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GAME DESIGN DOCUMENT



# DANGEROUS DAG

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**STORY**

# **BACKSTORY**

Add a little Dangerous Dag is a baker, more specifically a pie maker, who's greatest enemy is a very hungry, thieving pig named Pickles. Pickles often finds his way into the bakery under the cover of night and steals Dag's beautiful baked goods to stash for him and his minions to munch on. Dag provides food for the village he lives in so he must retrieve the baked goods, but it is never simple. Pickles and his minions guard their food stashes with their lives... and a few locked chests.



# **PLOT**

This time, Pickles strikes again, stealing 6 pies from the bakery and stashing them around the Whispering Marsh, a dark swampland that many dare not enter for fear of running into one of Pickles hungry pig minions. Dag must venture out once again to gather up his stolen pies and return them to their rightful owners.



# OBJECTIVE

The objective of the game is to gather 3 keys in each level that correspond to 3 chests scattered around the swamp which each contain a stolen pie. Though the chests might be easy to come by, the keys prove more difficult. Along with finding the keys and the chests, the player must also hunt and fight to gather coins to pay a ransom (of sorts) for a key. The last key will also be guarded by Pickles himself, who tends to get very angry when it comes to food.





**CHARACTERS**

# MAIN CHARACTERS

## Dangerous Dag

### CHARACTER DESIGN

A small but mighty baker, fit with chefs hat and uniform.

### ABILITIES

Shoots fireballs - 10 damage each.  
3 hearts of health, each heart is 10  
HP = 30 HP in total.

### GOAL

Retrieve stolen baked goods from  
Pickles and his minions.

### INTERACTION

Normal environmental interaction.  
Normal earth gravity physics.

### CAN/CAN'T DO'S

Moves left and right, jumps up, falls down.  
Cannot fly or swim.



# MAIN CHARACTERS

## Pickles

### CHARACTER DESIGN

A large fat pig; who doesn't need 6 extra pies anyway.

### ABILITIES

No special abilities.  
100 HP - will have to be hit 10 times to defeat.

### GOAL

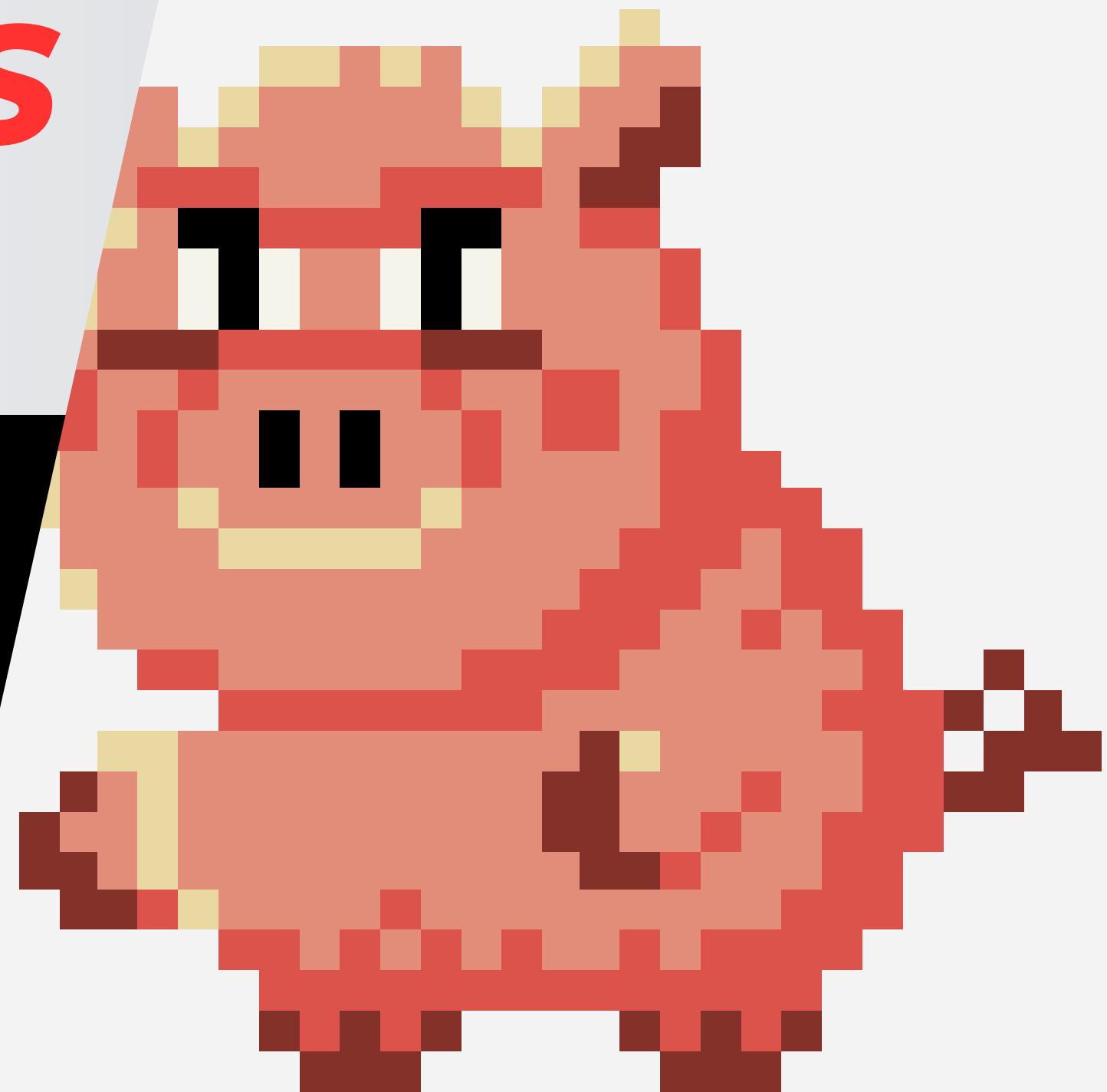
Prevent Dag from getting his food back and protect the final key from him.

### INTERACTION

Normal environmental interaction.  
Normal earth gravity physics.

### CAN/CAN'T DO'S

Moves left and right but not far and not fast. Jumps often. Cannot fly or swim.  
Drops a key on defeat.



# MAIN CHARACTERS

## Pig Minions

### CHARACTER DESIGN

Smaller pigs than pickles, similar design.

### ABILITIES

No special abilities.  
50 HP - to be hit 5 times to defeat.  
Do 10 damage to Dag if hitboxes collide.

