

Game Design Document for:

Convalescence

Version: 1.3.4

Last updated: 30 August 2021

Project members:

Chloe Chan – Team Lead
Low Hsin Yi – Programmer Lead
Sim Wei Yew - Game Designer Lead
Marian Evangelista - Art Lead
Arsyad Jazali Bieshaar- Artist
Tan Jing Yi- Artist



How's

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Low Hsin Yi - Programming Lead

Sim Wei Yew - Game Design Lead

Evangelista Marian Judith Pulayan
- Art Lead

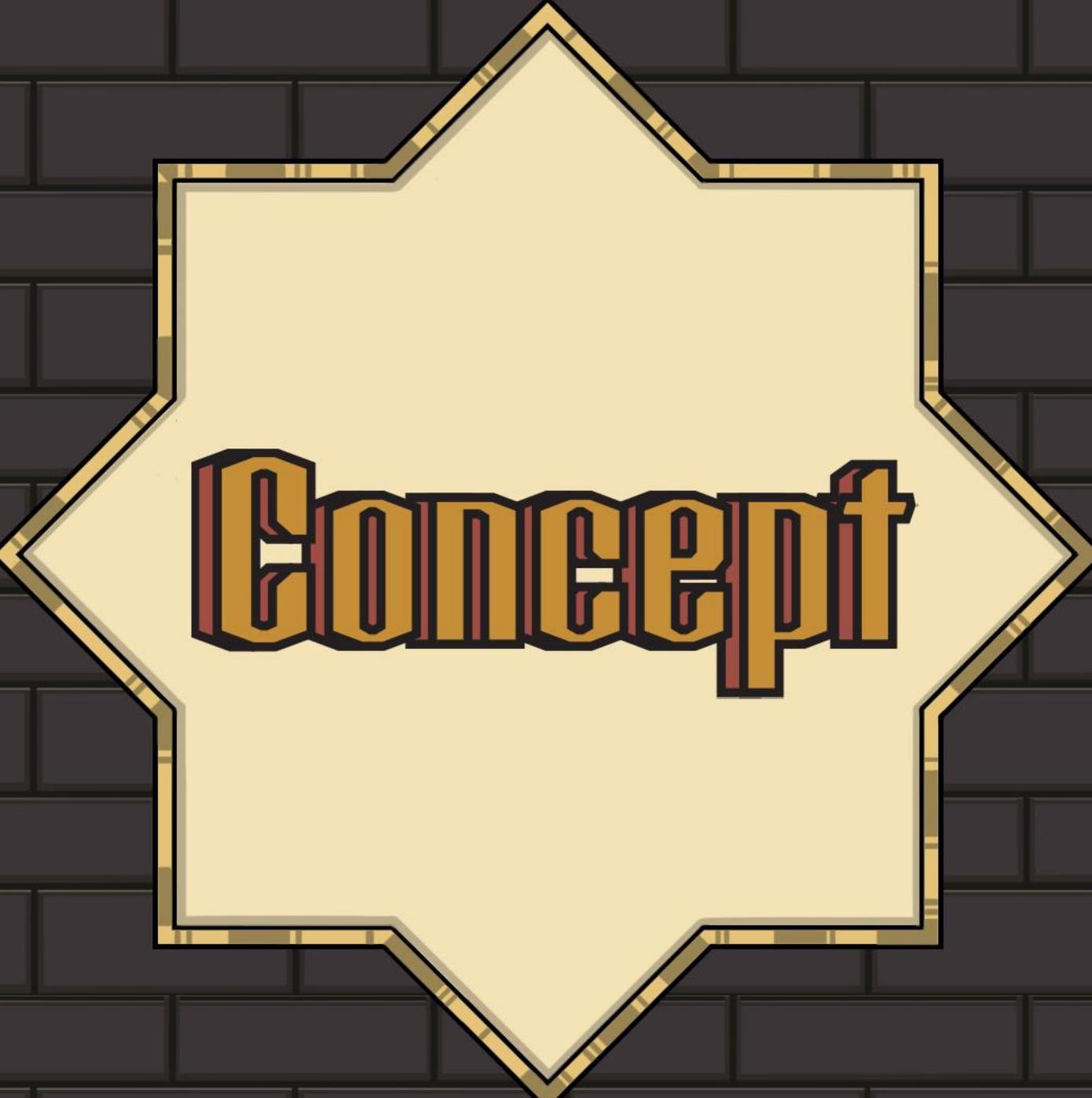
Arsyad Jazali Bieshaar - Artist

Tan Jing Yi - Artist

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Concept

Description

- Use your quick time reflexes and foresight to anticipate your enemies attacks.
- Dodge the manifestations of your demons trying to make sure you don't escape
- Challenge yourself at the end of each level by fighting the mini boss

Genre

- Bullet hell
- Unlockable endless mode
once the game is finished

Key Features

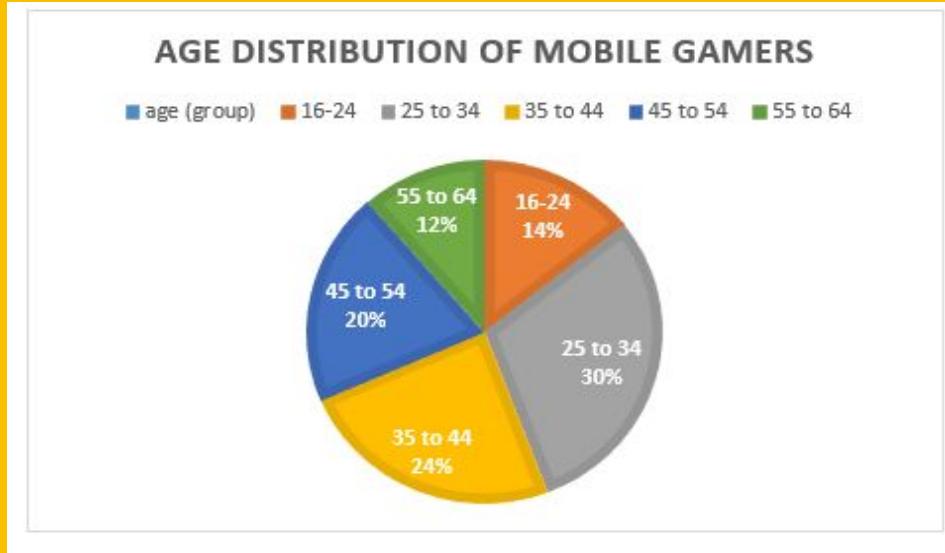
- Adrenaline pumping gameplay
- Easy to pick up and put down
- Non-exhaustive gameplay loop with at least 6 types of enemies

Platform

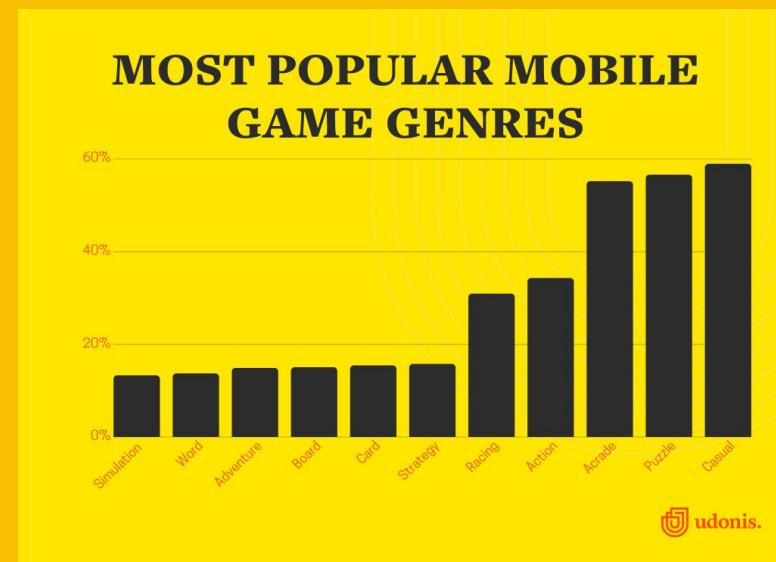
- Mobile



TARGET MARKET



Our target market are teenagers and young adults; combined, they are almost half of the mobile gamer population, a wide audience who may be interested in fast-paced games



Our game genre is action-casual, a combination of 2 games in the top 5 most popular game genre, drawing in a larger audience

TARGET MARKET

Name: Bored Blake

Age: 18 [target demographic is Teenagers and young adults [14-30]]

Occupation: Student



"I like to play simple yet challenging games while waiting for class"

Experience goals for player

- Satisfaction and feeling victorious when finishing a level
- Fear and adrenaline when attempting to dodge the blades

Motivation to play games

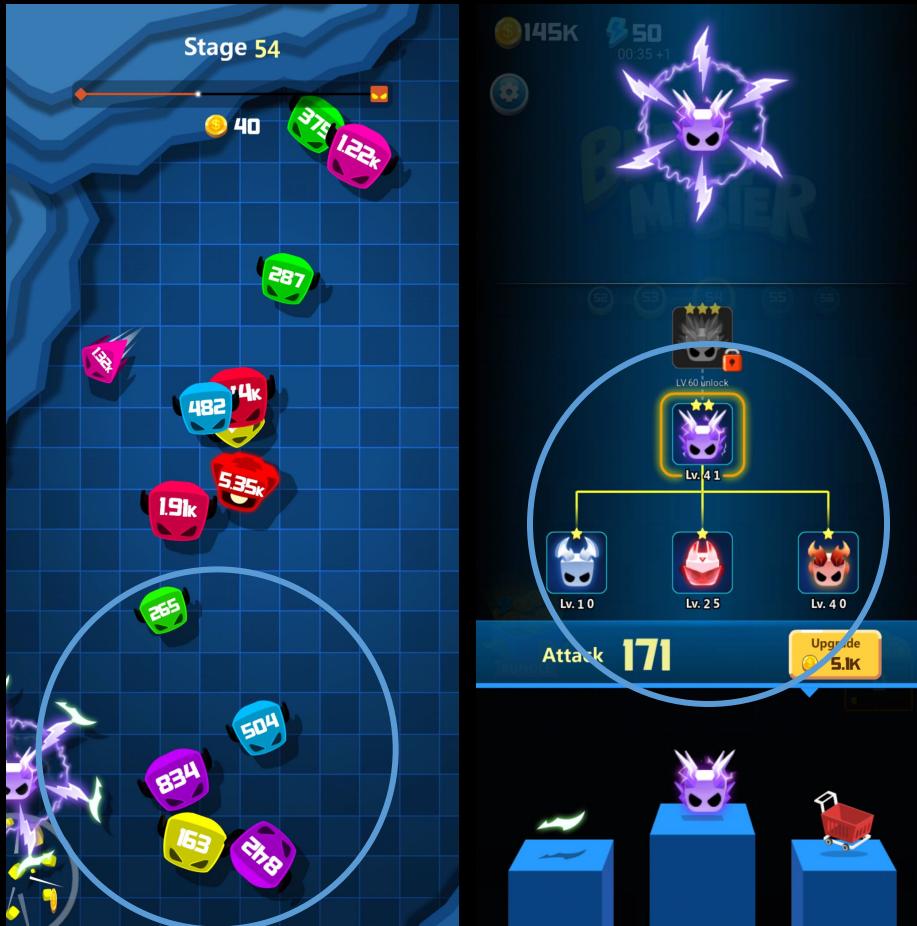
Blake plays mobile games when bored or when they need to kill time. As casual games can get boring after a while, Blake likes to find a slightly more challenging game than the usual casual games but still possess simple, intuitive gameplay controls. Furthermore, Blake also likes some action to make the gameplay more interesting and exciting.

