorter 2010)

Art and architecture found in the game will be influenced heavily by ancient Egypt and most structures will strive for similarity with the real world equivalents. Art and especially small details will have a moderate part in the game's visual appearance as Egyptians believed in charms and symbols and utilized them a lot (Ruiz 2001, p. 47). Such symbols will be used in the game as details for different surfaces in order to create a more realistic and believable experience. Overall the art style will strive for realism to increase the player's immersion and to enhance intense situations. Image 3 has an example of what the different symbols and details will look like as well as the color schemes for these details. All details in the game will be derived or inspired by real world equivalents to make the player feel like they are in ancient Egypt while playing the game.



IMAGE 3. Egyptian symbols (Cazilu 2015)

3.3 Audio

The game's music will play a big part in setting the scene and establishing atmosphere as well as foreshadowing coming events. The music style will aim for mysticism and wonder in safe areas and danger in areas with enemies in them. The music will try to

capture the essence of ancient Egypt and add some elements of the unknown to it so the player will have the same feelings while playing the game. The music will aim to guide the player by letting them know how they should feel in each situation and warning them of threats to come.

The sound effects of the game will give the player feedback by making sounds that players might think of as positive when they do something correctly and sounds that people associate with failure or overall bad in certain situations when they fail something. For example swinging their weapon at an armored enemy will make a bad metal-on-metal clanking sound instead of a satisfying slicing sound which will instantly give feedback to the player that they are doing something wrong and will guide them in that sense. There will be no music jingles that many other games have when the player succeeds in something, instead the game will sound effects that sound satisfying and in the context of the game as well as soft and pleasant, in contrast to the sharp bad-feeling sounds such as the one mentioned before.

Sounds made by NPCs will let the player know what they are about to face, for example sounds of a certain type of enemy that the player has faced before echoing in the area. This way the game will help the player prepare for certain types of enemies that they will face in the near future and it will also help increase the tension of the situation, keeping the player on their toes expecting to see an enemy soon. It can also lead to surprises that bring in some uncertainty to the game if the source of the sounds cannot be found, for example.

The soundtrack in general will be quite spiritual and mysterious as these two themes tie in well with the story of the game. Most of the game has no soundtrack playing but in cutscenes and boss fights there will be a track playing, enhancing the experience. No soundtrack when travelling the world creates a feeling of loneliness and gives room for other sounds to be heard by the player, such as NPC dialogue or sounds the enemies make. However, some areas will have a soundtrack playing. These areas are the safe zones in the game where the player is in a sanctuary of sorts where no harm can come to them unless they attack the friendly NPCs that lie there as well. This can lead to transitions that let the player know that the next area is not safe anymore, such as having the music fade out or end abruptly accompanied with a sound coming from an enemy. Music clips 1 and 2 give a general idea for the theme of the music in the game. It is quite

soft and atmospheric and adds to the feeling of solitude and loneliness the player will feel while playing the game, which will make the player feel more helpless in a sense but overcoming obstacles will be even more satisfying as it means defeating the loneliness as well.



music_clip1.mp3

MUSIC CLIP 1. Music example for safe zone (DL Sounds 2016a)



music_clip2.mp3

MUSIC CLIP 2. Music example for boss fight (DL Sounds 2016b)

4 CREATING THE BACKBONE OF THE GAME

4.1 Movement

Teaching movement to the player is not necessary unless the movement takes place in a strange environment that the player is not used to or has seen before. Traditional movement along the floor or ground of the area using the controller comes naturally to players who have played almost any game before, barring mobile games. The challenge is to teach the player vertical movement such as climbing and other specialized movement actions like jumping, running and rolling.

If the player is not told they can do these things, they will likely never do them so the levels have to lead the player into situations where utilizing these actions become necessary for progression. This can be achieved by molding the surroundings to look like they can be climbed or jumped over, or having small hints in the surrounding area such as depictions of traps and people jumping or climbing them. These have to be very subtle though so the player does not feel like their hand is being held which is what this project tries to avoid.

Finding out exactly which buttons should be used for each action is quite impossible without having data on which buttons people prefer for each one and making surveys and tests for this is out of the scope of this project. Some button placements will be have to assumed to be sufficient based on other video games in similar style and genre because players who would be interested in playing this game might also have played the other ones and be able to transfer their knowledge to this one. However, if the player cannot figure out the button for a required action, they can always refer to the options section and look at the control configuration part that lists all the buttons and allows the player to set their preferred buttons to each action.

4.1.1 Walking

As mentioned before, walking with their character is something most players know how to do already so only a little effort is needed to encourage this action for players. Having

something interesting in the field of view but out of reach in the starting area or room should suffice to gain attention of the player and make them test out the usual movement control on their controller. If however the player does not know how to walk with their character then they will most likely test out different buttons on their controller until they find their character moving and then further test out which control moves the character in which direction.

Walking can be split up into slow walking and normal walking and usually the distinction is made with how the player is tilting the control stick on their controller. The less you move it the slower the character walks and tilting it fully makes the character walk at normal speed. This can be hard to do in tense situations and depending on the controller the sensitivity can vary. It might be good to also add a separate button to toggle slow walking on and off but it can be quite unintuitive and will only be found out by the player by accident.

4.1.2 Running

Running is a very important aspect in almost any game and it trades some of the ability to react quickly and scope out their surroundings for speed and it can be utilized as a way of getting to where the player wants to be quicker or as a necessary tool to survive a certain encounter in the game for example a chasing sequence of some kind where the player will die if they do not run.

Dedicating a button for running so that button is only used for running is important, because if you are using the running button to avoid death and accidentally do another action with the same button, the death will be unsavory and will frustrate the player.