### GOAL

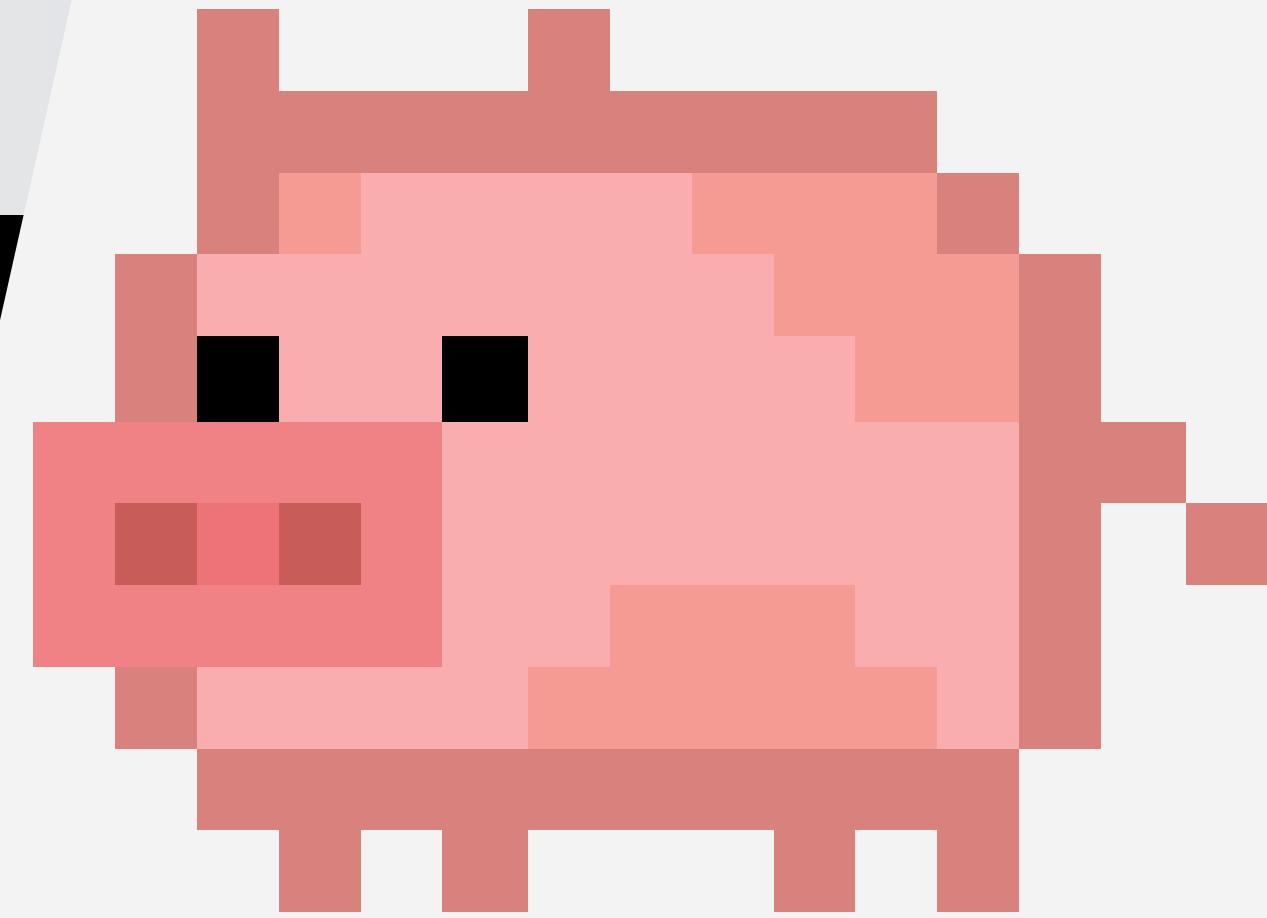
To protect chests and guard various locations around the swamp from Dag and other intruders that may try to enter.

### INTERACTION

Normal environmental interaction.  
Normal earth gravity physics.

### CAN/CAN'T DO'S

Move left and right at medium speed. Cannot jump, fly or swim.  
Drop coins on death.  
Can be killed with fireballs or by jumping on top of.





**ENVIRONMENT  
DESIGN**

# **GEOGRAPHY & CLIMATE**

Swamp; dark, water tiles/wet tiles, greenery, trees, rocks, bushes, fallen trees/logs, grass

These environmental details will add to the immersion for the player and aid in giving them the sense they are in a swamp overrun by evil.



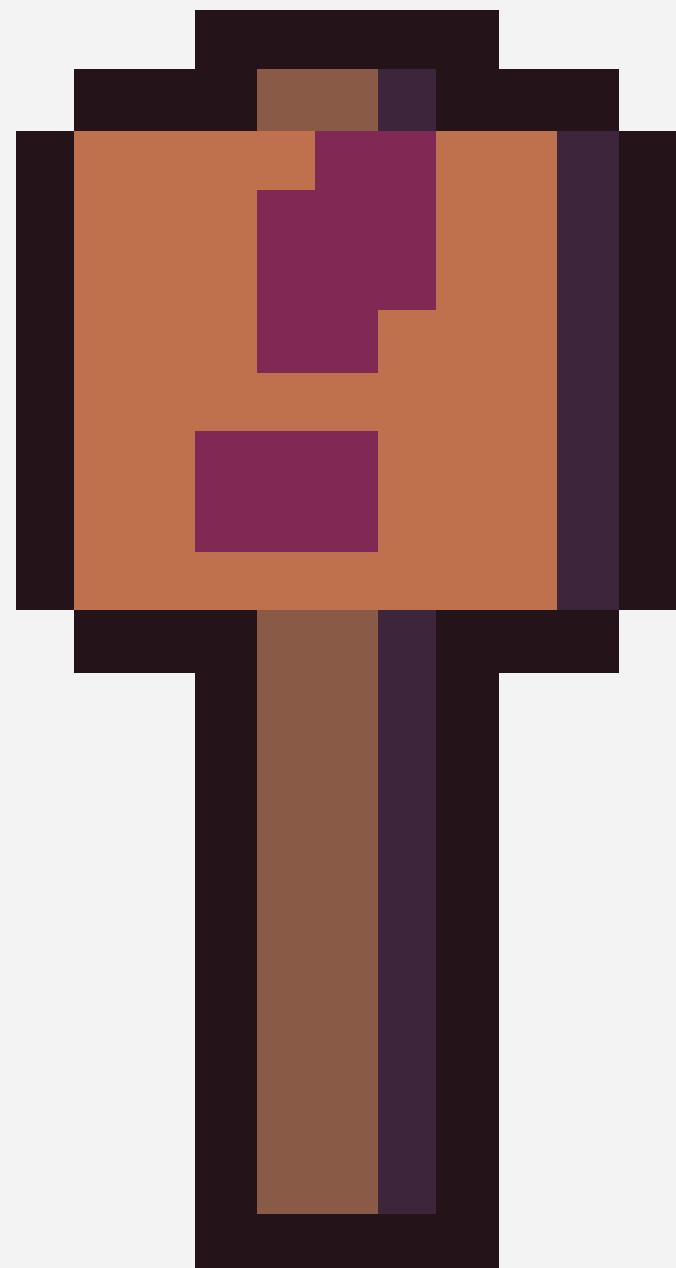
# ARCHITECTURE

Degraded and decomposing remnants of previous life, signs of people that once lived in the swamp before it became overrun by Pickles.