Criteria for selecting game

- Kill time (a casual game to play when bored)
- A more challenging gameplay than a usual casual or hyper casual game
- Get excited when playing the (fast-paced) game

Frustration with game

- Finds a lot of casual game too boring and have repetitive gameplay
- No clear ending to the game
- Lack of clear narrative



EXISTING GAMES

Blade Master

Strength

- Clear objective
- Various enemy types
- Game have an addictive quality
 - Fast energy recharge
 - Bonuses in levels
- Power-ups are relatively easy to get
- Good level and power scaling

Weakness

- Controls can impede gameplay [UI]
- Colour choices messes up player's perception of health when new to the game. [Art]
- No extra challenges at boss level. [Gameplay]
- No warning signs for enemies appearance [Gameplay]



EXISTING GAMES

Disc Room

Strength

- Good affordances
- Various enemies despite all being blades
- Varied gameplay
- These missions vary from survival timing to dying to certain blades. [unique]
- Appeals to player competitive streak

Weakness

- Power-ups
- Repeated gameplay

FEATURE COMPARISON

Games	Enemies	UI	Affordances
Blade master	A few different enemies with varying skills	Portrait mode on the phone, one handed control	no affordances except for boss levels, uses some warning signs
Disc room	Many different blades that has different special moves for each one	Landscape mode (because on the computer), uses the “wasd” for movement	An animation is always played before the special abilities is used to give the player a warning
Convalescence	Enemies similar to the game reference. We have a few enemies that has a different skills for each one	Landscape mode, uses a joystick to move with an ability at the bottom right corner for the ability button	Affordances mimic from disc room, uses animation to show ability before it occurs



Game Narrative

Character's Profile



- Bren struggles with her inner demons, made worse by self-isolation
- She gets trapped in her own “Mind Prison”, hence the dungeon-like environment
- Her negative thoughts manifest as monsters

Prologue

- After months of isolation, Bren's mental state begins to spiral. We follow Bren on her journey to self-recovery



Main Story

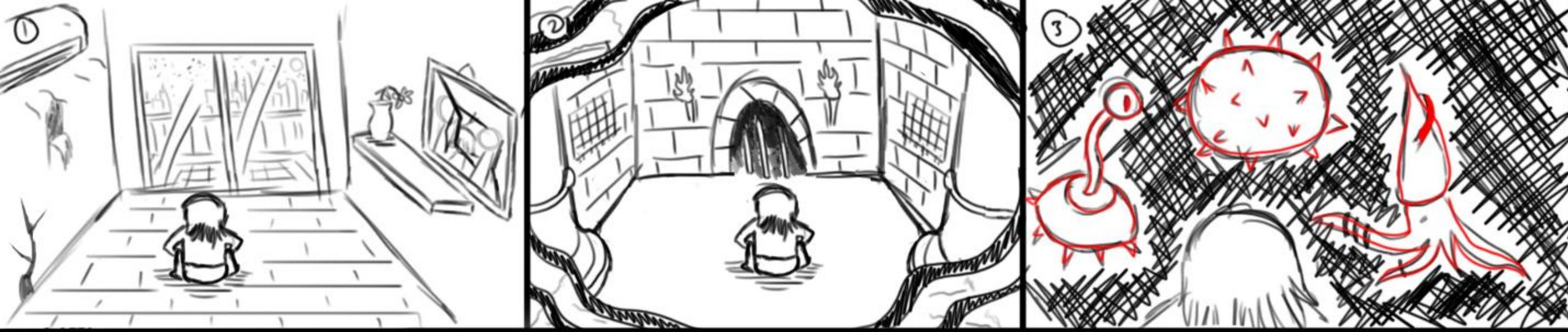
With each room she passes, the stronger her enemies become but she in-turn also recovers more of her energy, in the form of fire crackers which scare the demons which in turn give her confidence to face them and venture forward. This was done intentionally to symbolize how the journey to self-recovery is never easy. Her main objective is to make sure her inner demons do not keep her a prisoner of her own mind forever.



Ending

After a difficult battle, Bren slowly comes to terms with her inner demons. She gains enough energy to leave them behind and realises that they do not have a hold on her. Knowing this she takes her first step out of her figurative prison and into reality.







Mechanics

Main Mechanics

Main game mechanic:

- Dodge the enemies
- collect all the items



[Game Prototype Link](#)

Sub-Game Mechanics

Player Abilities



Shield

Blink

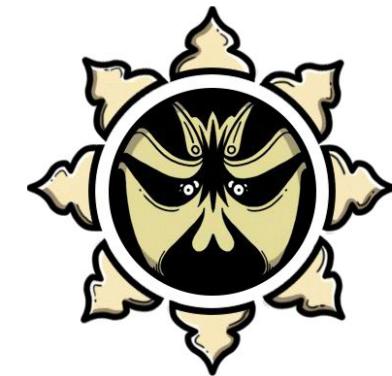
Kairos

Enemy Types



Basic Blade

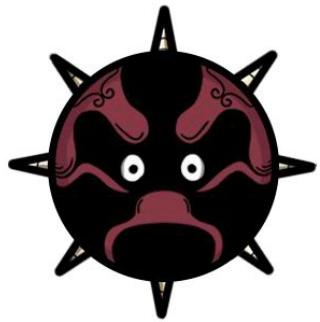
- Most common enemy
- Moves around the map in no particular order



Splitting Blade

- First enemy introduced after tutorial
- Splits into two smaller blades after 3 seconds

Enemy Types



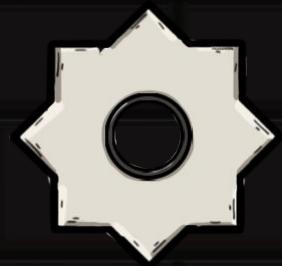
Expanding Blade

- Expands and retracts its sharp spikes while moving around the map



Dash Blade

- Dashes towards the player every 3 seconds



Wall Blade

- Moves along the wall at a constant speed
- Ensures the player cannot “hug” the wall

Enemy Types



Disappearing blade

Sprite and collider offs
and ons at random
intervals

Enemy types (Boss)



Spitting blade

Spits out bullets at fixed intervals, bullets will disappear after fixed



Dancing Blade

Bullets dancing on the outside



Fire Blade

Shoots fireballs that becomes lava that reduces the playing field

Attributes & Stats

- Player move speed (increase with each level)
- Enemy move speed
- Time delay before enemy uses ability again (eg.delay before enemy dashes)
- Amount of collectible to be collected for the flame to drop
- Maximum number of enemies spawned

LEVEL DESCRIPTIONS

- Level 1 - introduces the idea of dodging blades (splitter blade)
- Level 2 - introduces blades with special abilities (expanding blade and dashing blade)
- Level 3 - Harder blades introduced here (boomerang blade and mirror blade)

[Link to Demo](#)

Level Design

Tutorial Level Layout

- teach player joystick controls
- introduce idea of dodging blades
- collect 1 collectibles(firecrackers)
- to unlock flame for the next room
- give player the shield ability after clearing tutorial