By default the run button should be held down to keep running as this will increase the feeling of tension in situations where the player must run for their life, the closer they get the more they will press the button, giving the illusion of running faster and feeling good when they survive. Holding down the button could be changed into tapping in the options of the player prefers tapping over holding. Toggle should not be an option because it reduces the feeling of tension if the player does not need to actively do something in order to run.

4.1.3 Jumping

The jump button is easier to teach to the player than the running one because running requires an intense situation that triggers the need to run in the player, but jumping as well as climbing can be taught through having an otherwise unreachable area with something of interest, such as treasure. The player can then test out the different buttons on the controller until they find what they need and then memorize said button for future use when it is needed in more threatening situations.

Jumping can be utilized as a risk and reward action or a necessity in high-tension situations. The player can find treasure or something similar on the other side of a ledge or a river and can choose to try and jump it if they want or they can be chased by something or having their life threatened in some way and then find a jumpable object in their way. They will then have to make the jump successfully or they will die or have to take a detour, increasing their chance to die. This can be changed depending on the situation.

The jump button can be shared with another button for example jumping and interacting with NPCs, or jumping and rolling. In this case each action could require a different type of press of the button, such as tap once to roll and hold for a split-second and jump when the button is released. However, the jump button should be located close to the running button as the player might want to make running jumps and it can also be required to reach certain places that cannot be reached by regular jumping.

4.1.4 Rolling

Rolling can be used to dodge attacks or effects from enemies or the environment, as well as move faster for a short distance than running. Teaching the player to dodge can be done in the same manner as jumping, such as putting an obstacle that can only be crossed by rolling and that leads to something valuable for the player to collect. The roll button can be on its own button but it also can be the same as jumping if there are only a limited amount of buttons.

4.1.5 Climbing

Climbing is an action that can be used through the interact button, but only in certain locations where the game allows it. As there will not be any prompt on the screen for climbing, climbable objects must be highlighted in some manner, such as having things that look like they could be used for climbing on the object such as vines or ropes. A more subtle option is also available, where for example the character puts their foot or hand in a foothold in the climbable thing, letting the player know it is possible to go further if they so choose. This can be harder to do however, as animations can be hard to get right.

4.2 Interacting and dialogue

Interaction itself is quite straightforward in the game as it all starts with just one button, the interaction button. Things the player can do with the interaction button include talking to NPCs, interacting with objects in the game such as items that can be picked up, things the player can climb, looting corpses, opening doors, disarming traps and pulling levers. The challenge is telling the player that they can interact with all these different things in different ways.

4.2.1 Interacting with objects and NPCs

Loot-able objects such as NPC corpses, chests, hidden stashes and the like should be accentuated so they stand out from the environment and let the player know that there is something they can interact with near them. Chests and hidden stashes do not necessarily need any extra visual effects, as players will try to interact with things that look like they should be able to interact with. This is why it is important that all things that look like they could be interacted with can be interacted with, even if that interaction makes no progression for the player. This is because it avoids confusion that the player might get if they cannot do what they think they should be able to do and also avoids the player missing key things along the way through the game because they think some objects will not do anything for them due to previous experiences. This also applies to other interact-able things such as ladders, doors, levers et cetera. Decorative doors that

lead nowhere should still give some sort of feedback when the player interacts with them, such as a sound of a locked door or a visible lock on the door, so it encourages the player to keep interacting with doors in case one of them happens to open.

It is also possible to have NPCs perform interactions in the player's view so they can see what is possible and what is impossible to interact with. This should not be used too frequently though, as it can make the player feel too guided. Having hostile NPCs perform these interactions might be better because it is possible to make so when the player does the same interactions it can lead to the enemies dying, giving the player a feeling of outsmarting the enemy.

For interacting with NPCs, the NPCs themselves can direct the player to themselves by motioning or asking the player to come to them. This leads to the player walking up and trying different buttons until the NPC speaks again, letting them know that they have succeeded in interacting with the NPC.

4.2.2 Navigating dialogue

Dialogue will be simple in the game and will only have simple answers to questions that the NPCs ask the player, such as yes or no questions. However, as the goal is to have minimal UI clutter in the game the answers will have to be improvised instead of a single yes and no options on the screen of which the player chooses one. For example the yes answer might be returning to the NPC later with an object they ask for or unlocking their chains if they are a prisoner and the no answer might be for example simply not returning to them again or leaving them locked up.

Normal dialogue with no options can be skipped either by pressing the interaction button prematurely, walking away from the NPC or attacking the NPC. The latter option then triggers another set of dialogue or an outright counter attack by the NPC. Otherwise continuing with the dialogue happens with the interaction button after the voice line is finished for the current portion of the dialogue.

4.3 Inventory

The inventory is an important part in any RPG and this game will have one too because some of the game's progression relies on items and not having some tool to manage them would make the gameplay more confusing and tedious the more items there are. Therefore there needs to be an inventory system the player can access.

4.3.1 Accessing and navigating the inventory

The inventory button is the main element in the game that is not gameplay and blocks the screen when opened, discouraging use in combat. Also, the button to open it with does not need to be easily accessible. For example the inventory could be opened through the menu system, hinting the player that it should not be opened in intense situations. However it should still be possible to open it in combat in case players want to switch usable items in combat. Armor or weapons should not be switchable in fights however, as it is unrealistic for the game and might lead to unintended interactions. There can be a quick switch element in the UI however, where the player can store weapons and items to swap between in combat, but it would need to be set up beforehand.

Navigating the inventory is done with the movement buttons or the arrow buttons and selecting the options for items and equipment is opened with the interaction button, and then the wanted option is selected with the same button. The inventory should be split into different sections to make it more clear for the player to navigate and overall easier to manage.

