Mausoleum

Game Design Document

Mausoleum

0.0 How to read the document

- Everything put between brackets **[ ]** is a **variable** that will most certainly be changed many times during the project.
- The text is sometimes divided in art, programming and audio. This will make it easier for each discipline to find the most important information for them. **BUT** you should read through the other parts as well to get a good picture of the mechanics.
- If something is undefined, let us know and we will fix it. If you wish to change something, you are very welcomed to ask for changes if you have a good reason for it.

Content may change at any time, make sure you have the latest information.

1.0 Overview

1.1 Setting

Make your way up the tower to kill the evil lord and take your soul back. In each floor of the tower, a room filled with enemies will have to be fought. Use your sword to kill the enemies to eventually get to the boss floor in the top of the tower!

1.2 Genre/Theme

- Single player
- Hack and slash
- Medieval, fantasy

1.3 Platform

Playstation Vita

1.4 Controls

Left stick: Move around
Square: Basic attack
X: Dodge
Triangle: Ultimate
Front touch: Draw
Start: Menu/pause

2.0 Gameplay

The player will begin a floor/room after the character has walked out from the left door. The door on right side is locked and non accessible. When all enemies in the room are defeated, the right door unlocks. When the door is passed through, the player comes to the next floor.

2.1 Winning/Losing Condition

- Beat all floors of the tower. With a possible boss at the end.
- If the HP drops down to zero, the player has to restart from the same floor he/she died.
  - (Alternatively if the player dies 3 times, the whole game has to be restarted?)

2.2 Ultimate Slashing

2.2.1 Overview

When the Ultimate ability is activated, the game is paused. In this state the player can use the front touch to connect multiple enemies with a line that will get slashed and take damage.
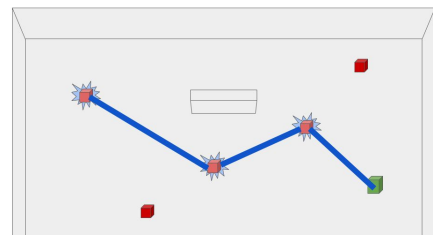
This ability is dependent on 3.1 Energy bar, read that section for more information.

When the ability meter is full and is activated the following will happen:
Time stops → Player "draws" → Character slashes enemies → Back to normal

2.2.2 Ability: Ready

When energy bar is at **100%** but activation button is **not pressed**.
Programming
- All blocks in the bar glows in white.
- (*An **animation** on the energy bar in the UI starts playing?*)
- A white outline will **flash** around the bar. **[2 s]** long flash in an interval of **[3 s]**.
- A **sound** effect plays.
- A lasting **sound** plays as long as the ability is ready but not used.

Art
- (*When the bar is fully charged, it will have 2D **animations** of blue flames. A white outline will **flash** around the bar?*)

Audio
- At the moment the bar gets fully charged, a short but strong/powerful "**sword clink**" will be heard. Like two swords clashing.
- As long as the bar is full and the player has not activated it, a **soft, fiery sound** is playing.

2.2.3 Ability: Active

When energy bar is at **100%** and activation button **is pressed**.

Programming

- By pressing either one of the shoulder buttons (L or R), the game enters the drawing state.
- When the ability button is clicked, the game **pauses** and the **screen** turns **darker**.
- The current music will slow down by **[25%]**.

Audio

- A sound for when activation button is pressed.

2.2.4 Drawing

Programming

- When activated, it enables the player to draw lines between the character and enemies. The line will automatically start at the player.
- The line **snaps** to enemies "drawn" over.
- When the line snaps, a visual **marker** will show around the enemy. First somewhat big and then shrink.
- As the player move the finger across the screen, the end of the line is **snapped** to the **finger**.
- Lines can go over pits and through walls.
- (*The line has a **max length** so the player cannot connect enemies across the room?*)
- The player can connect to a max of **[6]** enemies, the same number of blocks in the energy bar.
- If the player does not use all blocks, the remaining ones **disappears**.

Art

- The line is light blue and fiery.
- *(The line should match the color of the Sword/Ultimate color?)*
- The marker that shows when you snap to enemies

Audio

- When an enemy gets targeted, a lock on sound plays once per enemy.