Level 1 Layout

Room 1 - 2 big and 1 small blade

Collect 3 collectibles for matchstick

Room 2 - 2 big, 1 small and 1 wall blade

Collect 3 collectibles for matchstick

Room 3 - 3 splitter blade

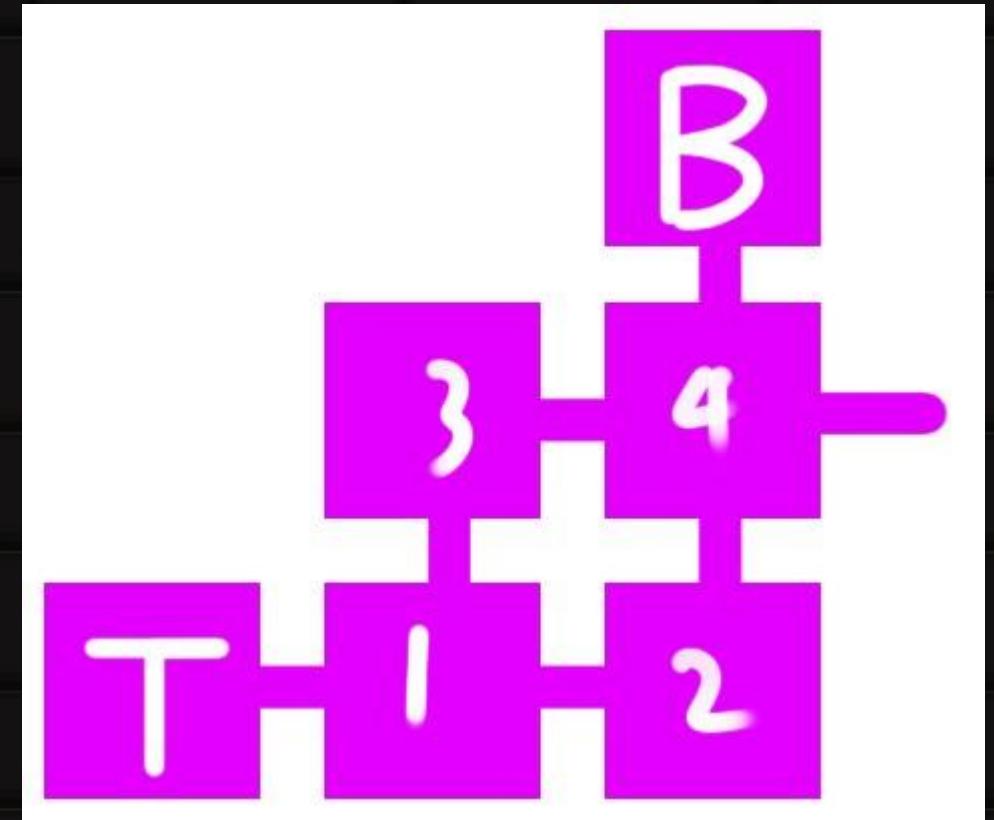
Collect 3 collectibles for matchstick

Room 4 - 2 big, 1 wall and 2 splitter blades

Collect 4 collectibles for matchstick to level 2

Boss room - Ring boss blade and wall blades

unlock dash ability upon clear



Level 2 Layout

Room 1 - 4 expand blades and 1 wall blade

Collect 4 collectibles for flame

Room 2 - 2 expand, 1 wall and 2 big blades

Collect 4 collectibles for flame

Room 3 - 2 dash and 1 wall blade

Collect 4 collectibles for flame

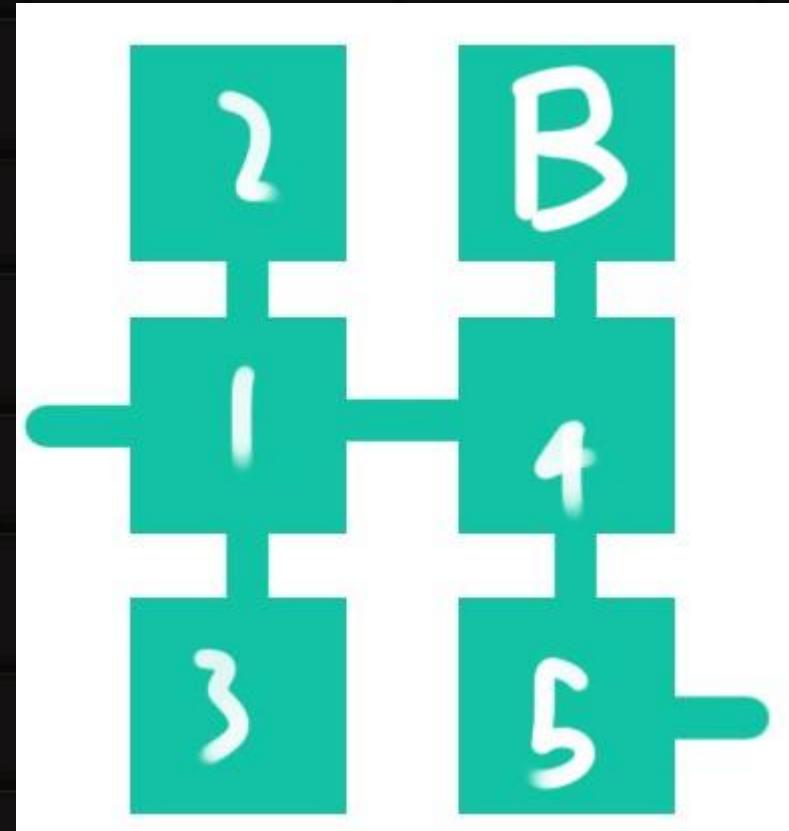
Room 4 - 2 expand and 2 split blades

Collect 4 collectibles for flame

Room 5 - 1 dash and 3 expand blades

Collect 5 collectibles for flame

Boss room -1 Shooter boss blade and 1 wall blade
unlock Kairos ability



Level 3 Layout

Room 1 - 2 disappearing blades

Collect 5 collectibles to unlock flame

Room 2 - 1 disappearing blade, 2 big blades and 1 wall blade

Collect 5 collectibles to unlock flame

Room 3 - 3 split blades and 2 small blades

Collect 5 collectibles to unlock flame

Room 4 - 1 disappearing blade and 1 dash blade

Collect 5 collectibles to unlock flame

Room 5 - 1 disappearing blades 1 wall blade 2 expand blades

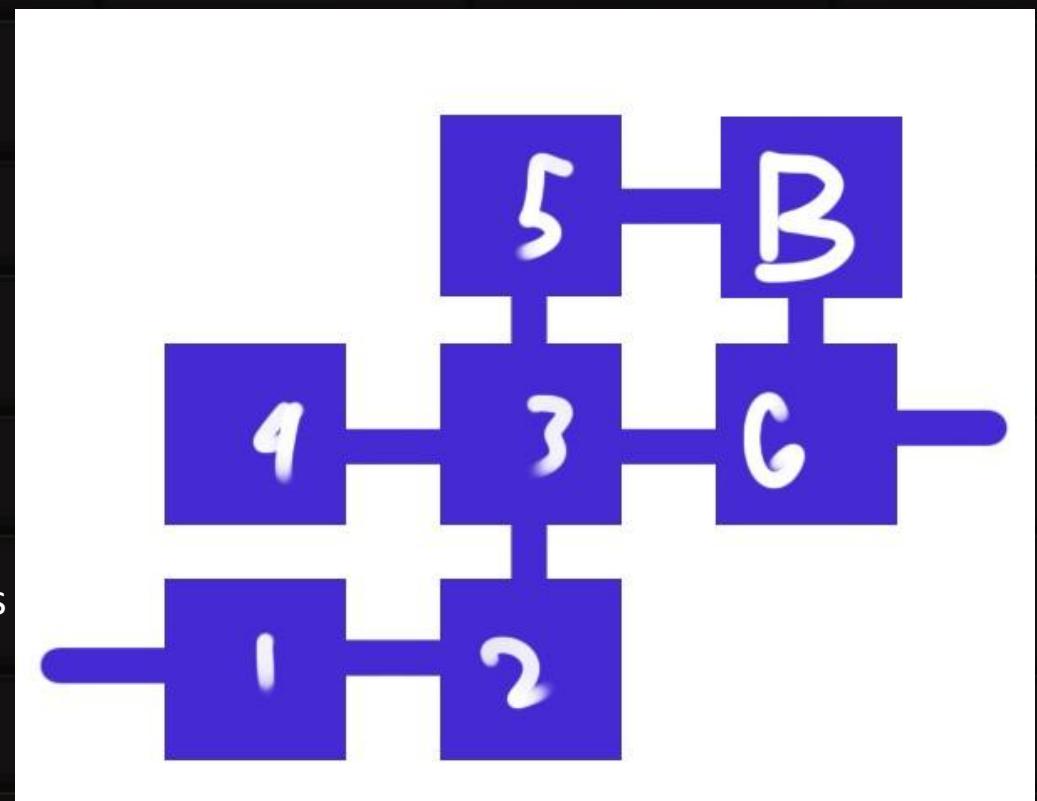
Collect 5 collectibles to unlock flame

Room 6 - 2 disappearing blades and 1 split blade and 1 wall

Collect 6 collectibles to unlock flame

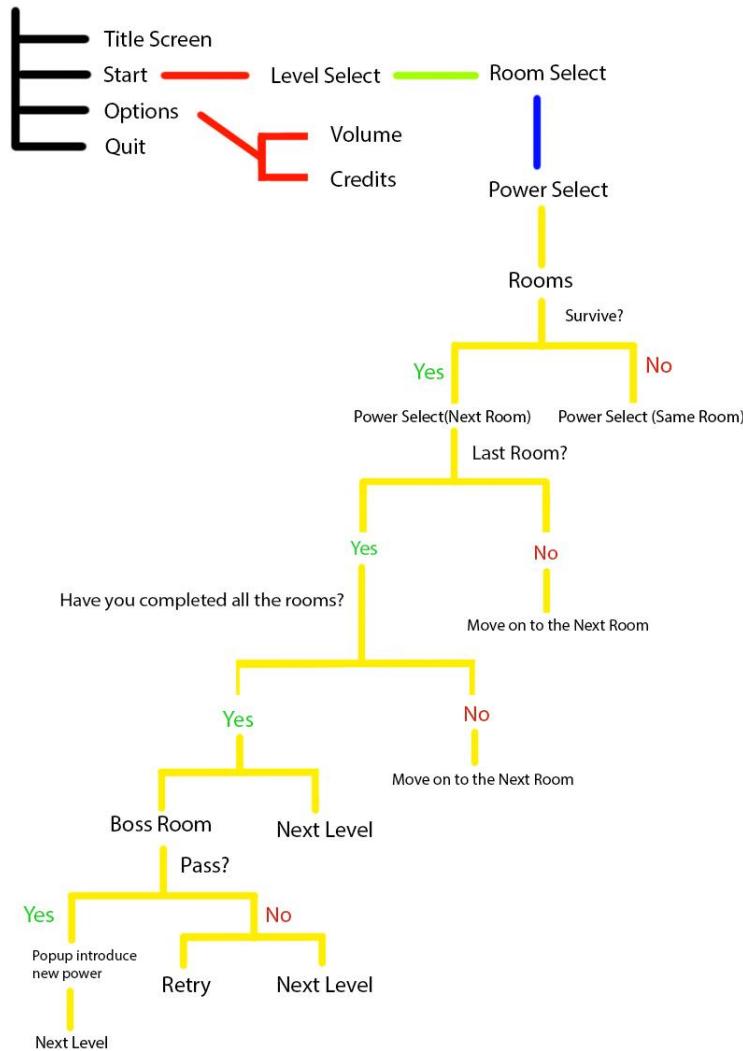
Boss Room - fire boss blade and wall blade