There will be more significant signs of boxes and fences around where enemies are located to signal to the player that they are approaching these enemies and can prepare to use their skills.

There will also be pointer signs around the map to gently guide the player on the right path - signposts, crates and boxes, ladders, broken fences, flags.

These features add to immersion for the player and ties in with the backstory and plot.

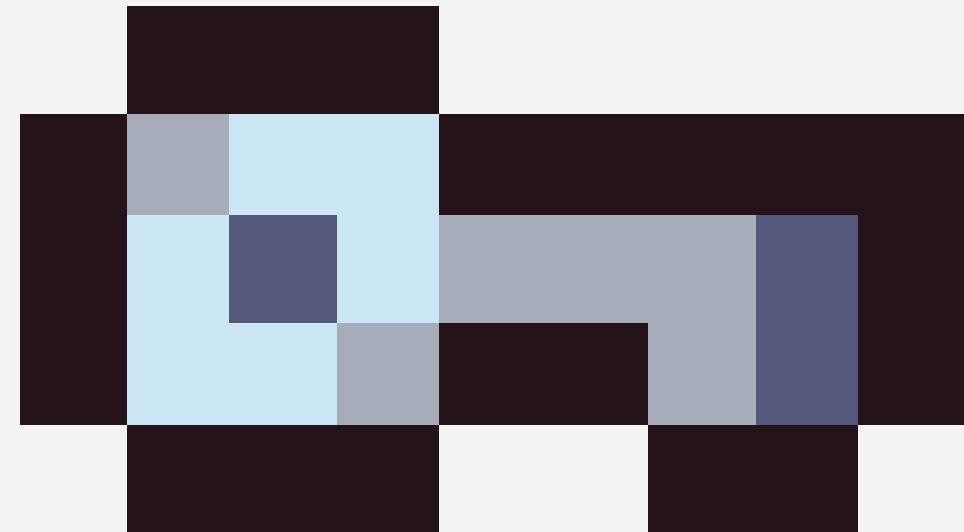


# RESOURCES

Collectable and interactive items that correspond directly to the objective of the game:

- chests
- coins
- keys

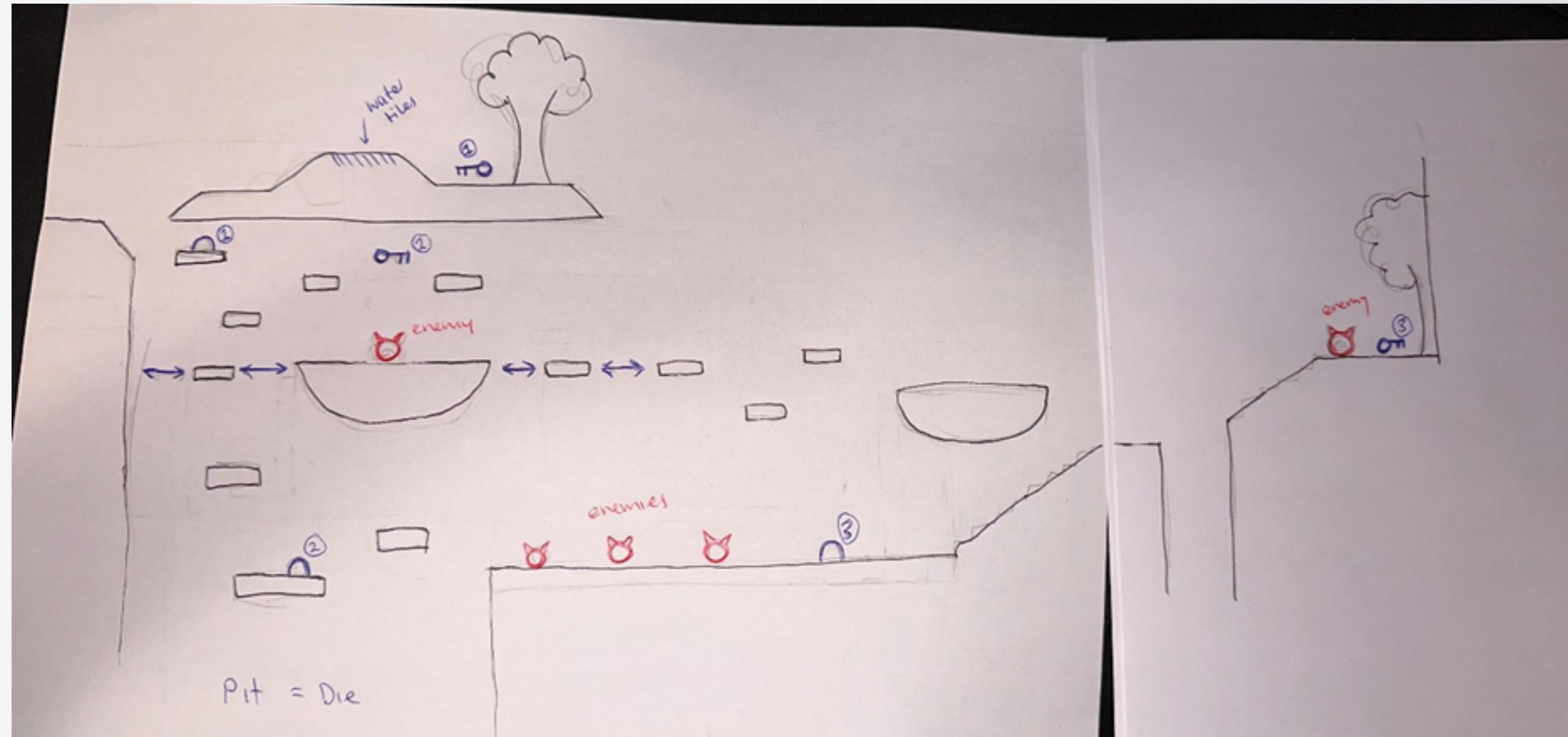
Keys will be colour coded to correspond to chests of the same colours. This will give the player some guidance about which key goes to which chest.





**LEVELS**

# LEVEL 1 - OVERALL



## Goals

Collect 3 keys corresponding to the 3 chests, numbered 1, 2 and 3.