4.3.2 Equipping items

Equipping weapons and armor can be done straight while playing by holding the interaction button instead of pressing it once when looting weapons. From the inventory however, the player must navigate to the item of their choosing and equip it from there with the interaction button. They can also choose to set it to the quick swap element of the UI, where they can quickly change weapons and items in combat.

The player can also have an organized quick access inventory for usable items that they can shift through in combat, but it is limited in size so they cannot have too many items at once and incentivizes planning ahead. Using items from the inventory is possible, but made difficult or else the player might have an unfair advantage in the game when it strives for difficulty.

4.4 Combat

Combat will be the central aspect in the game and what the gameplay focuses on so it is important to get it to feel smooth, intuitive and fun overall while still being challenging. Challenge is imperative because the whole point is to get the player to test their skills and feel accomplished after they beat something difficult.

Combat can be split to three main types which are combat with equip-able weapons which is what most of the combat will consist of, using items from the inventory to fight enemies and fighting enemies utilizing the environment for example explosive objects, breakable structures or traps. Most of the time it will be up to the player to choose which of these three types they will choose to fight with, but sometimes one or two of the options are not available due to the location in the game or to the type of enemy the player is currently fighting.

4.4.1 Attacking with weapons

There is a variety of weapons in the game, from which the player can choose the one they prefer. There are ranged and melee weapons as well as special weapons that do nothing unless used against a certain type of enemy. All weapons have a standard attacking pattern that is used with a shoulder or trigger button on the controller, which is what players have grown accustomed to by playing other games. The starting area of the game will offer some rooms where the player can find this button and practice using it in a non-threatening environment.

Attacking in the game will take some finesse as enemies can block, dodge and counter-attack. Timing is important to ensure the attack connects with the enemy but so is the type of attack. The player can choose from different types of attacks depending on the buttons pressed or held as well as the weapon itself. Each weapon comes with a specialized array of attacks that fit the theme of the weapon.

4.4.2 Targeted swings

Targeted swings are attacks that the player can choose where they go. Holding the attack button and then moving the walking control in the desired direction of the attack or doing both actions simultaneously will send the player's weapon in that direction, making a specialized swing that can bypass enemy defenses if it is angled correctly. This will be an important tool for the player in fights as it can hit enemies when the standard attack cannot. These attacks will also be utilized in puzzles and traps in the game, where the player must choose the right type of swing to reach certain things to disarm the traps or complete the puzzles.

Targeted swings may come intuitively to the player as they can begin to attack an enemy but at the same time notice that the enemy is reacting to the standard swing by raising a shield or starting to dodge the attack and then try to correct the swing by using their movement control, which then will alter the swing to go to that direction, hitting the enemy. The swing can also be taught in the starting area with a simple puzzle, such as lighting torches high up where the standard swing cannot reach.

4.4.3 Dodging and blocking

Dodging attacks will be possible and the player can choose to try to do it but it will require good timing. Dodging can be done by either walking away from attacks or using the roll action that will be taught in a safer environment first, but the player may want to utilize it later in combat. Dodging is a good way to preserve the character's health as well as keep momentum going in the fight and follow it up with attacks.

Blocking enemy attacks is possible but it is less efficient if the player does not have a good tool for it, such as a shield or a weapon to block with. Blocking can only be done when the item is in the off-hand which is the left hand by default but can be changed in the options. Blocking is a good way to stop momentum of the enemy and return as well as survive a hit that the character would normally not survive. It can also be used to push enemies by running or walking against them with a shield raised up.

Blocking with items other than shields is less efficient as more damage will come through because other items will not be as sturdy but they will still help somewhat. The player can also pick up temporary items from the environment such as pieces of wood and stone tablets to block a limited amount of hits until they break. This is a good way to counteract surprises that leave the player unprepared for a fight.

Teaching the player to block will be done in the starting area through a trapped room, where the player cannot progress unless they block the mechanism of the trap.

4.4.4 Parrying

Parrying is an action where the player blocks the enemy's attack with their own weapon using the targeted swing action. The player can find this out on accident while practicing their targeted swings against enemies or intuitively when reacting to enemy attacks and swinging in the direction of their weapon in an attempt to block it. Parrying an attack will cause the enemy to stagger, giving the player an attack of opportunity for increased damage as a reward. Some enemies will not be able to be parried, for example if the enemy is much bigger than the player then they will logically be stronger than them also, making their blows go straight through the player's defenses.

4.4.5 Engaging and avoiding enemies

The player will encounter different types of NPCs along their way, some of which are aggressive, some passive and some neutral. Aggressive enemies will pay close attention to the player as they approach and attack if they get too close. The range will vary from enemy to enemy but the action will be the same, engagement in combat.

The player can learn to pay attention to the subtle clues of the NPCs from afar, if the NPC seems interested in the player then they might look to harm them and if not, then they are most likely passive. Later on there can be surprises where aggressive enemies try to feint the player by pretending to be something else.

Friendly characters will usually speak up to the player, letting them know that they are friendly and not of any harm. However, some unfriendly NPCs can also speak to the player to throw them off and then do something devious behind their back. The player can try to pick up on the subtle differences in their speech, as harmful NPCs will talk vaguely or try to lead the player somewhere that might be dangerous.

4.4.6 Usable items

There will be a variety of items that the player can use in the game but their use is determined from their descriptions that can be accessed from the inventory, logical thinking by the player for example using an item that has something to do with explosives against brittle environments or enemies that might be weak to fire and flames. The player can also see enemies using similar items against them and they can then adopt this fighting technique later on.