unlocks endless survival mode



FLOW DIAGRAM

Start Screen





How's

Convalescence

恢复期

Settings

PLAY

Credits

— 恢复期 —

Convalescence

Start

Options

Quit

— 恢复期 —

Convalescence

Level 1

Level 2

Level 3

— 恢复期 —

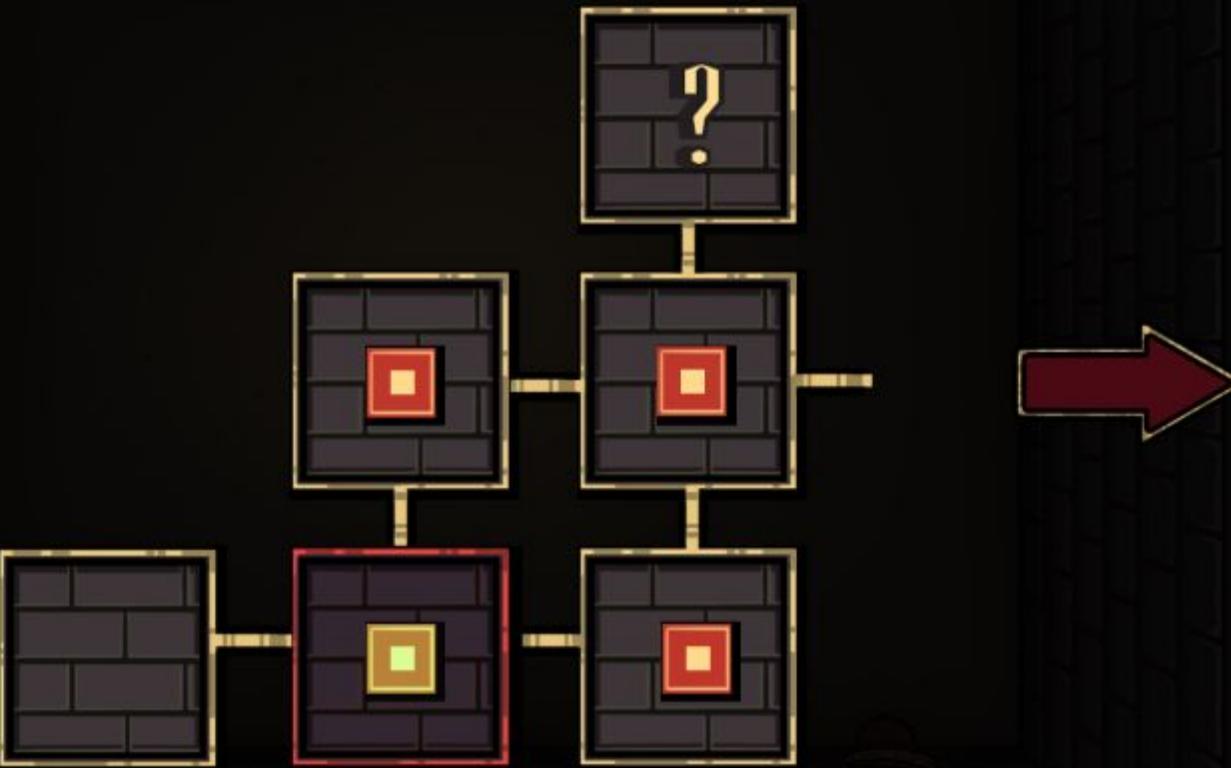
Convalescence

Level 1

Level 2

Level 3

Level 1



Not Cleared ? Boss Room 你 Player Position



Power Up

—— 技能 ——

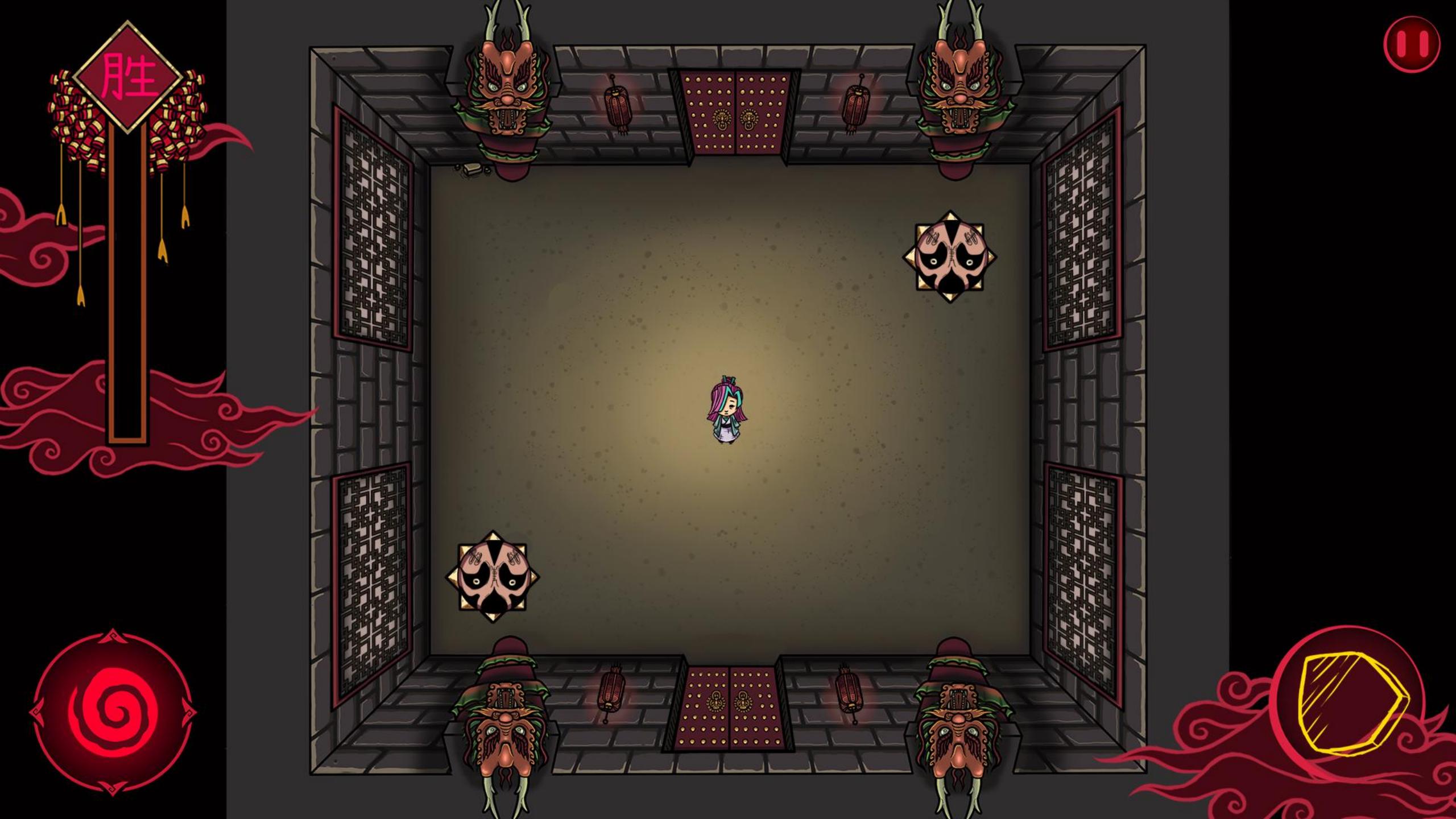


Power Up

—— 技能 ——



II





Paused

暂停

Continue

Settings

Level Select

Quit

胜



Room Cleared

过关

Continue

胜

You-Died

— 死亡 —

Respawn

Main Menu





The End

结束

Back to Main Menu

CREDIT SCREEN

- Draw the layout of the credit screen
- Describe the transition animations with use of diagrams
- List the members of the team and their roles
- Credit the sources where you got the sound and text typeface

CHARACTER ART

- Describe the art direction of the characters
- Draw concept design of characters with notes and comments
- Draw the concept sprites of the characters
- Draw the concept animation sequence of the characters

ENVIRONMENT ART

- Describe the art direction of the environment
- Draw concept design of the environment
- Draw the concept level art with notes and comments

PROPS ART

- Describe the art direction of props and object
- Draw concept design of the props and object with notes and comments



Concept Art

Art Style Reference



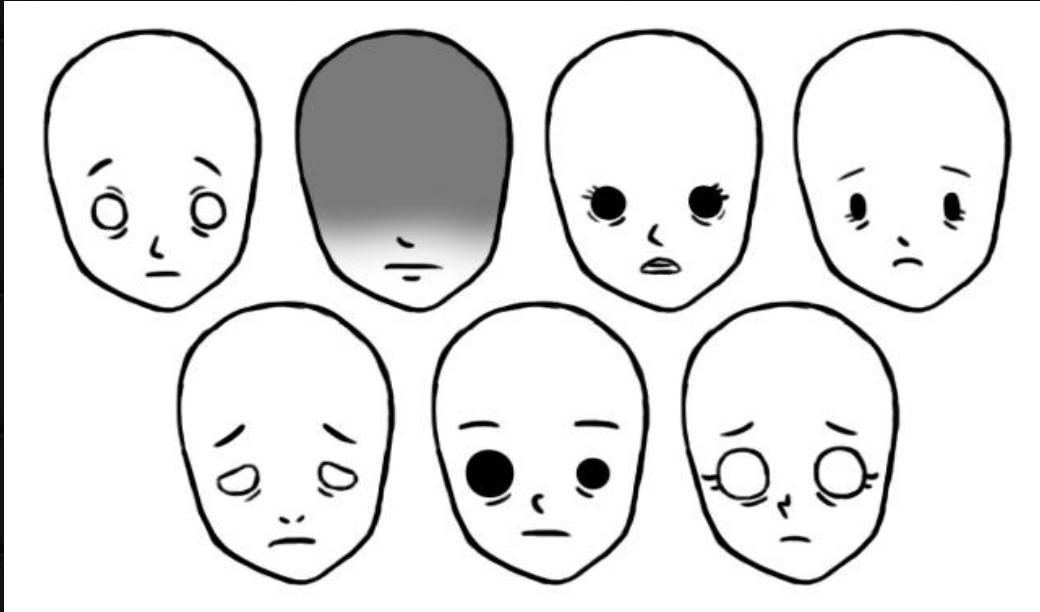
Colour Reference





Protagonist

Concept



Updated

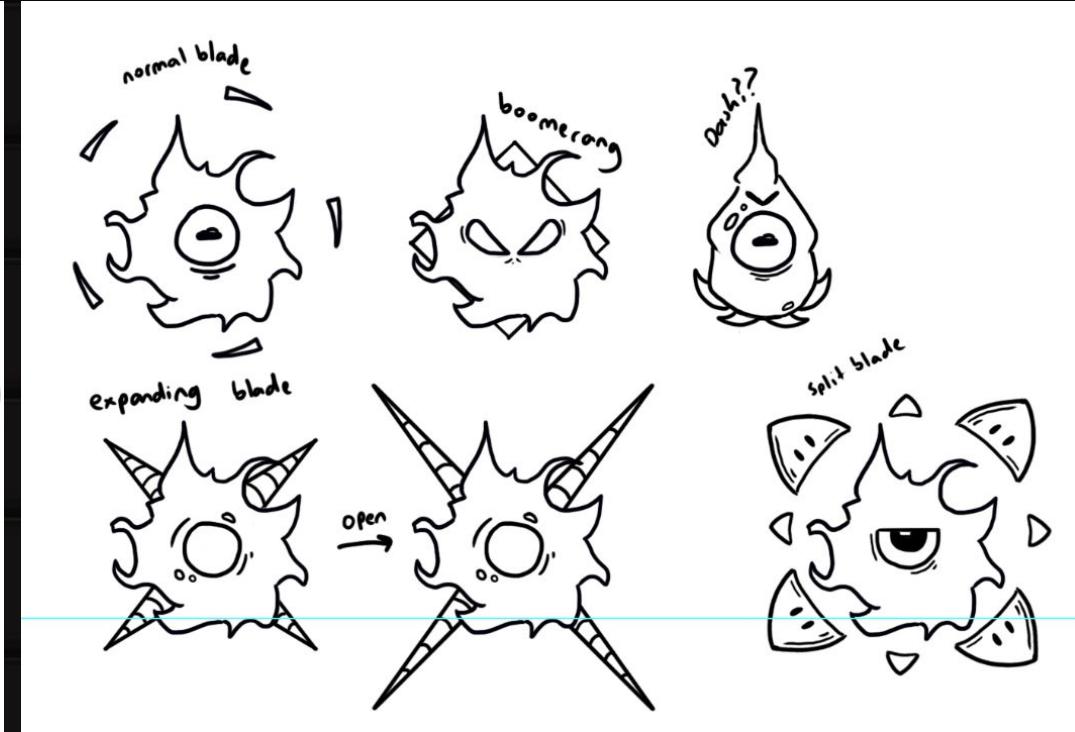
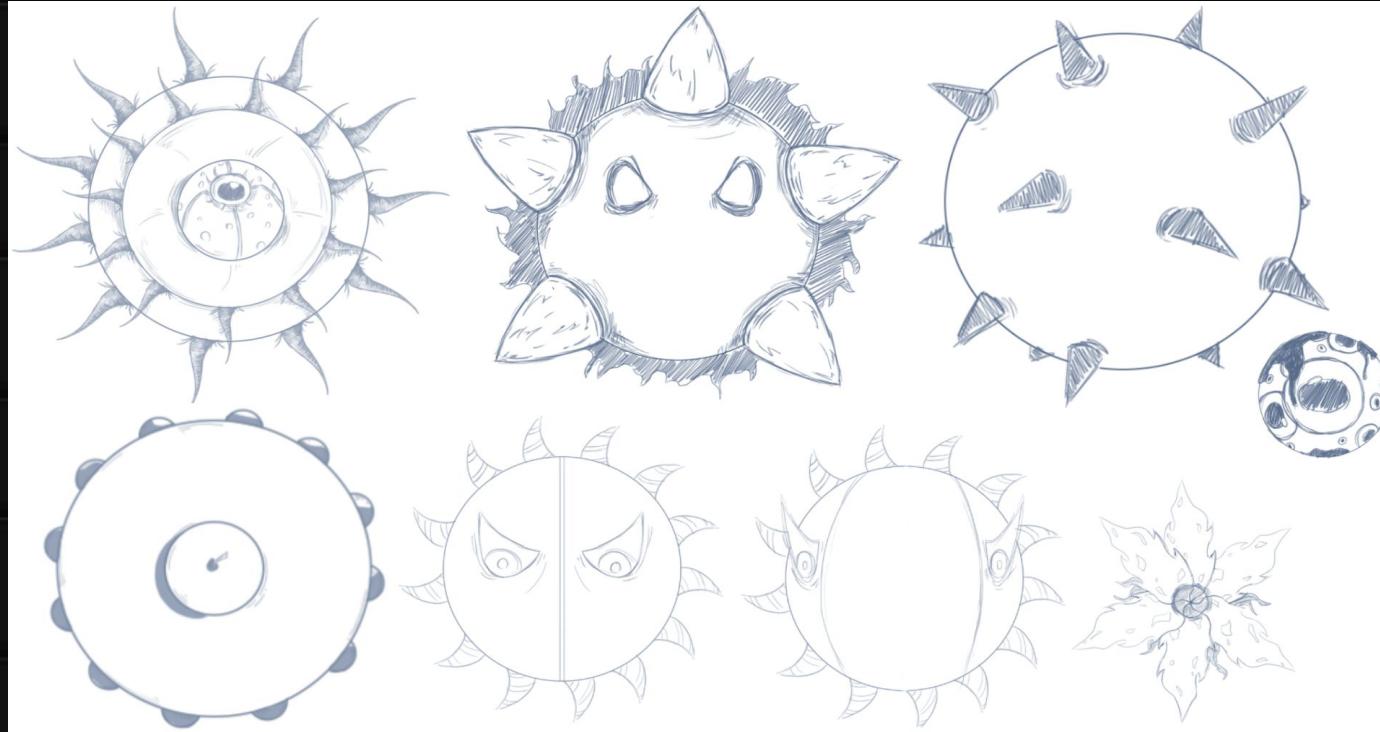


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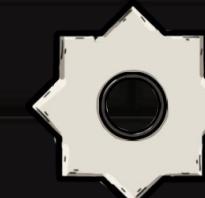