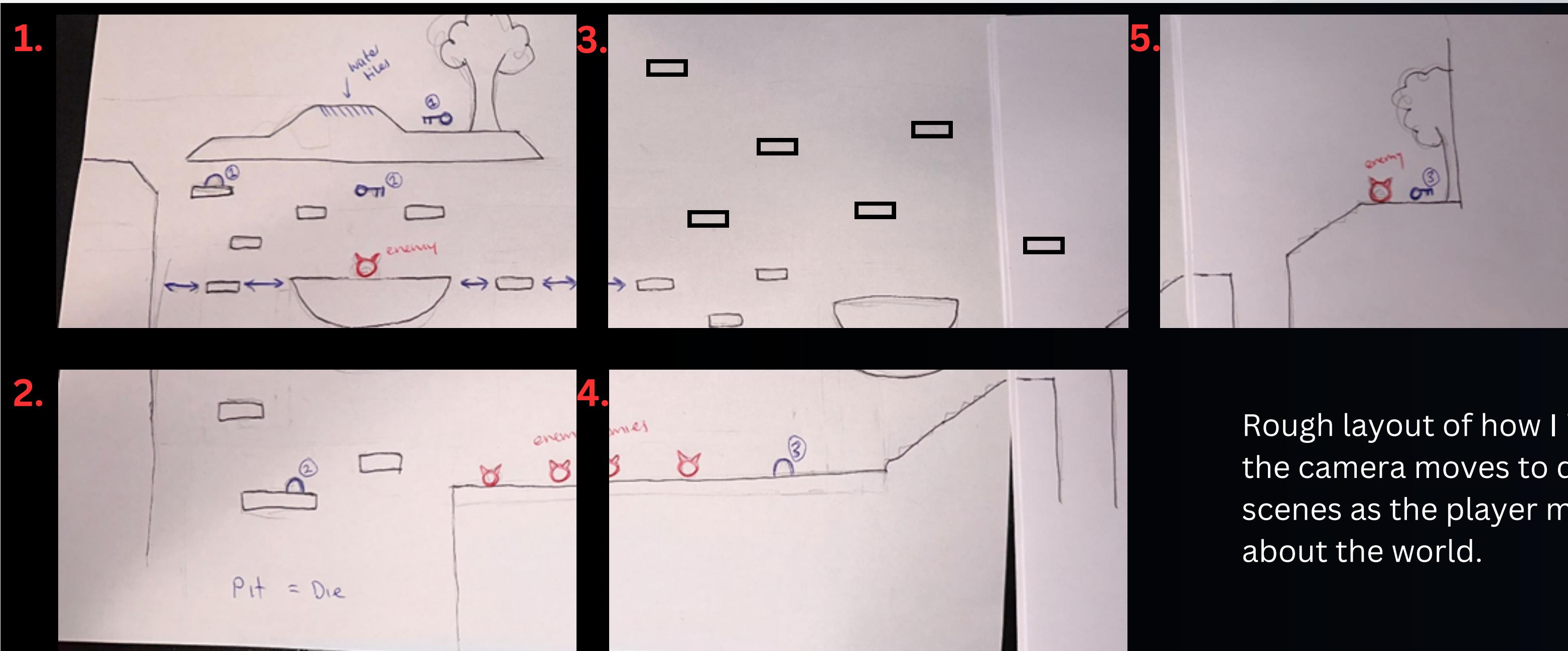
Collect coins throughout the level.

Defeat enemies throughout the level to reach chests and collect coins.

## Character Interactions

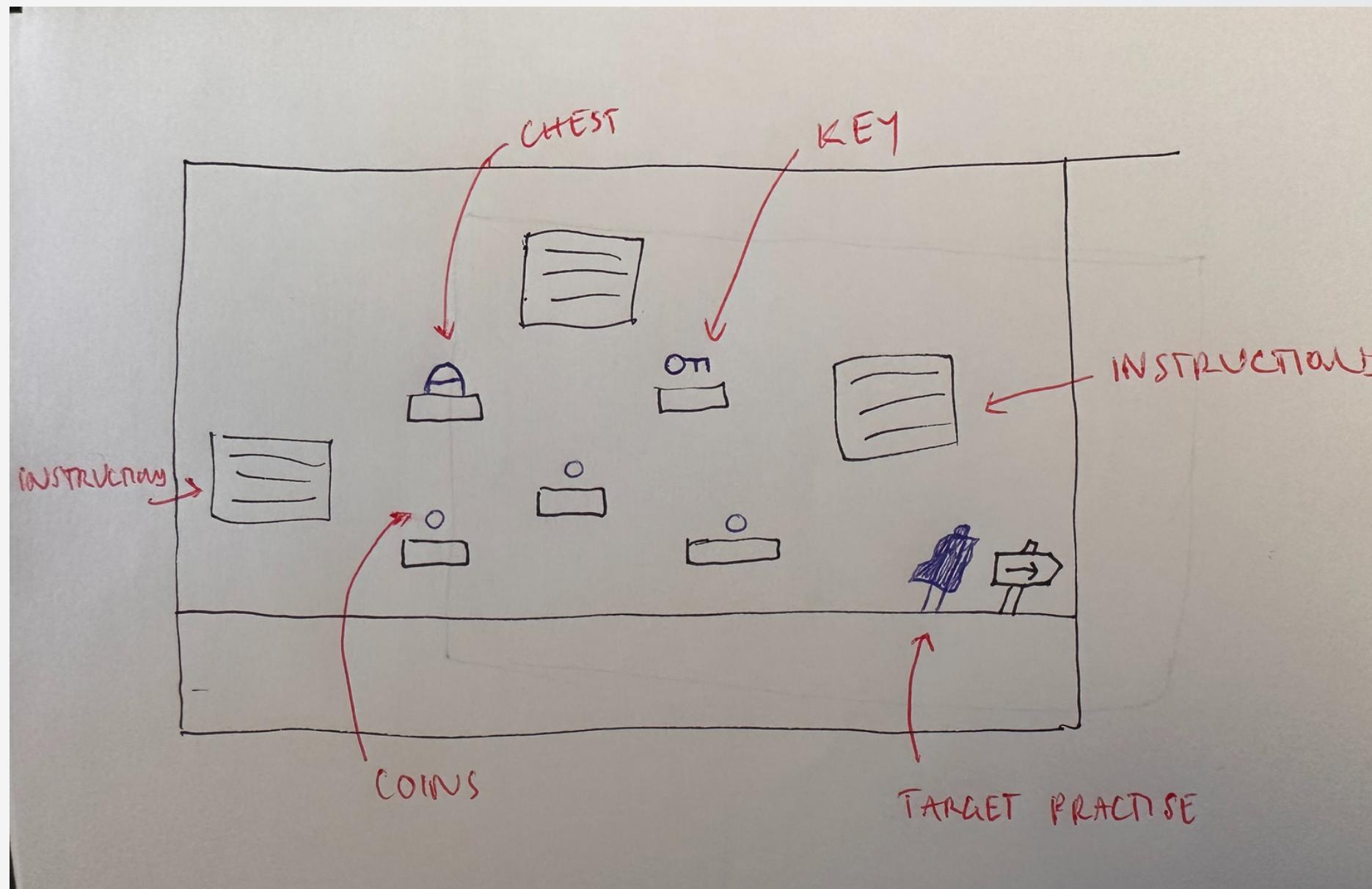
Jumping, collecting, defeating enemies, exploring, moving platforms.