The player can either pick up items from the environment by holding the interaction button, which makes the player character pick up the item and hold it in their hand, ready to be used or by accessing the inventory and equipping a select range of items in the quick-use element in the UI. The player can then switch between the selected items and use them in combat with a special button dedicated for this action. The player will learn how to use this button in the starting area, where the player must overcome a simple puzzle by using an item from the inventory.

4.4.7 Combat through environment

Fighting enemies utilizing the environment is possible in some situations. The player can for example drop stones, crash pillars or activate traps to fight enemies all of which

are done with the interaction button. There will be no prompt however for the player so they must experiment or suspect that something can be done with these objects. The player can also observe enemies do these things and then copy their actions. Some structures in the game will be breakable and upon breaking they will tumble, crash or fall, causing damage to characters caught in the way which can lead to the player intentionally breaking things to cause harm to their enemies.

4.5 Spells

Spells will be a mostly optional aspect of the game that the player can choose to go more in depth with if they want to. Some spells will be necessary for progression in the game but most spells will offer an alternative way to fight enemies if the player does not like the traditional combat. There will be a variety of different kinds of spells from different schools of magic and using magic affects the game world as well as the player character and how NPCs treat them. Spells will be unlocked gradually as the player finds the scrolls or books that teach them which are scattered around the world or held by enemies, bosses, corpses or friendly NPCs.

4.5.1 Acquiring spells

Spells can be acquired in different ways such as killing a boss enemy, finding a scroll in a tomb, exchanged for currency with a merchant or given as a reward from a friendly NPC. Spell scrolls will teach the player one spell but spell books will teach multiple in the same school of magic, such as forbidden magic. The magic schools will be fire, earth and forbidden. Fire spells will focus on destruction of enemies through fire and flames, earth magic will change the environment to shield the player character or attack enemies, and forbidden magic will attack the very souls of the enemies but also damage the user's own, changing the character and making NPCs treat the character differently the more the forbidden magic corrupts the character.

4.5.2 Equipping and using spells

Equipping spells will be done through the inventory system and only a select amount of spells can be equipped at any given time. After spells are equipped they can be cycled through with an arrow button on the controller. The amount of spells the player can equip goes up as they progress the game and gain more magical power.

Using spells requires a charm that acts as the weapon if the player chooses to use magic. The charm uses the equipped spell by using the shoulder or trigger button and drains magical power. This power acts as a limit on how many spells the player can cast and the power rises as they progress in the game. Spells can be either cast quickly by tapping the button or powered up by holding the button, which drains more magical power but makes them more powerful and sometimes makes them gain more effects.

4.5.3 Types of spells

There will be spells that affect the enemies, the environment, or the player character. Spells targeted at enemies are mostly harmful but some cases can give lasting effects on them, such as mind control. Spells affecting the environment can topple pillars, break walls, trigger traps or open doors. The player can choose to cast spells on their own character for beneficial effects, such as levitation, ethereal form that allows to absorb attacks, temporary boost to magical powers. Some forms of magic however affect the player negatively after the spell wears off, or gives a negative effect in order to boost a positive one even further.

4.6 Narrative

The game offers quite little when it comes to the story of the game at the beginning because the purpose is for the player to figure out what the story and point of the game is if they so choose. Tools to do this are scattered all over the game world in the form of texts, items and NPCs. The story is told subtly to the player so it will not feel forced to players that do not care about it and interesting and mysterious for people who do.

The focus of the story is on that of the world and not the character, at least at the start. All items and texts the player finds will explain about their surroundings rather than the character they are playing. This will open the game world to the player but also leave their character shrouded in mystery and make them yearn for more information about them. They can also begin to piece together the story of the player character from the information they gather from texts telling the story of the world as they will tie into the story of the player character as well.

The player character is a pharaoh who died in bad circumstances and is now trapped in the realm of the dead without the required objects to actually survive there and must now gather these items from the world because the character was buried in a common tomb after being mistaken to be a peasant. The player must collect find his name again which brings back all their memories again and starts revealing the story. The player must also find the book of the dead that contains spells that are required to progress, such as a spell to open the gates into the city of the gods where the final bosses of the game are. This book is slowly collected in the form of separate pages that are dropped by enemies, traded for with merchants or found in the game world.

The monsters of the game are actual people in the living world that the player character sees the symbolic equivalent of in the underworld so killing them also kills an actual living person and not a monster as the player sees and this is revealed later in the game as the player gains objects that allow the character to see correctly again. The bosses are Egyptian gods and by killing them the player is powering the entire underworld itself as the deity are transferred completely into it as they die and killing the final boss dooms the whole world into an eternity in the underworld instead as there are no gods left to sustain life in the living world. Killing enemies lets the player character absorb their essence to sustain their own soul in the underworld, making them transfer them more into that plane of existence and making them stronger, creating the leveling system. The more power the character absorbs the more the game world turns into more ethereal and monstrous, making enemies appear even more like their other worldly equivalents and make them more powerful, naturally creating a difficulty curve for the game as enemy power rises with the player character power.

4.7 Level design

4.7.1 Starting floor

This floor is where the gameplay begins. The player character is spawned in the bottom room. There are rooms that cannot be accessed by the player and interacting with the doors either does nothing or causes the player to try to push on the doors but they will not budge. Some of the rooms are interconnected with small tunnels, apparently dug by someone else who has been trapped in the rooms.

This floor's purpose is to introduce the player to the game world and establish the surroundings' aesthetics and general feel. This also serves as a room where the player can safely practice what their buttons do on their controller as there are no enemies or other dangers around. Some of the rooms have interact-able items that appear to do nothing, as well as loot-able items of little impact and value that help the player to get accustomed to the inventory system.