2.2.5 Slashing

Programming

- Releasing the finger from the screen will activate the slashing.
- The character travels the lines with an animation. This will happen like a flash, **[1000%]** of player speed between each enemy.
- When an enemy is hit the character stays at its position **[1 s]** and simultaneously a **screen shake** will occur for **[2 s]**.
- All enemies that are drawn on will take damage.
  - Melee: **[50%]** of max HP.
  - Ranged: **[75%]** of max HP.
  - Brute: **[30%]** of max HP.
- When the character is done following the line, it knocks back the last enemy about **[2 enemies wide]** to the opposite direction of where the player comes from.

Art

- Sword slash visual effect.

- Dash effect. Same as regular dash?
- The "dash" between enemies. Similar to regular dash.
- Hitting enemies. Similar to regular attack 1 or 2, if not the same.

Audio
- Sword slash sound. Different from regular?

2.2.6 Ability: Not Ready

When energy bar is **not** at **100%** and activation button **is pressed**.

Programming
- If energy in bar is not 100%, the activation button will not do anything.
- If player presses button: the **outline** of the energy bar will **flash red**.
- A sound effect plays.

Audio
- Ability is not ready - sound.

2.3 Player Base Mechanics

2.3.1 Movement

References:
- https://www.youtube.com/watch?v=_OWWba1XJnc
- https://www.youtube.com/watch?v=6qAWZczvVSc

Direction is decided from the input of the left stick and movement will be **very responsive**. Will go directly to running from idle.

Programming
- Movement speed value, can be tweaked.
- The steps that the character takes should happen instantly.
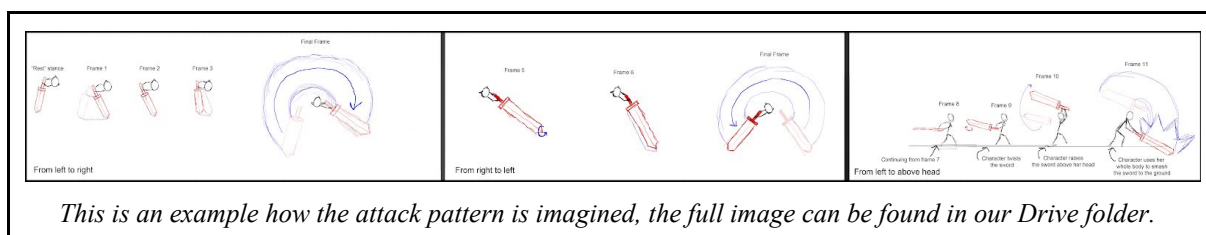
Art
- Running animation.
- Idle animation.
- Idle animation for when character is in "**exhausted**" stat. A "**tired**" stance.

Audio
- Footsteps for stone floor.
- Footsteps for marble floor.

2.3.2 Basic Sword Slash

This is an example how the attack pattern is imagined, the full image can be found in our Drive folder.

By pressing the attack-button, the character will attack in the direction she's facing. This is the basic way of dealing damage to the enemies. The attack follows a 3-part pattern: right, left, above. See the video of **Blood Well** for Aatrox in LoL here. Scroll down a bit on the page.
(suggestion: When the player is doing the 1-2-3 attack pattern, they can turn/rotate on the spot so that aren't locked in 1 direction)

Programming
- By pressing the **[X]**, the character will attack in the **direction** the left analog **stick** is facing, **not** where the character is facing.
- You **cannot** walk and attack at the same time. (*But you can rotate?*)
- The basic sword slash will respond instantly to input.
- No matter how fast you press the attack-button, there will be a cap of how fast you can attack (Perhaps **twice every second**?).
- The screen will do a quick "pulse" when hitting an enemy. (Screen will quickly zoom in and out.)
- Enemies inside the area of attack will then take damage.

Art
- It will play a quick animation and end fast (the animation will take no more than **1 second**).
- Three animations that can works well put together but also apart. (If player stops pressing attack after first or second attack in the sequence).
- There will be a **big** visual effect of a **sword slash** when attacking.

Audio
- A slashing audio effect will be heard.

2.3.3 Dash

The player can dodge an attack by dashing. By pressing **[button]**, the character will dash towards the direction of the left analog stick. The character can dash 3 times in a row, after the third time the character will enter a **"exhausted" state and will be panting**.
The character will be very visibly tired and the character **can't dodge again** until **[2s] seconds** have past, after that the character will enter its **"normal" state**.

Programming
- The speed of the player is increased with **[100%]** for **[1 s]**.
- During this time, the dash **animation** is played.
- The character can't dash in the **"exhausted" state**.
- If player press **dash** in **exhausted** state, a sound will play.
- The character will dash to the direction of the **left stick**.
- If the left stick is **untouched**, the dash will **not happen**.