# LEVEL 1 - DETAILED



Rough layout of how I imagined the camera moves to different scenes as the player moves about the world.

# LEVEL 1 - DETAILED

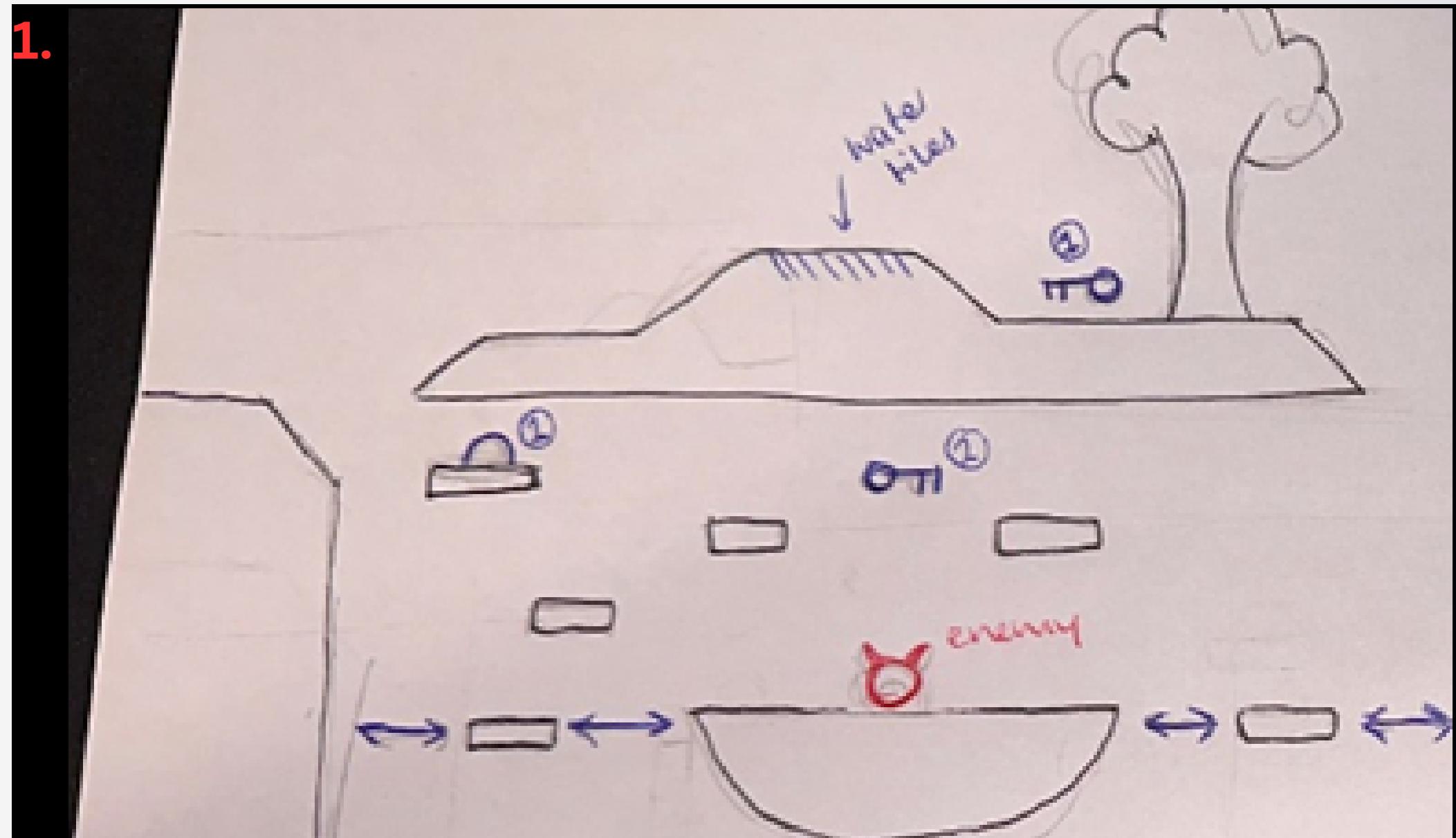


## Screen 0:

Introductory screen to allow the player to get used to the controls before progressing into the level. Can be skipped by walking straight through to Screen 1.

Has instructions and involves all interactions and game mechanics throughout the levels.