Enemies

Concept



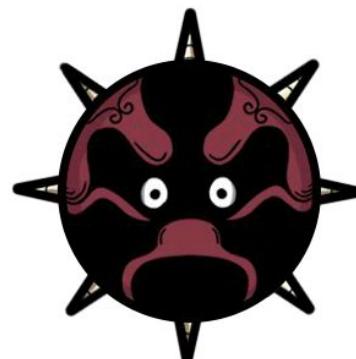
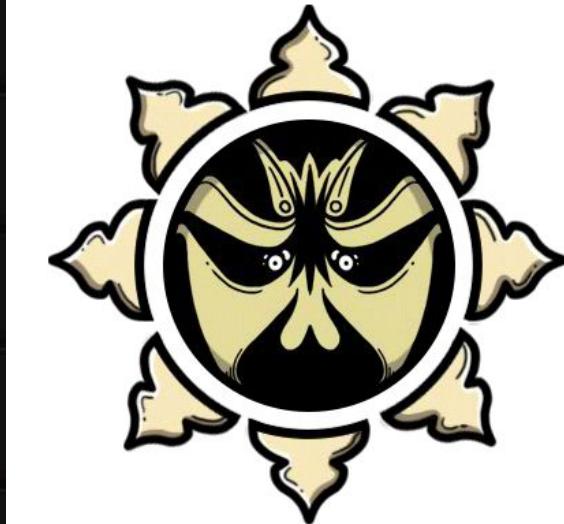
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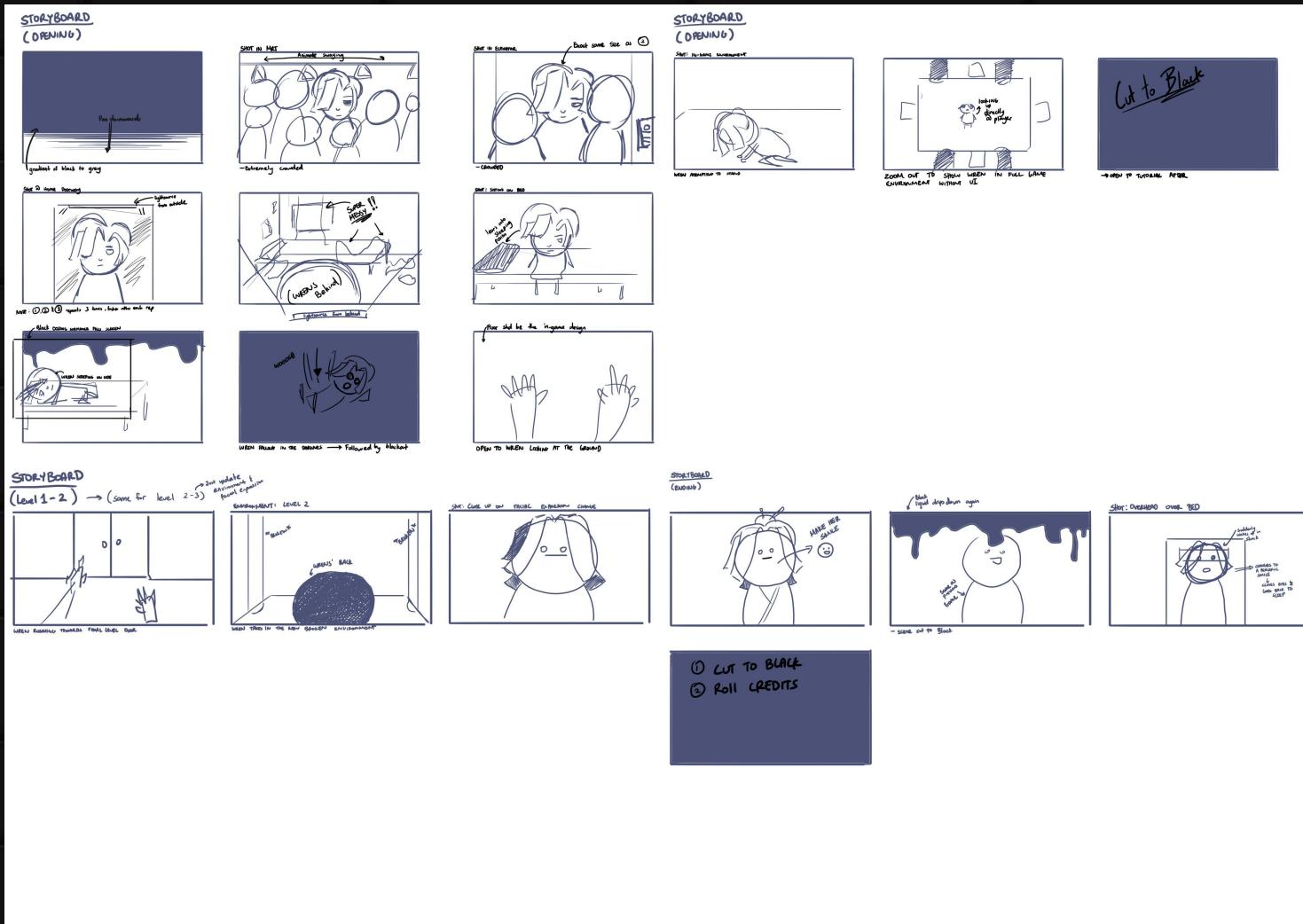


Animation



Animation







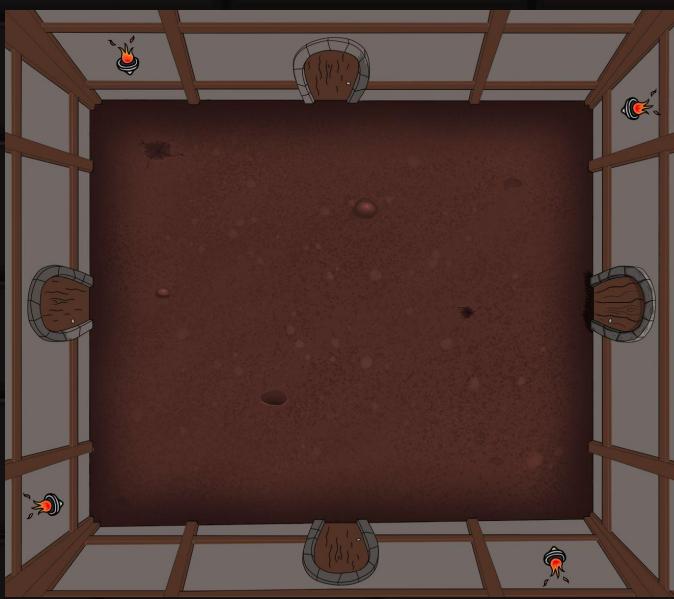
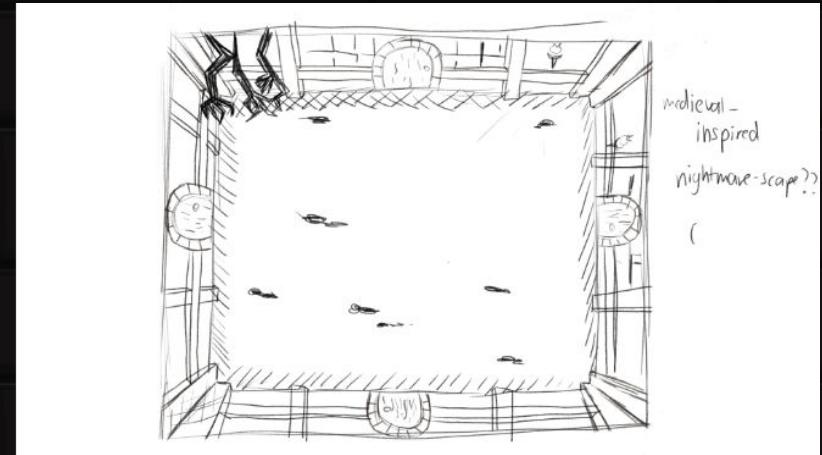
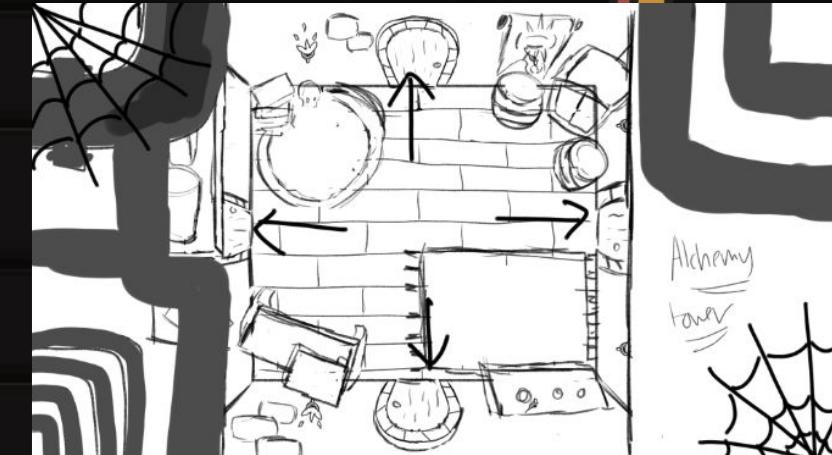
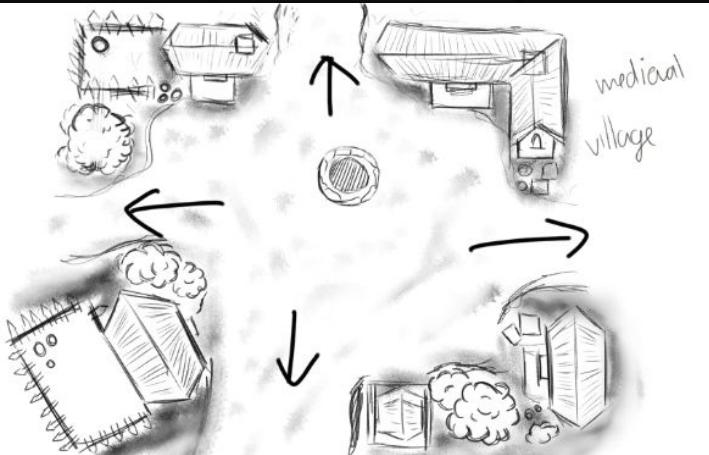