Art
- The animation for the dash will be a **"freeze-frame"** of the character running.
- In the "**exhausted**" state, the character will emit "panting" clouds from the "mouth".
- Dust particles will show under the character when rolling + leave a small trail.

Audio
- A dash sound.
- In the "exhausted" state, the character will be audibly pant and gasp for air.
- A big "sigh" if player tries to dash in exhausted state.

2.3.4 Death

When the health bar reaches **0%**, the player dies and has to restart the level.

Programming

- At the moment the character's health goes **to 0%**, **pause** the enemy movement and projectiles.
- Make the character white and a bit see through.
- Play death animation and death sound.
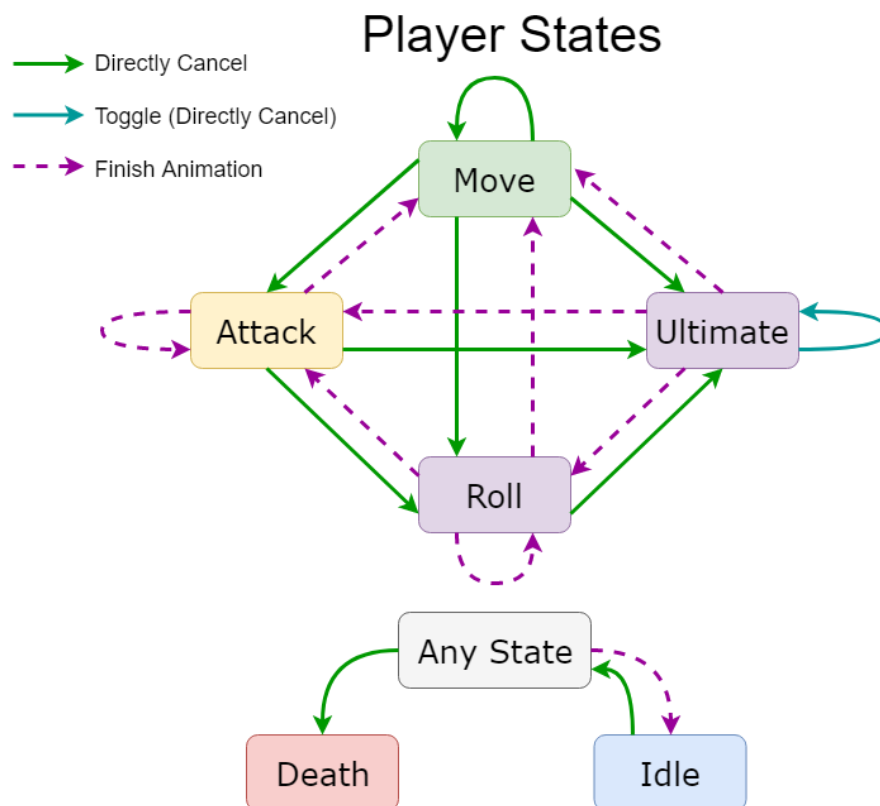- Restart level.

Art

- Simple death animation.
- (*Small white "particles"/orbs that fly off the player? Like a fire behaves.*)

Audio

- Death "scream"
- A sound similar to Dark Souls death sound.

2.3.5 Player States

- **Idle state**
  - Can **never abrupt** other states.
  - Can be **abrupted** by **everything except roll** at any time.
- **Player movement**

- ○ Can only **abrupt idle**.
- ○ Can be **abrupted** by **everything** at any time.
- **Attack state**
  - ○ Can **abrupt move** and **idle** states at any time.
  - ○ Can be **abrupted** only by **ultimate** state and **roll** in **certain frames** of the animation, *more information on this will come later*.
- **Roll state**
  - ○ Can only be **entered** from **move** and **attack** state, direction on **left stick** is needed.
  - ○ Can **abrupt move** state and **attack** state in **certain frames** of the attack animation.
  - ○ Can only be **abrupted** by **ultimate** state.
- **Ultimate state**
  - ○ Can abrupt everything except **death**.
  - ○ Can **never** be **abrupted** by any state, only by **toggling** it off with button.
- **Death state**
  - ○ Can **abrupt everything**.
  - ○ Can **never** be **abrupted** by any other states

- Might add **Exhausted state**
  - ○ Player moves a bit slower in this state and cannot dash.