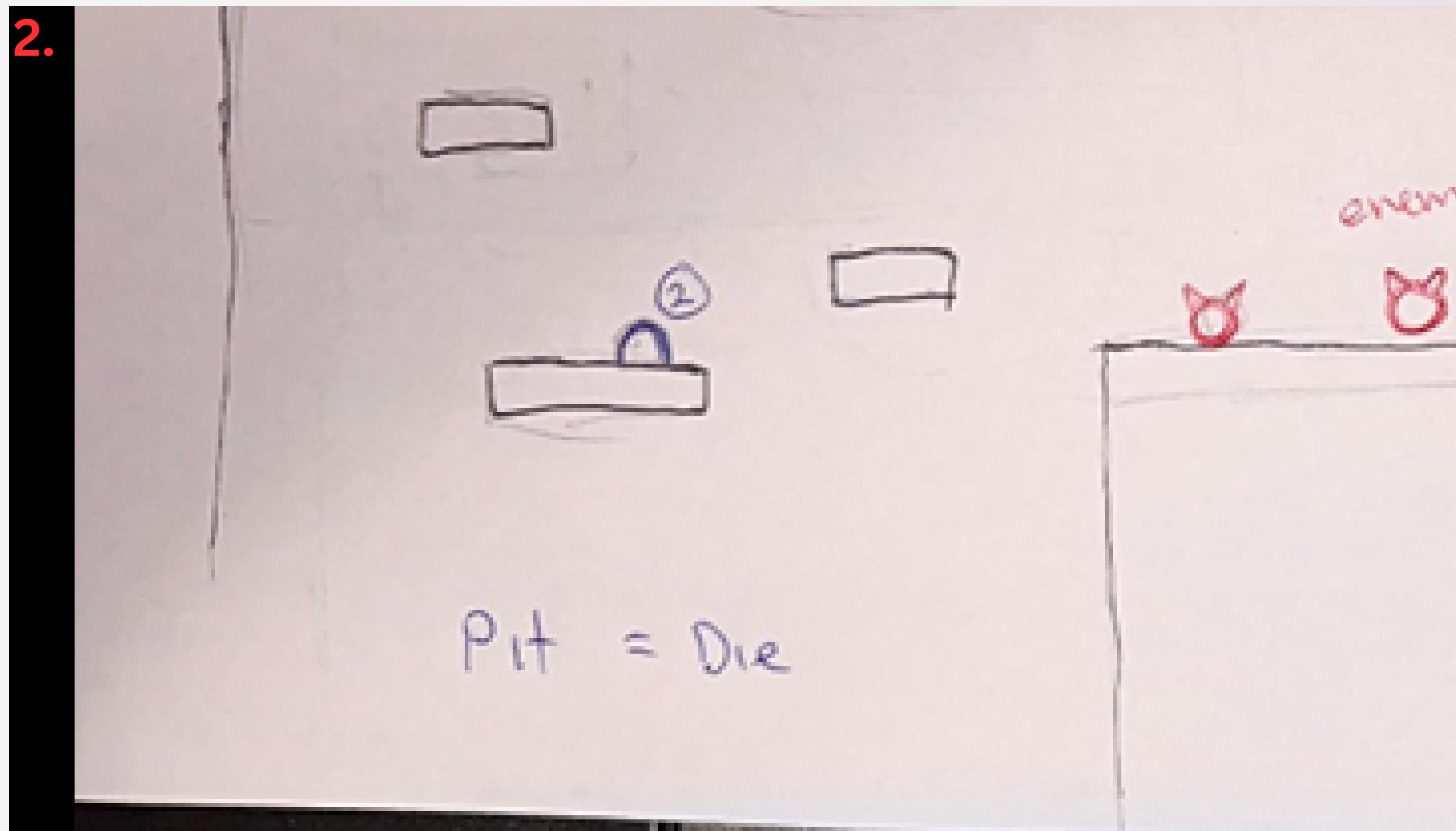
# LEVEL 1 - DETAILED



## Screen 1:

Keys 1 and 2 are both visible to the player in this first screen but only the first chest is visible. The first enemy is also met by the player on a large platform. 2 moving platforms are also visible. This scene is introducing the player to various game mechanics in a more practical sense than Screen 0.

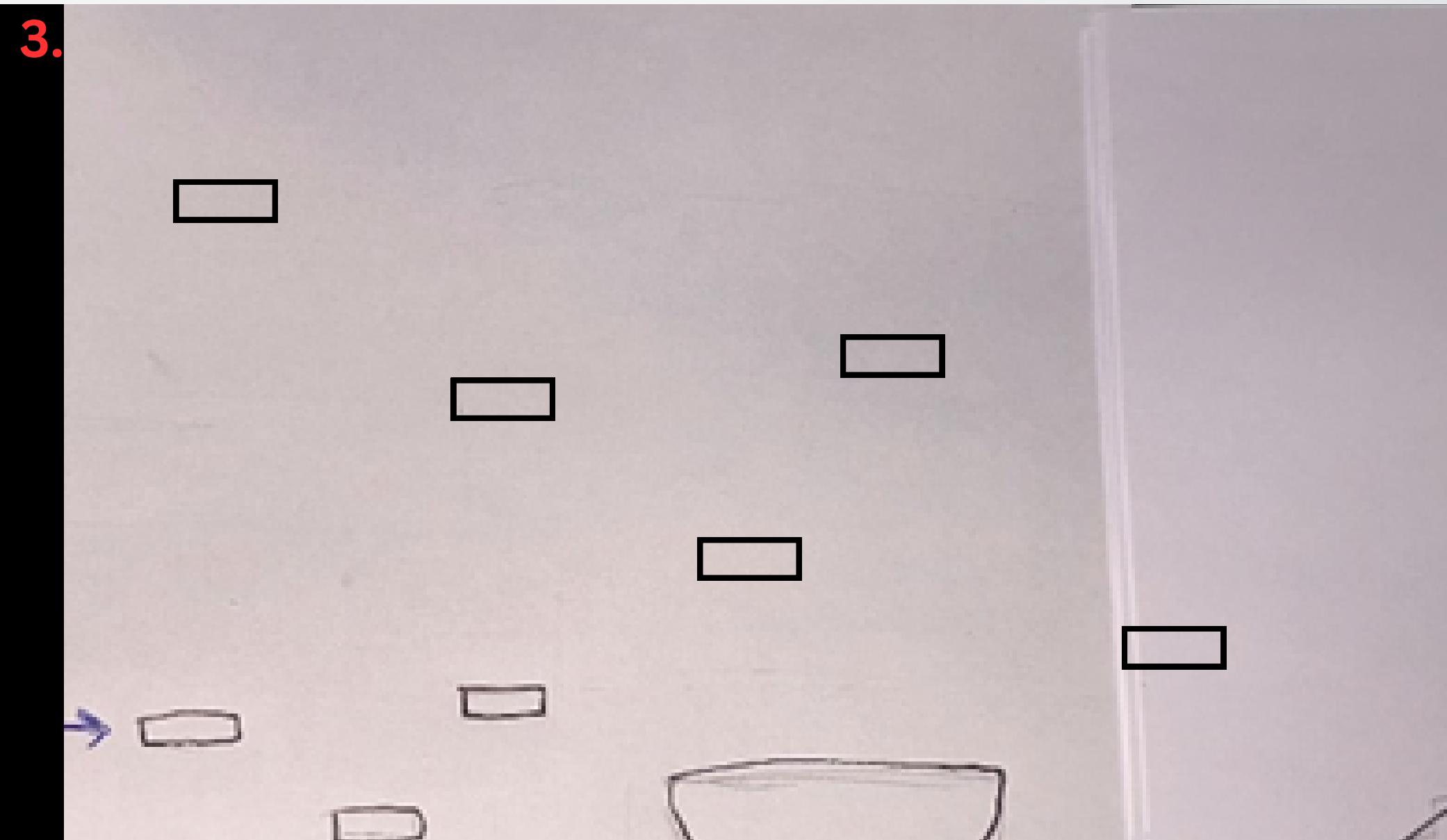
# LEVEL 1 - DETAILED



## Screen 2:

The player must venture downwards to find this 2nd chest, which they hopefully have already collected the key for. This chest is a challenge to reach as player will die if they fall. At this stage in the game the loss is not too great as they have only just started.