Lighting is depicted in image 4 with light bulbs, and it will be created with torches that are sparsely placed in the floor with two torches on both sides of the starting tomb after which one can be found to the west, drawing the player to the corridor on that side. The other way is left dark to encourage usage of the other side as there is an item that can be picked up that teaches the player inventory usage and gives them points that are used to level up in the game. The northeast corner has a burning torch as well, letting the player know that it is a way where they can and should go and will be rewarded with consumable items which are a healing charm, depicted with an ankh, and an unlit torch.

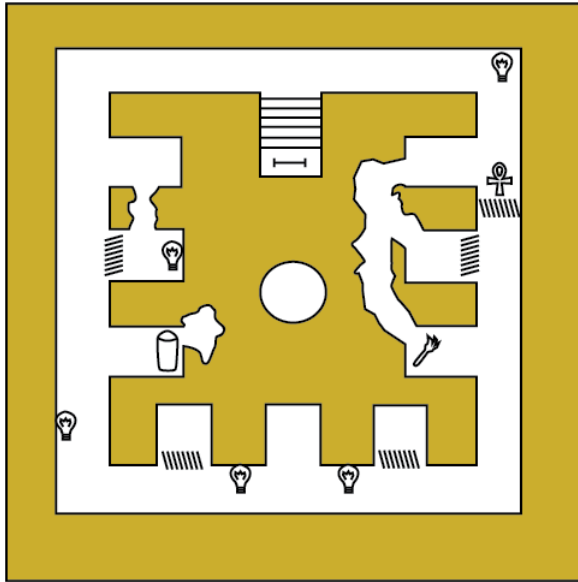


IMAGE 4. Starting floor

4.7.2 The gallery

The second floor is there so the player can be introduced to NPCs and teaches them that some NPCs can be neutral, but if they attack them then the characters will change their behavior. The gallery room is vast to give the player some room to breathe and give a relaxed feel to the floor. It also introduces the player to guiding them with the use of light with a big sunbeam being cast from the ceiling to the floor, through a vent. The player can inspect this vent and walk on it and it makes sounds that give the player the feel that the vent is fragile, but will not break if they walk on it. There are all kinds of treasure scattered around the room but the player cannot pick it up.

As seen in image 5, there is a single torch on both sides of the room at the northern end. As the area opens up into the gallery room, the only light source is the big beam of sunlight that goes straight down from the ceiling in the middle of the room. This beam radiates some light into the whole room but it is not enough to properly light up the area, leaving the edges darker and slightly hides the NPCs who are depicted with the icon of a person. On the other side of the room there is a burning torch around the corner leading eastward, indicating that it is the way to go as the other way is blocked.

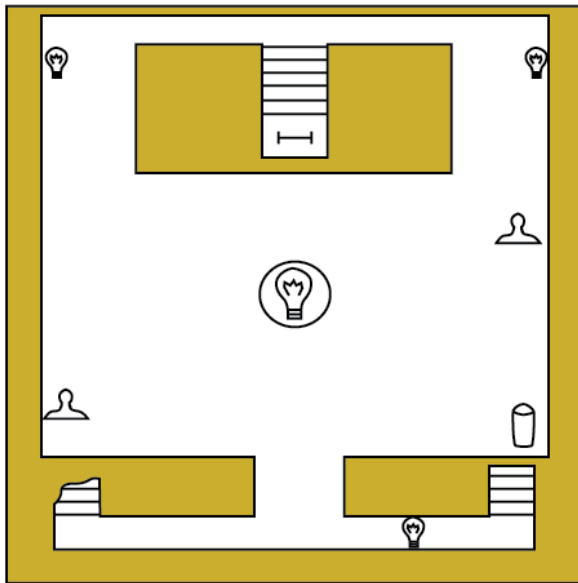


IMAGE 5. The gallery

Going upstairs from the gallery leads to a small stock room where there are some food and drink that serve as decoration and an explanation for the room. As seen in image 6, the room is very well illuminated by the beam of light and there are some consumable items that the player can loot as well as a ceremonial knife that can be picked up and equipped from the inventory. This will then serve as a weapon. There are seemingly no ways of progression to the player but if they drop down the hole in the floor, they will crash through the brittle vent in the gallery and fall down to the next floor.

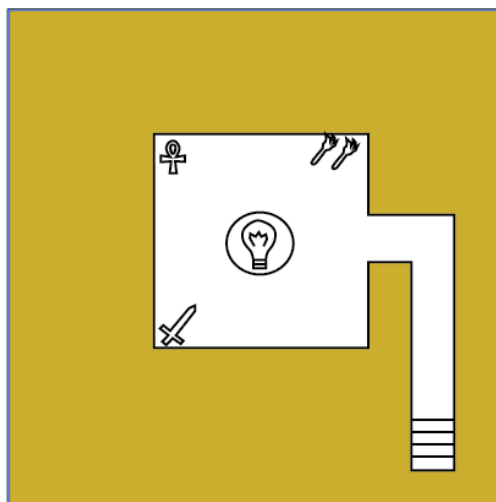


IMAGE 6. The room upstairs

4.7.3 Preparation area

When the player falls down, they are shrouded in the sunlight and cannot see well but when they step out of it, they will see a room with great volume with sarcophagi and NPCs scattered around the place. The NPCs notice the player but continue working on the mummies on the tables next to the sarcophagi, preparing them for storage. The surroundings seem run down and in bad condition with pieces of the walls scattered along the floor, with whole pieces missing at some points. The corners of the room look abnormal, giving the player a feel that there might be something behind the walls and looking up the walls do not reach the ceiling and has space behind them. In image 7 shows the layout of the area as seen from above. The room is quite big as the pyramid becomes bigger the lower the player goes and the middle walls do not reach the ceiling so that there is room for the player to walk around on top of them, meaning that the area itself is quite spacious, creating a feeling of smallness in the player as they stand in the voluminous room.