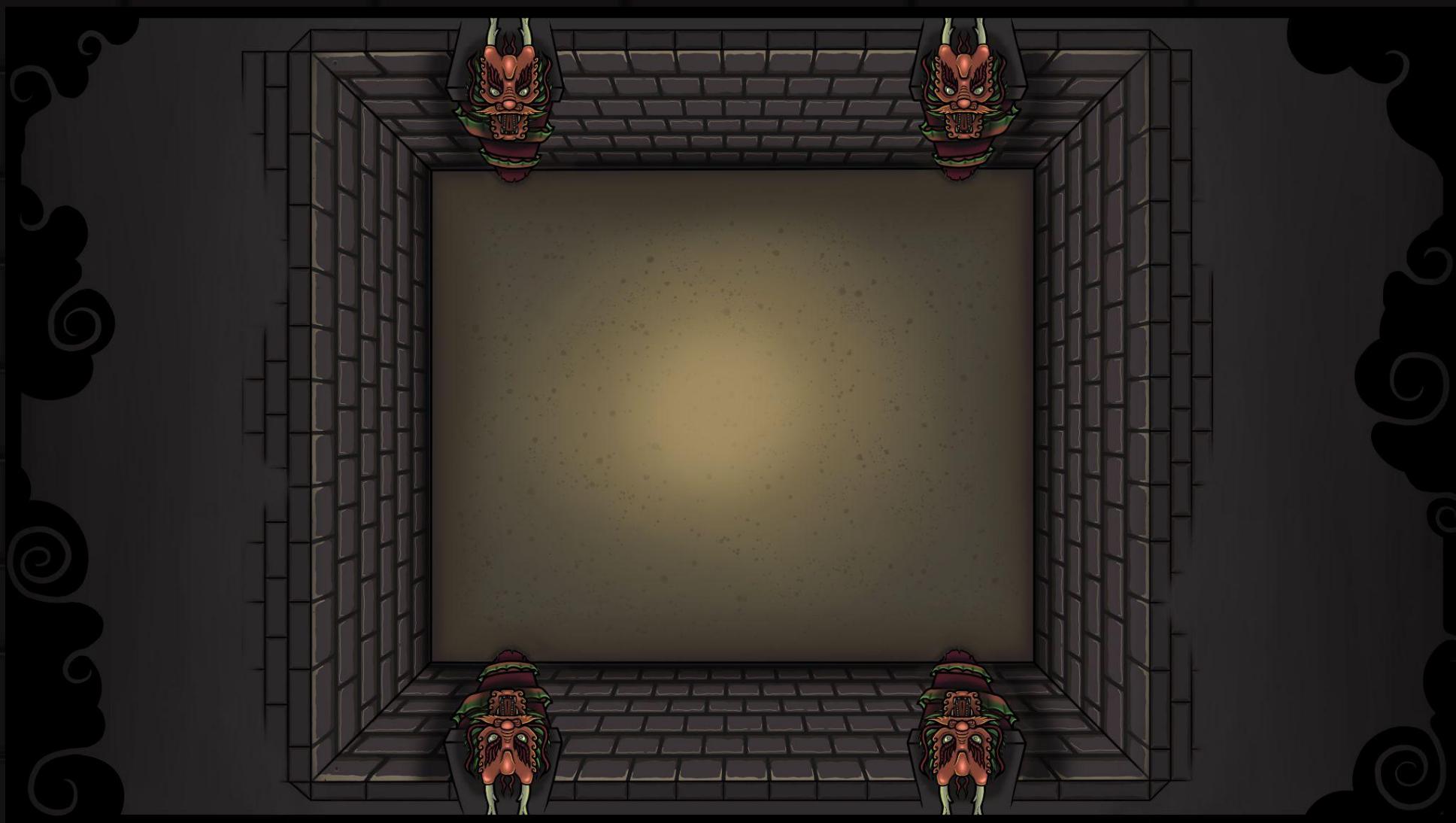


Environment

Concept



Updated



Updated



Updated



Updated



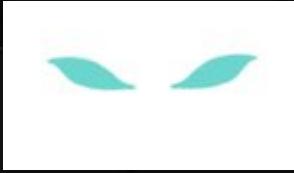
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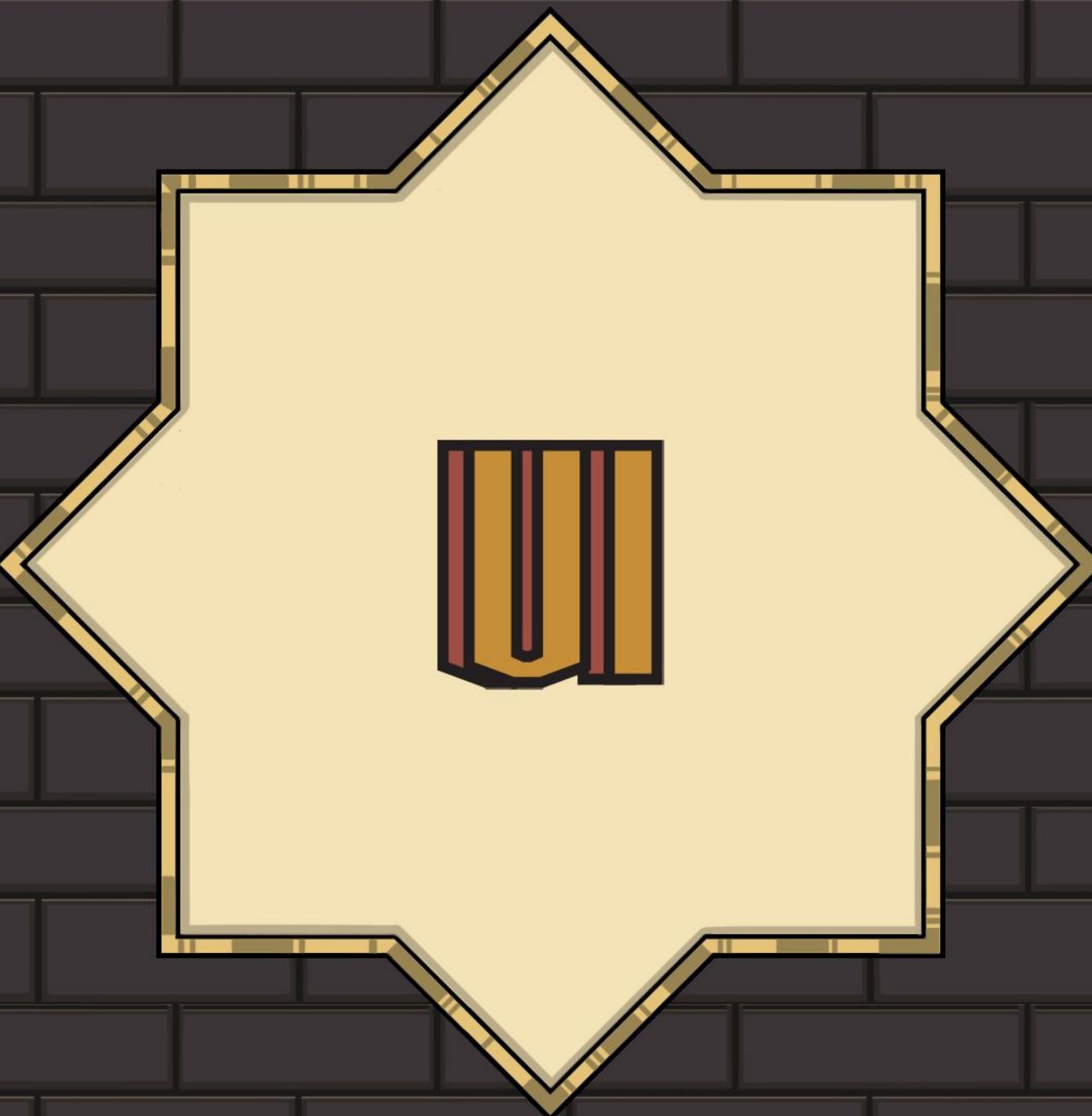


Animation

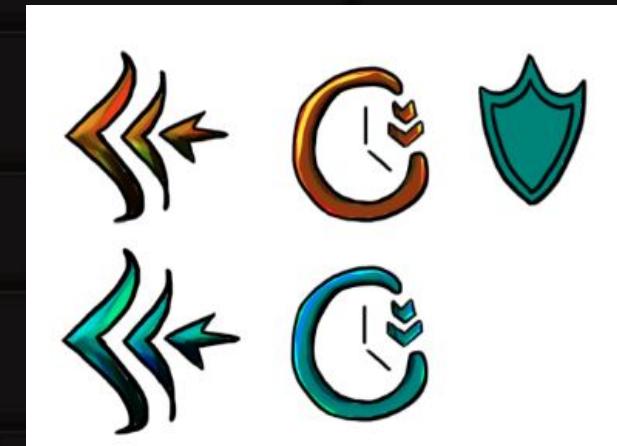
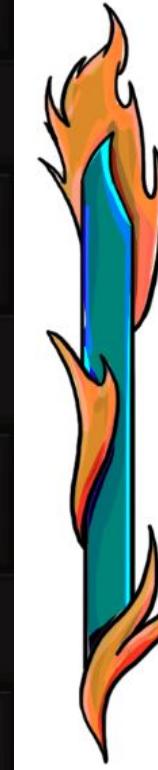
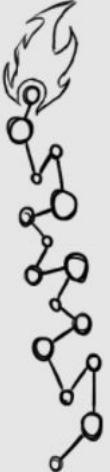