2.4 Enemies

There will be different kinds of enemies, all with different behaviors. Enemies has a **[5%]** chance to drop an orb/potion of health for the player to pick up.
- **All enemies** will quickly **flash** in white when taking damage.
- All enemies will get slightly knocked back when getting hit by 3 part in attack. **[1 character]**.
- In normal sized rooms, **max 8 enemies at once.**
- In boss room, **max 10 enemies at once**.

2.4.1 Melee

Programming
- **Follows** the **player** only when in field of vision, about **[4 characters]** radius.
- If player is in field of vision but not line of sight, enemy will not walk towards player.
- If the enemy lose the player in their **line of sight,** it will walk to the place they last saw the player.
- If a melee enemy inside another melee's field of vision (possibly another field that is smaller) gets triggered by the player, that enemy will be triggered as well.
- When the enemy has reached the player, the enemy will deal damage, slightly delayed based on animation.
- Medium fast, **[70%]** of player's speed.
- Low damage **[10%]** of player's max HP.

Art
- Idle animation.
- Walking animation.
- Attack animation.

- Death animation.

Audio
- Attack sound
- Take damage sound
- Death sound

2.4.2 Ranged

Programming
- Will shoot **projectiles** towards the player when player is in **line of sight**. Distance is **infinite**.
- **Stationary**, **0%** of player's speed.
- High damage, **[25%]** of player's max HP.

Art
- Idle animation
- Attack/casting animation.
- Death animation.

Audio
- Attack sound
- Take damage sound
- Death sound

2.4.3 Brute

Programming
- Only **follows** player when in **line of sight**.
- When player is out of line of sight, the enemy **stands still**.
- Fast, **[105%]** of player's speed.
- High damage, **[30%]** of player's max HP.
- Big attack hitbox. A brute in size in front of brute?

Art
- Idle animation.
- Walking animation.
- Attack animation.
- Death animation

Audio
- Attack sound
- Take damage sound
- Death sound

2.4.4 Boss

The boss will be on the top floor sitting in a massive throne and will remain seated there during the whole boss fight. When the player walk into the room a dialogue will happen between the boss and the player. When it is done, the boss will spawn enemies from four doors in the room. Kinda like Greed in Binding of Isaac (1:26).

- After clearing **[X]** amount of floors, the player will reach the boss room.

- The boss fight will consist of waves of "normal" enemies, normal enemies are tied to the boss.
- This room is bigger than normal, enabling up to **maximum of 10 enemies** at once.
- Enemies that can move, will walk out of the portal and towards the player.
- Stationary enemies (Ranged), will move out from a portal and move to a set point in the boss room.
- At the start of the fight, a barrier will surround the boss, preventing th player to hit the boss
- Destroying 1 enemy will remove **[X%]** amount of health from the boss.
- When the boss has **[X%]** left, the barrier around the boss will drop and giving the player the opportunity to deal a final hit.
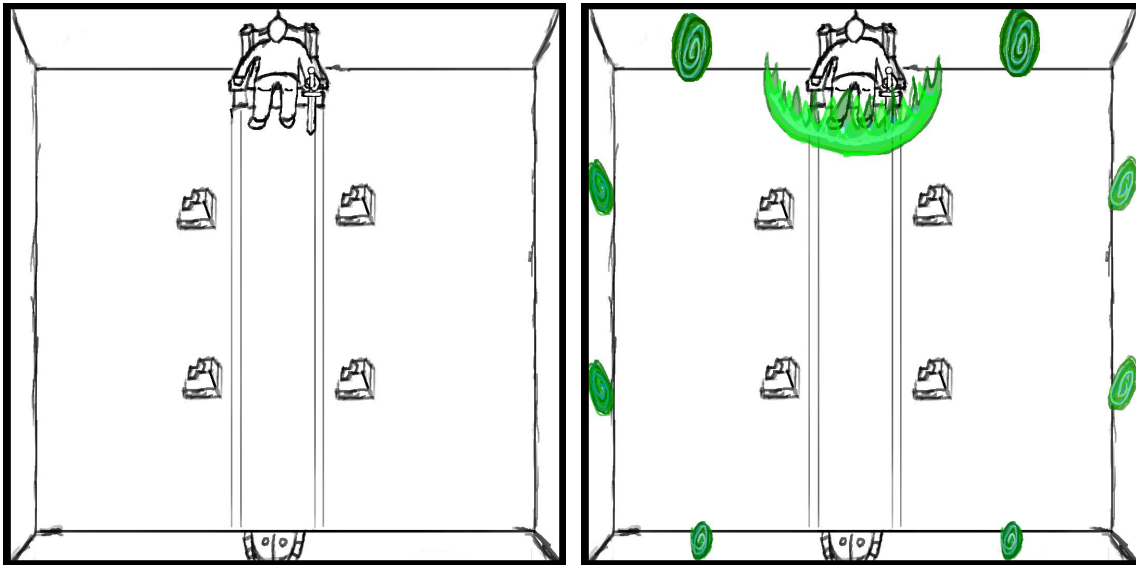
Left image: Initial state of the boss room, **Right image:** boss battle begins and portals/doors opens and enemies spawn from them.