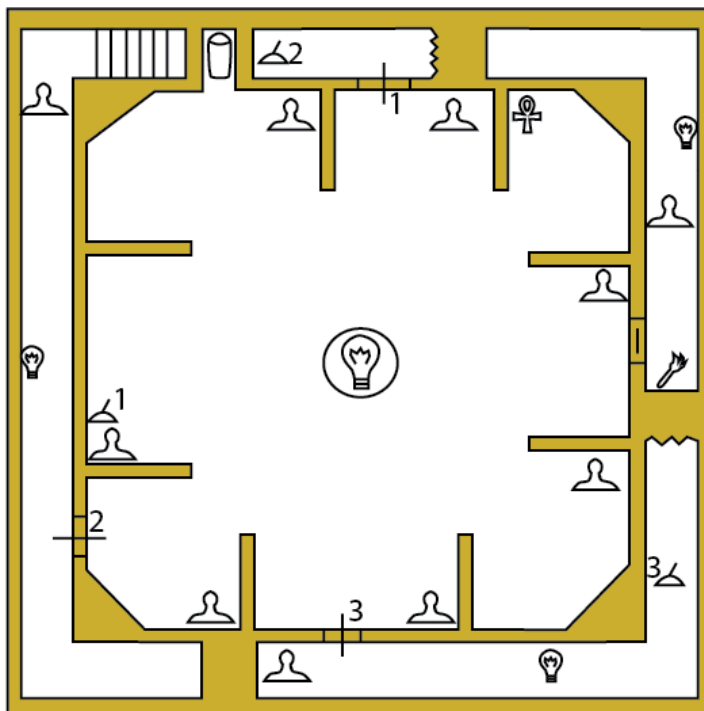


IMAGE 7. The preparation hall

The player can engage in combat with the NPCs and they will fight back but if left undisturbed they will just keep working on the mummies. Some of the NPCs will become aggressive if the player loots the items that can be found around the room.

The goal of the room is to introduce simple puzzles that the player needs to solve in order to progress as well as walking slowly by tilting the control stick only slightly as this will make it easier to walk in very narrow spaces. There are levers in the room that operate hidden doors in the room. The player can scout out the doors beforehand but they still need to find the levers to open them, as they are too heavy to open otherwise. The first lever opens the first door which leads the player into the hidden area behind the walls. This area is in even worse condition and darker than the main area. Some of the walls are broken up in a way that allows the player to climb up on the walls and walk on them.

The first room's door closes as the player pulls the second lever to open the second door and the player can hear the grinding noise in the distance as it opens but also the first door closing, trapping the player inside. This will force the player to find another way out which is climbing on top of the wall. The player can then walk on top of the wall to move on to the next rooms, where there are some items that can be looted as well as a third lever which just opens the way out of the back room. The player can then progress to the floor below through a ramp.

The beam of sunlight is still as strong and as illuminating as in the room upstairs and the edges of the room are again slightly dark. However, the player can see other sources of light behind the first walls, letting the player know that there is something behind the wall which will lead the player to solving the puzzle. There are NPCs on both parts of the area and the ones behind the first walls are aggressive whereas the ones in the middle area are not but will attack if provoked.

4.7.4 The boss room

This room will introduce the first boss of the game as well as the first aggressive NPCs. Walking into the area the player is faced by a grand sight of a great room with a connecting door, where a large creature stares at the player from the shadow, the creature seems to move and screech loudly before the door slams shut and some of the burning torches and braziers are extinguished, leaving a trail of smoke drifting off them. It is hard to see what the creature actually was but now the player's gaze is focused on the

enemies roaming the room before the door. Image 8 shows placement for enemies and other objects.

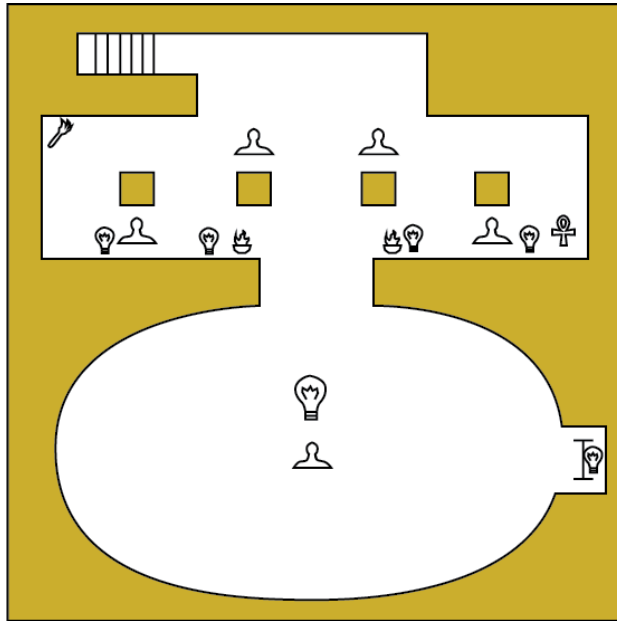


IMAGE 8. The boss room

Walking close to the NPCs will cause them to attack. The player needs to defeat them with the weapons that they have found in the rooms previous. If they have none then they can go back and find some weapons from the previous rooms. After killing the enemies the player can focus on the small scale puzzle that is the torches and braziers. The player saw them extinguished as the door closed and there is no way of opening the huge door which will lead to them trying to solve the puzzle. The torches need to be lit by swinging at them with a lit torch. The player has been able to find unlit torches around the floors and needs to light it in the brazier that is still burning and then light the other one as well as the unlit torches.