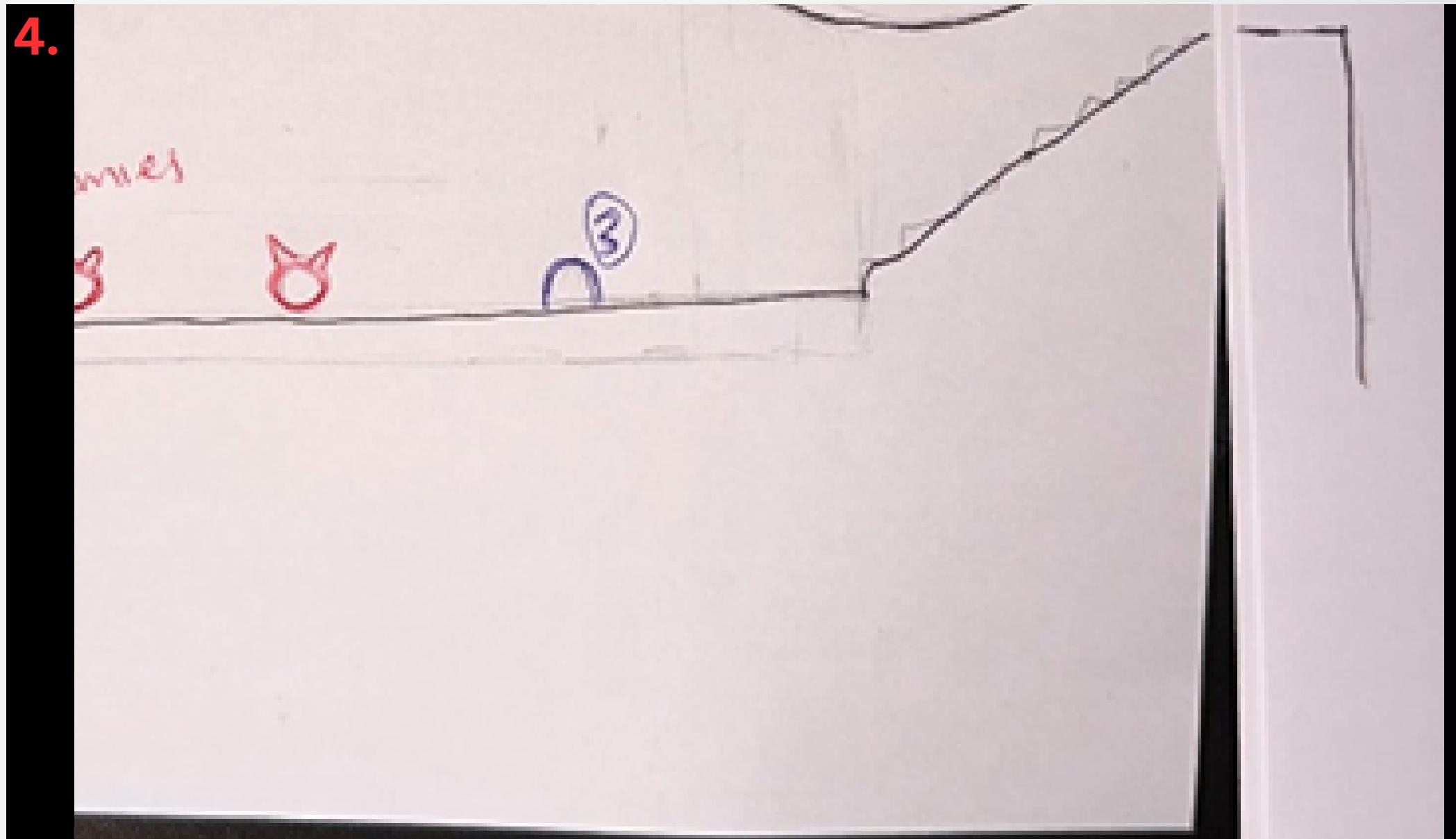
# **LEVEL 1 - DETAILED**



## **Screen 3:**

This screen will be an opportunity for players to do some coin collection, accessing the screen via a moving platform and having to make a timed jump to get to still platforms. The coins will be a little bit of a challenge to gather, some only being able to be collected by jumping between platforms.

# **LEVEL 1 - DETAILED**

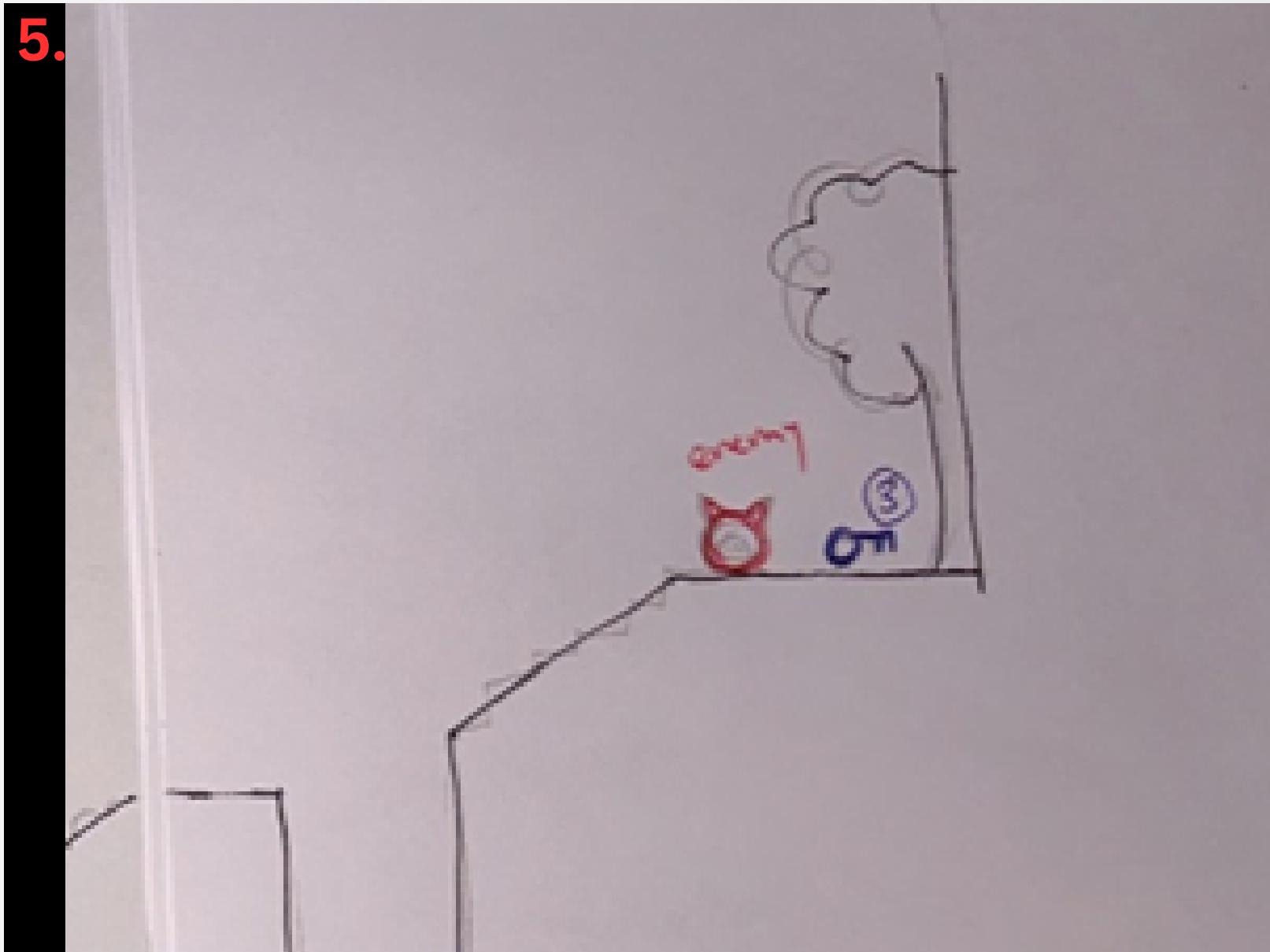


**4.**

## **Screen 4:**

This screen will involve some fighting with multiple enemies for the first time to get to the final chest. Depending on whether the player has ventured further into the map or not, they may or may not have the key for this chest. Either way they must defeat the minions to gather coins and reach the chest.