2.4.5 Player Getting Hit

- When getting hit by an enemy, the screen will do a greater pulse/shake.
- The greater the damage an enemy does, the stronger pulse/shake.

2.5 Level Design

The levels will be floor-based, where the player needs to defeat all enemies in the room order to progress to the next floor. Every floor has a different layout that will utilize the walls, pits and enemy positions to create a puzzle for the player.

The layout will force the player to quickly plan where to go, what enemies to kill first and what areas to avoid. Some areas of the room will make the player an easy target for ranged enemies. Those areas have a pit between the player and the ranged enemies so that projectiles are easily shot at the player while it is hard for the player to reach and kill the enemies.

Where the player exits the stairs / where the player "spawns", will always be a safe area. That is because no enemy will be able to see the player there from their position. This will give the player a chance to take a look at the level and plan how to tackle the enemies.

2.5.1 Walls and Pits

- Walls **will** break line of sight.
- Pits **will not** break line of sight.
- **Melee** enemies has to walk around pits and walls.
- **Ranged** enemies only has to move around walls, but can fire over pits.
- Different strategies can be applied depending on enemies that need a line of sight of the player.

2.5.2 Breakables

Skulls (and helmets?) will be placed inside the room that the player can break for a chance to find more HP. Storywise, these are other adventurers that also sought to reclaim their lost soul and they give you the strength to avenge them.

- They are placed mostly along the outer walls of the room. Some might be placed next to "inner walls".
- The breakables will not break the line of sight or affect the enemies in any way during combat.
- There is a **[20%]** chance that the pot contains an HP orb/potion.
- Rooms have a different amount of breakables. The less breakables in a room, the scarier. (Because of less HP drops).

2.5.3 Environment

Decorations and props will be placed/painted on walls and floors to make the rooms different from each other and more interesting and "immersive".

- Decorations will not have a collider and therefore not interfere with the gameplay. It is also important that it looks like they do not have a collider. Avoid boxes, barrels and other big and dense looking objects.
- Props like bookcases should be placed out so that they "blend in" more with the collision floor. The collider of the props should not stick into the level much at all. See pictures below.
- Will be placed differently from room to room. Different themes could be:
  - Armory
  - Kitchen / dining room
  - Tomb/grave room/mausoleum
  - Torture room
  - Bed room
  - "Church room"
  - Library/study
  - Throne room for boss
- Decorations will not be very detailed because of the small Vita screen.
- Make sure to balance out the decorations so that it is not too cluttered or empty.
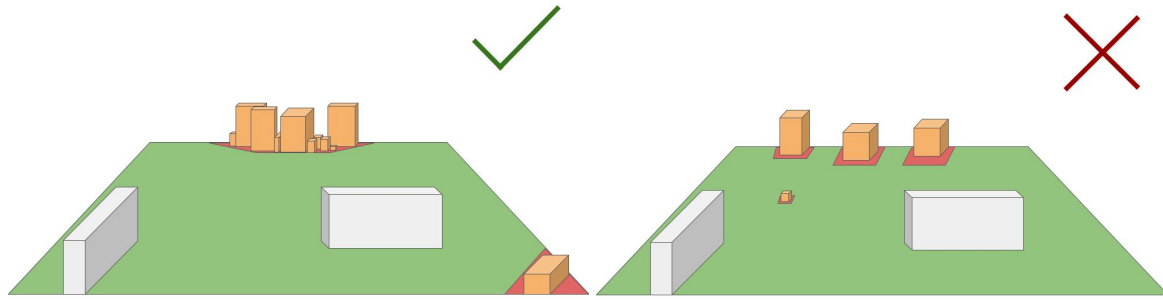
Examples of decorations:
- Floor candelabra
- Bookcase
- Spider web
- Windows
- Statues
- Framed painting

Doors

The doors will feel heavy and like they lock the player in the room until open. The door to the boss will be very heavy also slightly bigger than the rest. The player will know that there is a boss in the next room. Made out of stone, metal or metal bars/fence.