This will teach the player to swing and use targeted swings. After everything is lit the door will open and the creature seems to be gone. Upon walking in the room the door shuts again, lowering the light level in the room as the area is illuminated with the beam of sunlight but it is reflected so it comes into the room in an angle and as the door closes, part of the beam is blocked. The boss screeches again and dashes towards the player from above. The boss does not hit very hard as the purpose of the boss is to teach the player to dodge roll, block, parry and attack. There are tablets scattered around the room that the player can quickly pick up while fighting, giving them a temporary shield that breaks after taking too many hits. The boss spends a lot of time out of reach and swoops

down to attack the player and sometimes faking them out by just backing off before reaching them. This will help the player to practice dodging without getting punished too hard.

If the player wields a torch upon entering the room, the boss seems scared of the fire and is more wary with their attacks. The boss takes extra damage from the torch but can be beat with regular weapons as well. Upon defeating the boss the way forward is opened with a chant that is learned from a scroll that the boss drops.

4.7.5 The maze

The boss room leads to a corridor that seemingly takes the player away from the previous rooms and is underground as all sounds seem more muffled than before. The corridor goes on for a while before reaching the maze. The player sees a path that leads to a door with multiple corridors leading off the path to both sides. Trying to get to the door the player finds debris dropped on them, dealing damage and making them fall down. Looking up there are enemies dropping stones and fire on the player. Interacting with the door the player finds it firmly closed and must move somewhere else in the maze.

While the player navigates the maze, the enemies upstairs drop things on him as well as activate traps with levers such as moving walls to push together to squish anything in between them. The player is guided through the maze with lighting and sounds and the traps can be detected beforehand by the sound of levers being pulled, prompting caution from the player as well as mad cackling from the enemies. The traps also take a second to prepare the action so it gives visual hints that something is about to move. Images 9 and 10 also show the blockades throughout the maze which are caused by different sorts of debris or deliberate blocks made from stone or corpses.

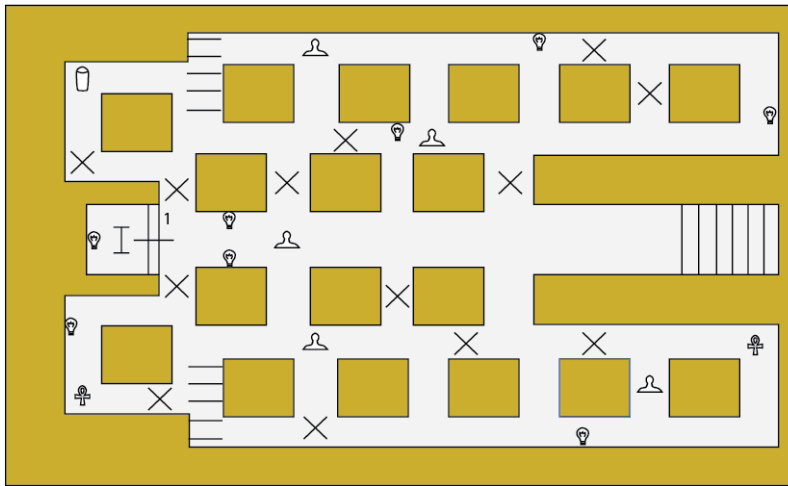


IMAGE 9. Lower level of the maze

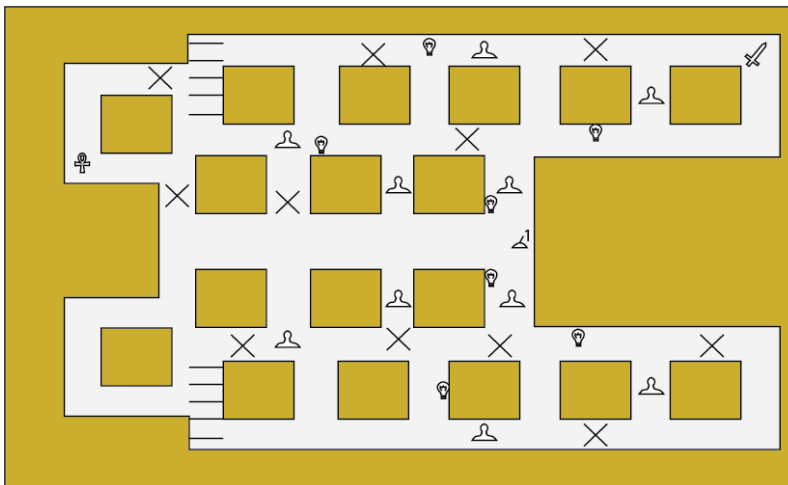


IMAGE 10. Upper level of the maze

The maze contains corpses and worn down equipment as well as debris and fallen down walls, blocking the way in certain places, creating a maze-like area with two connected floors. When the player reaches the top floor, the enemies become aggressive and engage the player in combat with weapons. After defeating them the player has to navigate the top floor to find a lever. After pulling it the player can hear a loud grinding noise coming from the bottom, coming from the door. As the player reaches the door there is a big enemy that climbs up the ladder that is beyond the door and the player must defeat it before progressing to the ladder.

There are several light sources scattered in the maze, both leading and distracting the player and offer little help overall. Some torches lead the player to enemies and some to treasure, creating a feeling of chaos and a feeling of being lost and overwhelmed by enemies. However, there are multiple different loot-able items in the maze to reward

exploration. The most important reward from this area is a short sword that is more powerful than any other weapon the player might have found.

4.7.6 Hall of the dead

The ladder leads to a hall with some separations lining the walls. At the back of the room there is an NPC wielding some sort of a charm and it mumbles into it and raises its hands as it sees the player. After this the player can hear grinding noise and a crash from behind the separations and the door behind closes and the braziers that burn with blue fire are extinguished, causing the room go dark.