Animation

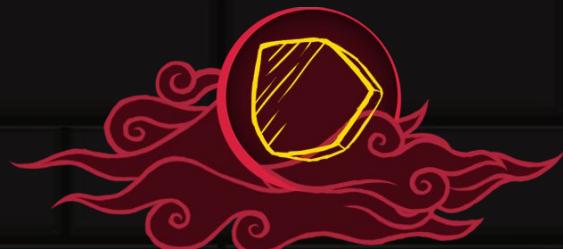




Concept



Updated



Updated

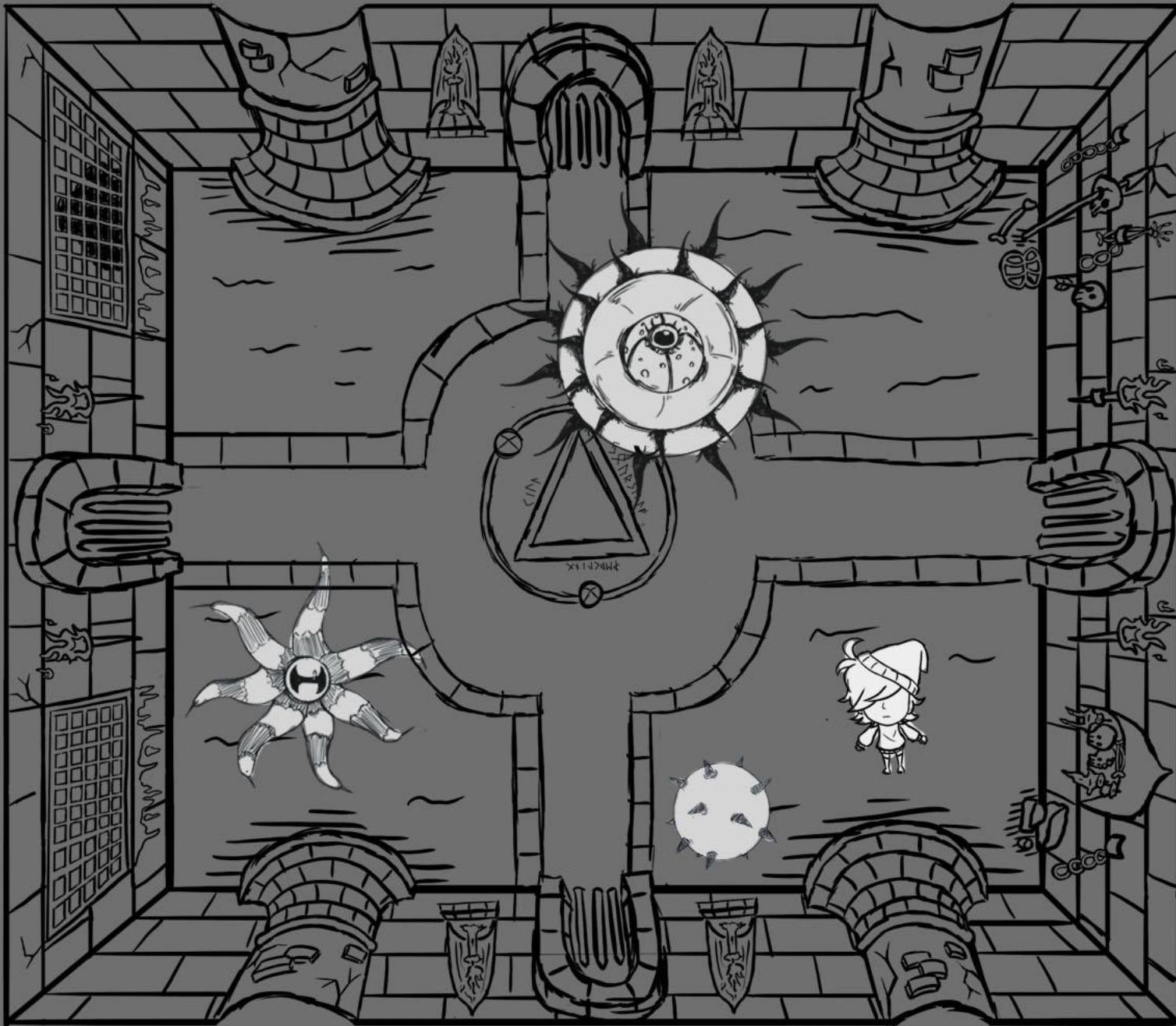




Mastersketch

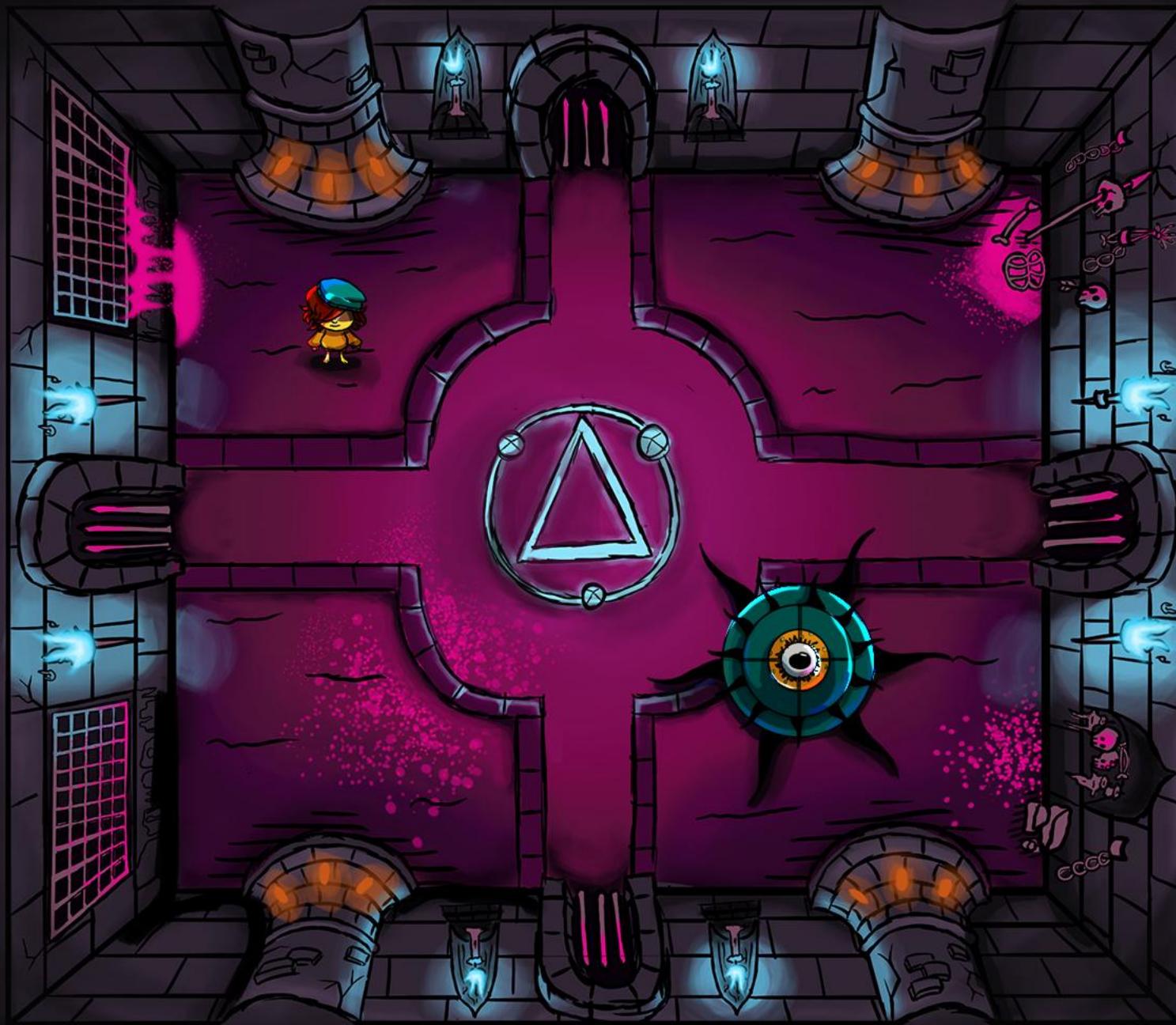
UI

Joystick

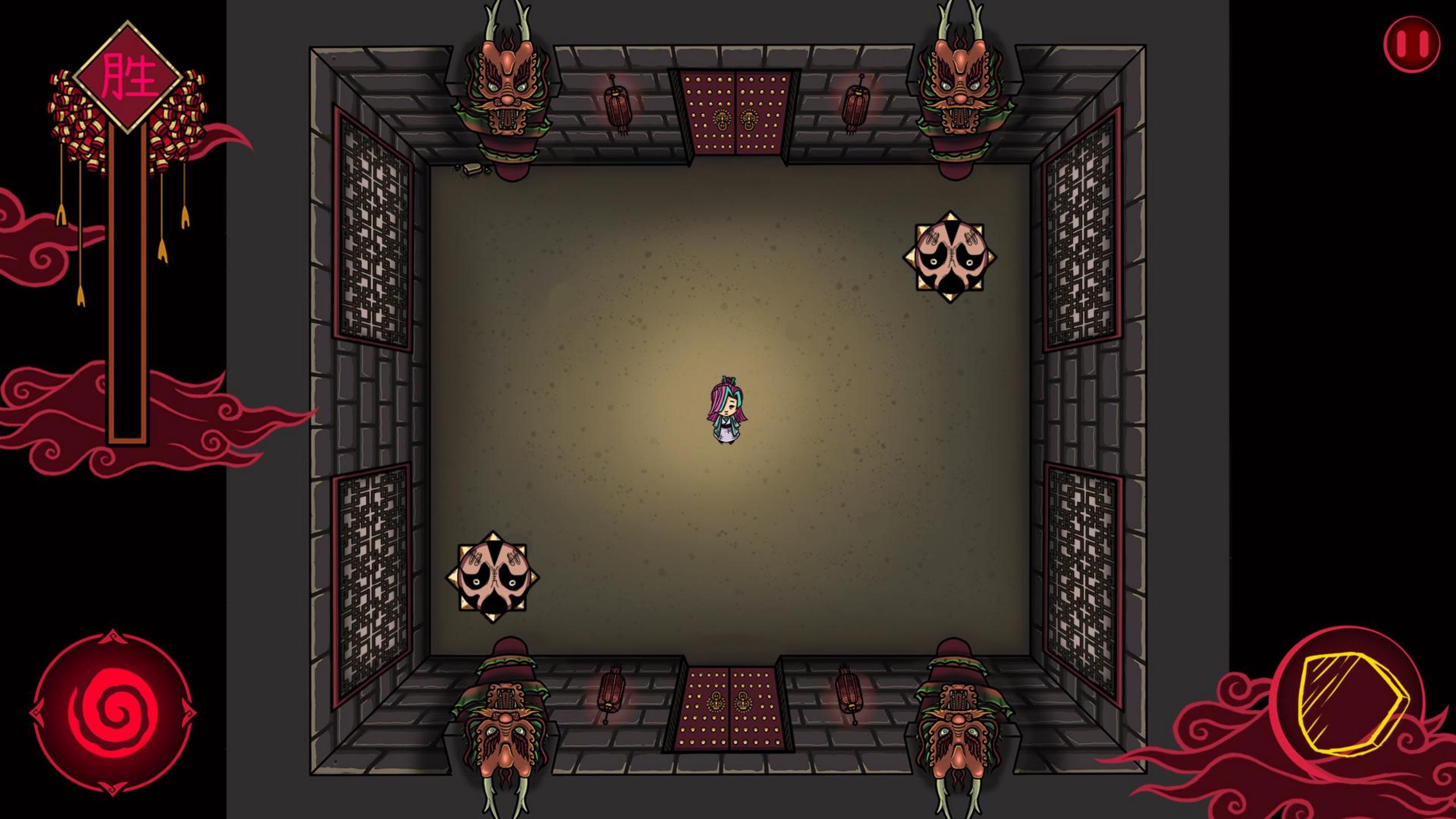


OPTIONS

POWER UPS



II





Sound & Music

The image features a large, stylized title "Sound & Music" centered on a light beige rectangular sign. The sign is mounted on a dark grey brick wall with a thick black border. The title is composed of three words: "Sound", "&", and "Music". Each word is rendered in a bold, blocky font with a yellow-to-orange gradient fill and a black outline. The letter "A" in "&" has a small tail extending downwards. The sign has a decorative gold-colored border with a stepped, Art Deco-style pattern. The overall aesthetic is retro and modern, reminiscent of mid-20th-century graphic design.

Background Music

creative direction:

- oriental music
 - tense feeling that has an increasingly stronger beat as the player progresses
- first level: darker, calmer
- second level: louder and stronger than first level
- third level: fast, strong beat (stronger than second level)
- boss music: battle music

*the level music are all part of the same song

Background Music

Level 1 music 

Level 2 music 

Level 3 music 

Boss music 

Background Music

Player death



Shield sound



Spawn blades



Kairos sound



Blink sound

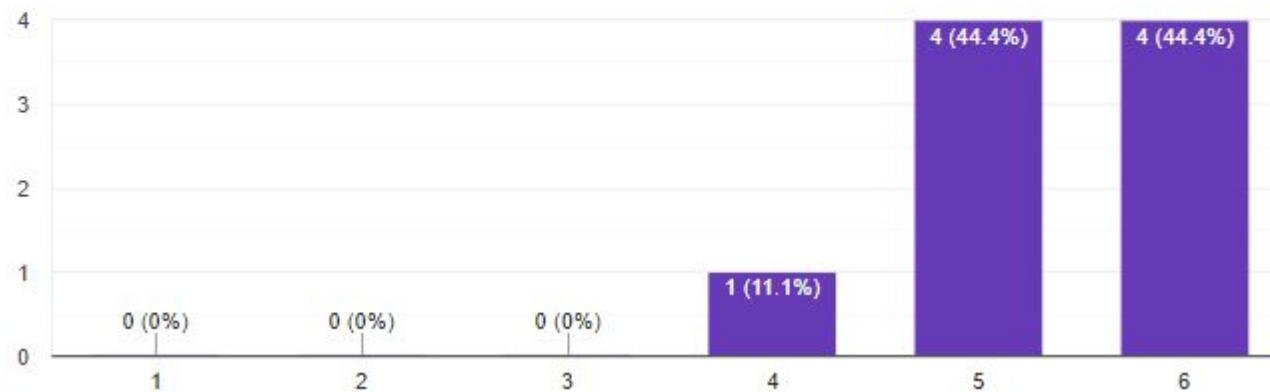


- sound effect to warn player of certain things

Playtest Report [general comments]

Rate the aesthetic of the game

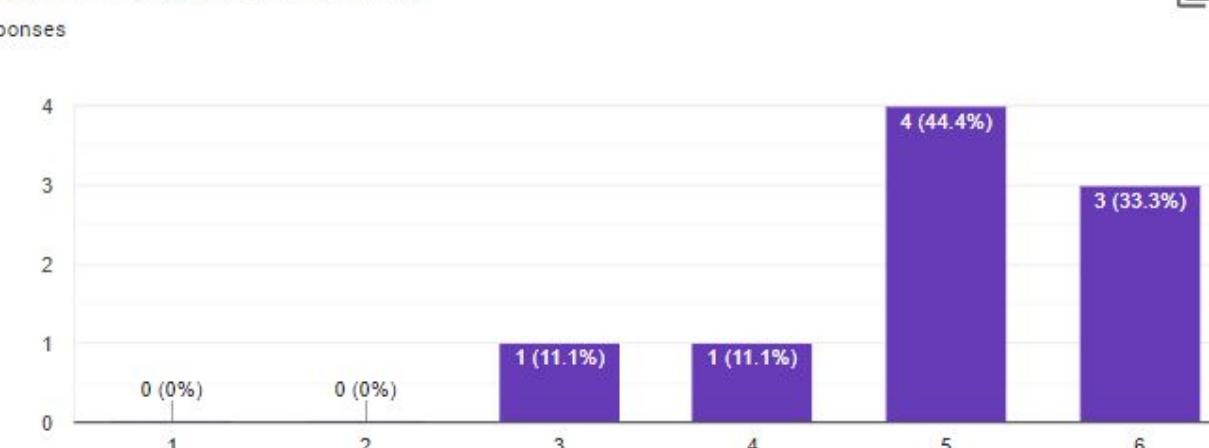
9 responses



Majority of the feedback of the art is good so we are not making any major changes to them

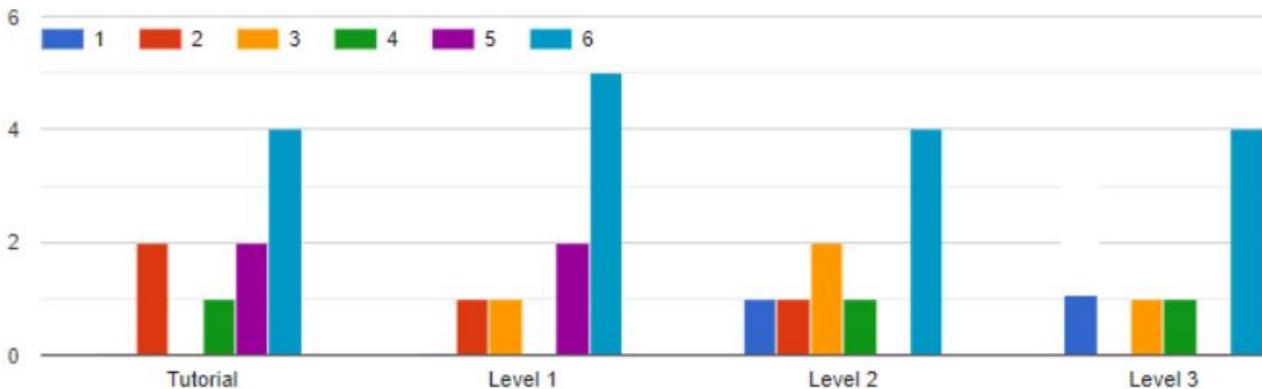
Rate the overall difficulty of the game

9 responses



Majority of the playtesters feels that the game is extremely difficult, thus we are going to do more game balancing to fix that

Rate how engaging do you feel the game is



In general, most people feel that the game is quite engaging.