2.5.4 Level Transition

When all enemies are killed, the exit door in the room opens and the player can enter. After the "loading screen" the character walks in to the room without the player's input, the door behind her shuts close and the player input is enabled.

Loading screen

When the player exits the door of a level/room, the screen fades to black and displays a text with the new floor e.g. "Floor 4". The text is big, white and positioned in the middle of the screen. This act as a loading screen as well as to indicate the new floor. When the text has been showing for **[4 s]**, the new level fades in.

Programming
- When all enemies in a room are dead, trigger open door animation and sound. Let the player pass through.
- When player has gone through the door, trigger the "loading screen" described above.
- In the new level, disable player input and make the character walk by itself out from the door. During this time, enemies will be paused/idle.
- Once out, trigger the shut door animation and sound.
- At the moment the door animation is done, enable player input and unpause enemies.

Art
- Open door animation. Heavy door.
- Close door animation. Heavy door.
- Dust particles/effect for the door when it closes.

Audio

- Level complete sound/tune.
- Open door sound.
- Close door sound.

2.6 Health Orbs

These can be dropped by breakable skulls and in rare cases, enemies. (**[20%]** for skulls, **[5%]** for enemies to drop.)

Programming

- When picked up, they restore **[20%]** of lost HP.

Art

- Animated to float

Audio

- A positive, short sound when picked up.

3.0 HUD & UI

There will be three elements in the HUD: HP bar, energy bar and current floor.

3.1 Energy Bar

In the bottom right corner, there will be an energy bar that keeps track of when you can use the ultimate ability. You can charge it up by hitting enemies but loses charge by self getting hit.

Art

- The **style** of the bar will be **simplistic** but still follow the style of the game. The outline of a sword? It is a rectangle-ish shape and the content is displayed in small blocks with a bright blue colour.
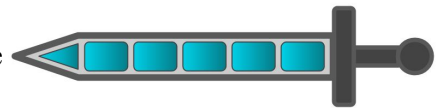
Programming

- The bar will be divided in **[6]** columns/blocks with a bit of space in between.
- Each time the player **hits an enemy**, the bar will get filled **[10%]** of max charge. If the enemy dies, **[15%]** of max charge gets filled
- When the bar is **below 100%**, its content is grayed out.

3.2 Health Bar

In the bottom left corner there will be a health bar. You can fill the bar by picking up orbs/potions dropped by enemies.

Programming

- Each time the player **gets hit**, the content of the bar does one **flash** in white and scales down. The "scaling" of the HP will **smoothly** go down and not jump from sizes.
- As the HP goes down, save the previous HP in dark red that will not go down until **[1.5 s]** have passed. If more HP has been lost during that time, save that as dark red as well. Example.
- When getting hit, the whole bar does a small but firm, **[1 s]** long, **shake**.

- The content of the bar will turn yellow when it is less than **[30%]** filled and red when it is less than **[10%]**.

Art

- The **style** of the bar will be **simplistic** but still follow the style of the game. It has to be equally as detailed as the energy bar. If the energy bar for example is the outline of a sword, the health bar has to be more interesting than a rectangle. The colour of the content is bright green.
- When getting hit, the whole bar does a small but firm, **[1 s]** long, **shake**.

3.3 Current Floor

In the top right corner there will be a text saying what floor the player is currently on.

Art

- The text style will feel medieval but should still be **simple**.
- The text will have a background to make it stand out better. E.g. a wooden "block".

Programming

- When a new floor is reached, the text will change and display the number of the new floor. "**Floor 1**" → "**Floor 2**" and so on.

Stuff around the screen "evil, dark stuff" when low hp. Maybe consume player more when low hp as well?

3.4 Menu

3.4.1 Main Menu

1. Continue (If there is a saved game)
2. New Game
3. How To Play
4. Credits
5. Exit Game

3.4.2 Pause Menu

Pressing start during the game will bring up the pause screen. By navigating with the left stick or the D-pad, the player can choose between these options:

1. Resume
2. Controls
3. Quit Game

The option currently "chosen" will be bigger and have markers next to it.

4.0 Wishlist

- Capture souls? The energy in the energy bar is souls taken from enemies. Visual effect where the souls "fly" from the enemy to the energy bar and fills it up a bit.
- Interesting boss

Ultimate ability - Using the backside touch
- When drawing on the backside, a visual marker will show on the screen based on the position of the touch.