Approaching the enemy causes other NPCs jump at the player from behind the separations. The caster enemy seems to channel some sort of spell as the other enemies attack the player. If the enemies die the caster seems to bring them back to life after a short while. The player has to kill the caster so the other NPCs also die permanently. After the NPC is dead, the braziers light up once more and the door opens.

The room is completely dark once the braziers are extinguished, barring the two torches marking the entrance to the room where the player first comes from, providing some safety if they become overwhelmed by all the enemies. Image 11 shows the light and enemy placements in the layout of the area.

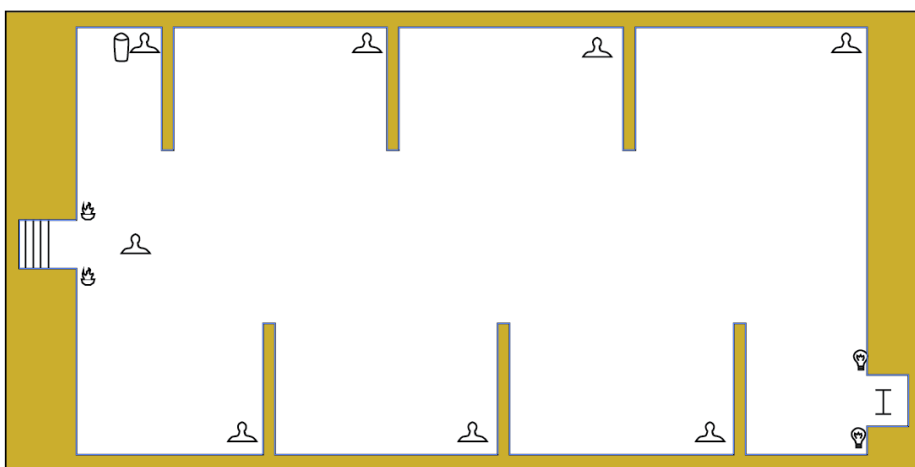


IMAGE 11. The hall of the dead

4.7.7 Ruins and exit

The hall leads to an area that is in very bad condition with all manners of walls and pillars crashed down on the ground, creating an obstacle course of sorts. The player must utilize running, walking, jumping and rolling to advance through this area. Lighting is used to lead the player around the area and guide them to safe routes through the area. This is done with cracks on the northern wall where some lighting, natural or otherwise, is coming through and shining on some platforms that are important for proceeding. Depicted in image 12 is the layout for the ruins and walls with an uneven edge means that part can be climbed as it is crumbled down in a manner that the player can reach the top.

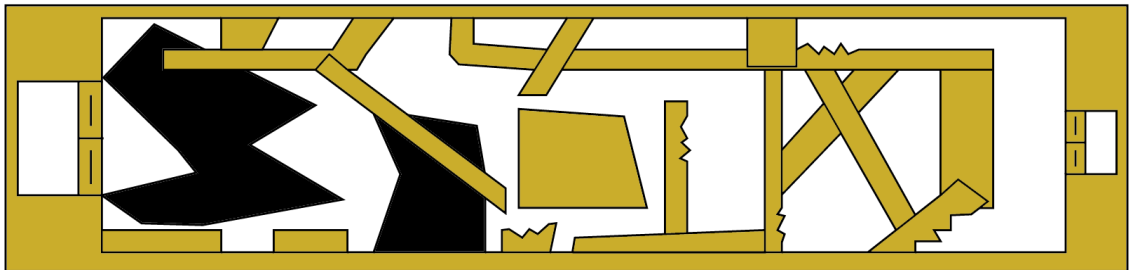


IMAGE 12. The ruins

After this area the big heavy door is pushed open and it leads to a wide corridor at the end of which is an enemy NPC whose chants can be heard from the other side. As shown in image 13, the corridor is completely dark as there are no sources of light. It is only lit up by the spells cast by the enemy that the player must dodge and run through the corridor to reach the enemy and kill them. This enemy drops a scroll with a spell to break the magical lock on the door out. After opening the door with the spell it can be pushed open, with sand leaking out of the cracks and sunlight pouring in. The player then climbs up and out of the area and into the desert with a big towering pyramid behind them and a rushing river in the distance.



IMAGE 13. The exit

5 FINAL THOUGHTS

Even though this thesis only handles the core elements of a game and its design, it gives a good look into the process and offers understanding on all the things that are required before the creation of a game can start. The biggest problem with this thesis was that the game itself never got into a point where it could be tested or played because that would be too much work for it to be within the scope of the project. However, the backbone has been created which means it is easy to continue to work on the game and take the project further into the actual development stage.

One of the goals was to try to implement existing history into the game and it worked well but it creates a lot of extra work because instead of creating something from the ground up one has to do fact checking and making sure all characters and other kinds of influences are in line with the actual history. This is why it might be easier to only take influences from something in the real world but still write a unique setting and story as it will shrink the workload that comes with trying to stay historically accurate.

The thesis focuses mostly on the design of the mechanics and levels which makes continuing the project easier because the narrative design can be supported by the already existing levels. With the mechanics and general rule set in place it is also easier to mold and implement them in the game engine. NPCs and other assets such as objects, graphics and audio need areas where they can be put in and the levels themselves can inspire the creating of additional assets which also adds to the importance of creating the levels before going too in-depth into the other aspects of the game.

The next step in taking the game further in the development process would be taking the game design into the game engine of choice. This means starting to implement the already existing designs into a playable form as well as creating new ones that might have been overlooked in the original design phase. Creating early digital designs for characters and other graphical elements can also start in this part of the development, so testing can be done properly. This thesis has the ground work in place for the game concept to become a fully functional and playable game but it requires resources.

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