Rate how smooth the player controls are?



9 responses

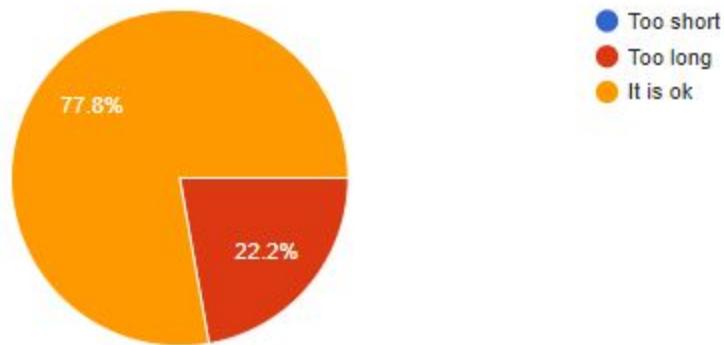


There are varied responses regarding the smoothness of the player controls, we had also received verbal feedback that we could change it to a D-pad and comments that the game is more suited to the PC.

Despite that, majority of the responses are still on the positive side, thus, this issue is not going to be heavily focused on for our gold, but would be taken into consideration

What is your opinion on the duration of the game

9 responses

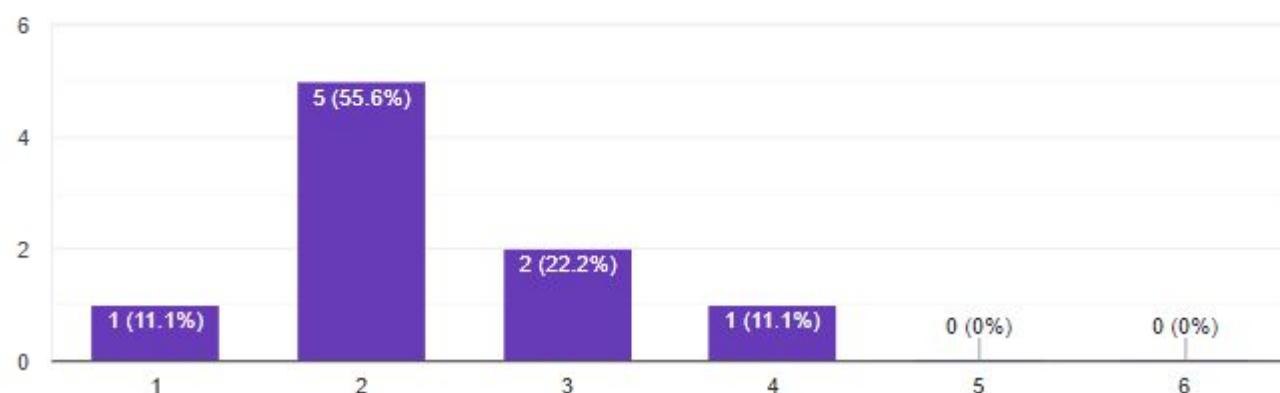


Most playtester felt that the duration of the game is alright, thus, we are not going to make any changes to it.

The main theme of our game is recovery. How well can you follow the recovery of our main character?



9 responses



Majority of the playtesters felt that the story for our game is not very obvious. This is thus going to be our main focus for our plans for gold to make the theme of our game more obvious to the players and clients.

Any other feedback?

7 responses

- UI can be bigger/bigger hitbox
- Enemies in general can have more visual cues especially disappearing and dash blades
- It would be nice if u implement Bren's story into the game (more storytelling)
- Levels are nice but I wish that there are bigger changes in the level art when level changes

Instead of making the ability change colour to indicate being ready, maybe make it a 360 cooldown instead because the first colour change might confuse the player

This game is amazing, but the controls of the game are hard on mobile. The game is probably more suited to PC, and on mobile it's pretty hard to pass the level.

Regarding the first comment, we would be changing the UI buttons to ensure they are easier to click, for both the menus and the player ability button. More visual cues for the disappearing and dash blades have also been placed into our plans for gold. As stated earlier, implementing Bren's story would be a major focus in our next plans.

For the second comment, we are planning to change it to fit what they mention about the 360 cooldown, either that or a vertically increasing like energy is filling up.

Playtest Report [gameplay and design]

How difficult was it to learn our game? Why? (have you played games of the similar genre before?)

9 responses

it was pretty alright since it was fairly self explanatory

No, It is pretty self explanatory

Not too difficult to learn, only learning curve would be what the blades do

It's a little hard to get used to the controls

Not difficult

Quite difficult cos lack of touch feedback in movement controls

difficult but i played Blade Master b4

It was very difficult with the current player controls and move direction of enemy

Its not difficult to learn nut hard to master

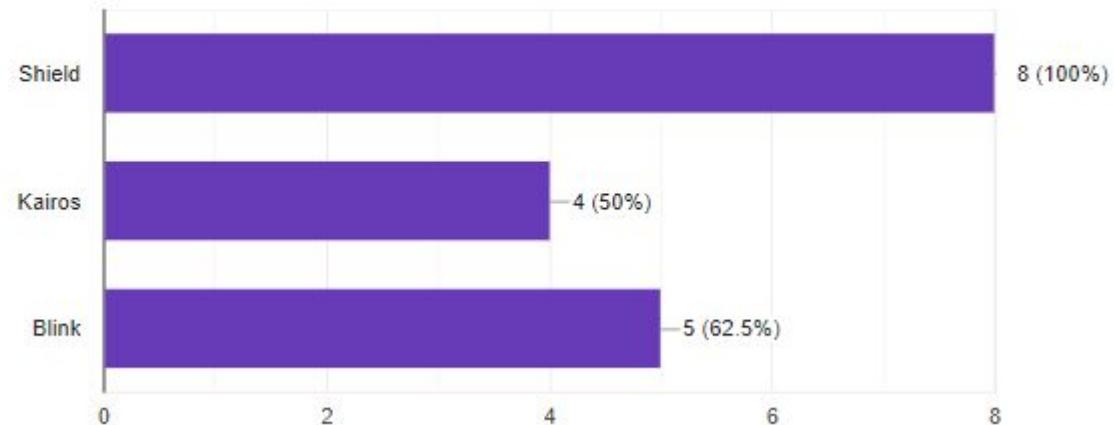
The opinion of the learning curve of our game is quite evenly split between difficult and not difficult to learn.

Those that mentioned that it is quite easy to learn mainly have the reason that it was self-explanatory. On the other hand, those that say it is difficult mostly say it is due to the movement controls.

Tick the abilities that you have tried using



8 responses



Which ability do you find the most useful? Why?

9 responses

- Shield
- Shield. the rest are not as good
- Shield. Easiest to use and the mechanic is simple
- Shield, its the easiest to use and provides more value than the other 2. Blink is fine but there are points where the invulnerability doesnt come out in time although the player disappears
- The wall. The wall is my friend. Stick to the wall.
- Shirld
- shield, i keep spammin it where available after cooldown to protect myself
- Shield, only get to try that

Most players found the shield the most useful as it was the one they were most use to and the one that was the easiest to grasp.

Once you get used to one of the ability, would you still use the others? Why?

9 responses

No because shield works the best imo

No, I am very comfortable using the shield as it's more reliable

I would still use the other ones just to try them out but ultimately would have a preference and go with only 1

Nil

Yes

Yes to kairos. Dash is not v useful

yes, to find out more what other ability do

Didn't get to try the others

I think I would. But I do need to see what are the purpose or advantages of the other abilities

The feedback is split quite evenly with half saying that they would still stick with the shield, and the other half saying that they are open to trying the rest of the abilities. Those who would use the other abilities or express intrigue to what the abilities do and although some say ultimately they would stick to only one, it was still good to have options.

Plans for Gold (Art)

- Boss Attack Player feedback
- Fireball morph into lava pool animation
- Boss Face Animation
- Boss room door
- Character Death animation
- Progression bar animation
- Improve player animations
- Menu screen improvement
- Cutscenes
- Change colour for dancing blade
- Disappearing blade shadow
- Death Screen
- Dash blade feedback
- Visual feedback for shield hitting

Plans for Gold (Programming)

- Pulse increase circle collider
- Visual bug for level select
- Fireball only instantiates downwards
- Level 2 boss particle keeps appearing even if boss dies
- Outer-blades for dancing blades missing spikes
- Make player invincible while blinking for dash
- Adjust pulse particle effect to be more in sync with the pulse
- Credit Scene
- Boss level music
- Pause done

Plans for Gold (Game Design)

- Reduce difficulty of level 3 (decreasing the number of blades especially in the later rooms)
- Buff the dash ability by increasing the dash range, adding such that the player is invincible when dashing and increasing the pulse radius
- Adding visual feedback for the dash blade before it dashes
- Slightly change the ability of the disappearing blade either by having a shadow below the blade when its invisible or have it not deal damage when invisible
- Back button go back to pause screen instead of menu (better flow for the game)
- Buttons needs to be bigger
- Clearer feedback for the collectible bar
- UI cooldown timer needs to be more obvious
- If room is cleared, it is stayed cleared and there is a reset button for players to choose if they want to redo the level

Versioning History

Version	Changes
V1.0.0	<ul style="list-style-type: none">- Character movements and basic enemy are coded and placed in scene- Walls and end of level doors- Pick-up and keys are added- UI for collection is placed- Placeholder art are used for character and UI- Preliminary art assets placed for pick-up and enemies
V1.1.0	<ul style="list-style-type: none">- character movement changed from 8-directional to 360 degrees- new blades are added- main menu and level select are placed in the game- player ability are added- started building sub-levels and teleporting between them- particle effects
V1.1.1	<ul style="list-style-type: none">- finishing level building for level 1- minor bug fixes- added some animations
V1.2.0	<ul style="list-style-type: none">- level 2 sub-levels are done- music changed and all background music imported- shield can only last 3 seconds before disappearing- cooldown for shield only starts counting after the shield disappears- new art for abilities- new background art- expand blade and dash blade- bug fixes

Versioning History

Version	Changes
V1.3.0	<ul style="list-style-type: none">- Level select overhaul- Boss blades added- Sound effects added
V1.3.1	<ul style="list-style-type: none">- Abilities update (additional features added to the existing abilities)- UI update for ability images and button- Player sprite and animation update- Level select changes and debugging- Environment art updated
V1.3.2	<ul style="list-style-type: none">- Level 3 added- Changes to main menu- Debugging- Visual feedback added [particle effects]- updated playtest report and insights
V1.3.3	<ul style="list-style-type: none">- Optimised player ability script- Minor changes to sprites- Collectible bar changes- Boss animations added- Debugging

Versioning History

Version	Changes
V1.3.4	<ul style="list-style-type: none">- Fix boss doors- Debugging- Update cutscenes and endscreen- Commenting script

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