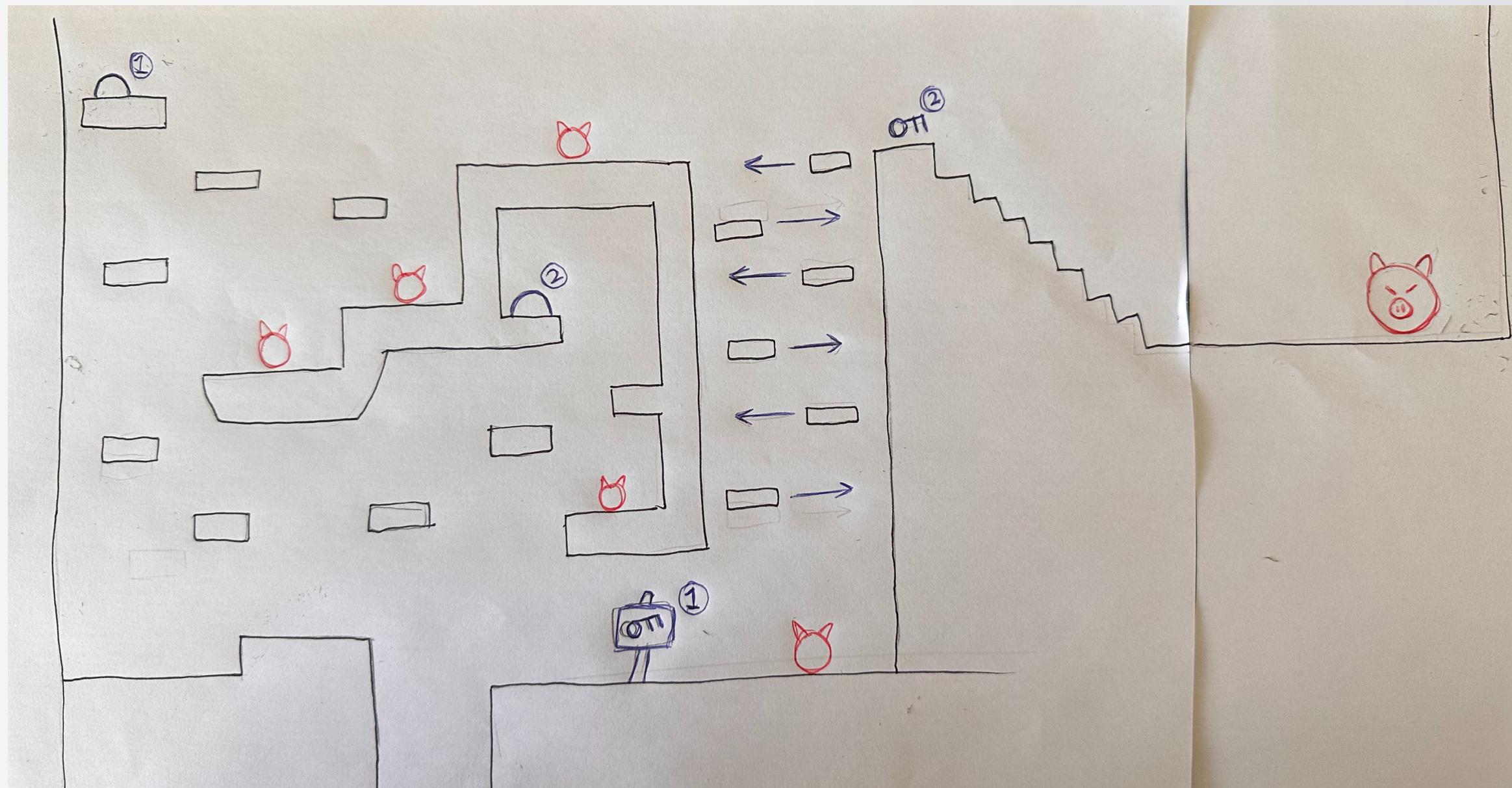
# **LEVEL 1 - DETAILED**



## **Screen 5:**

This final screen in the map will be accessed via 2 larger jumps that will have to be well timed to cross successfully. The final key will be guarded by just one minion. The player will have to go back to the corresponding chest to get the pie.

# LEVEL 2 - OVERALL



## Goals

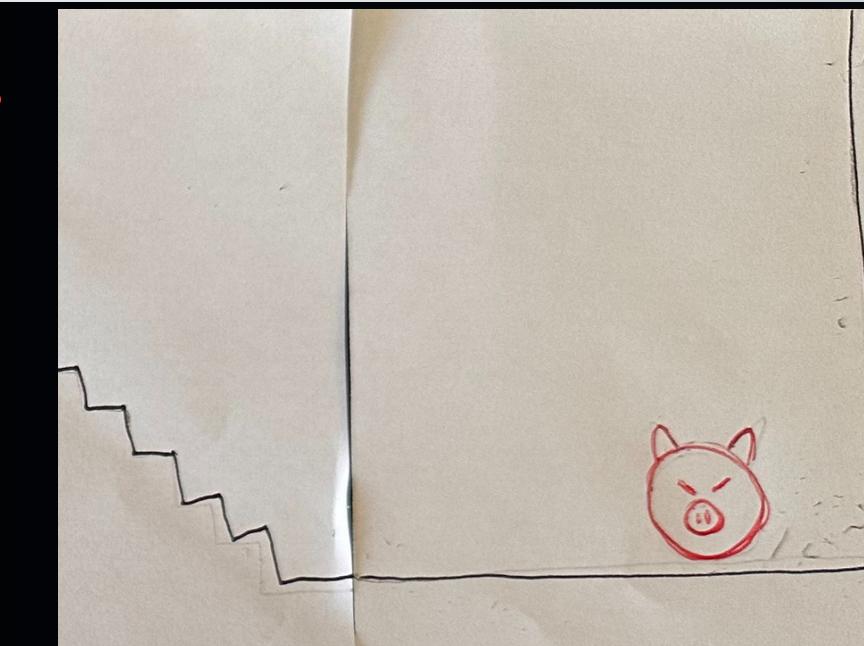
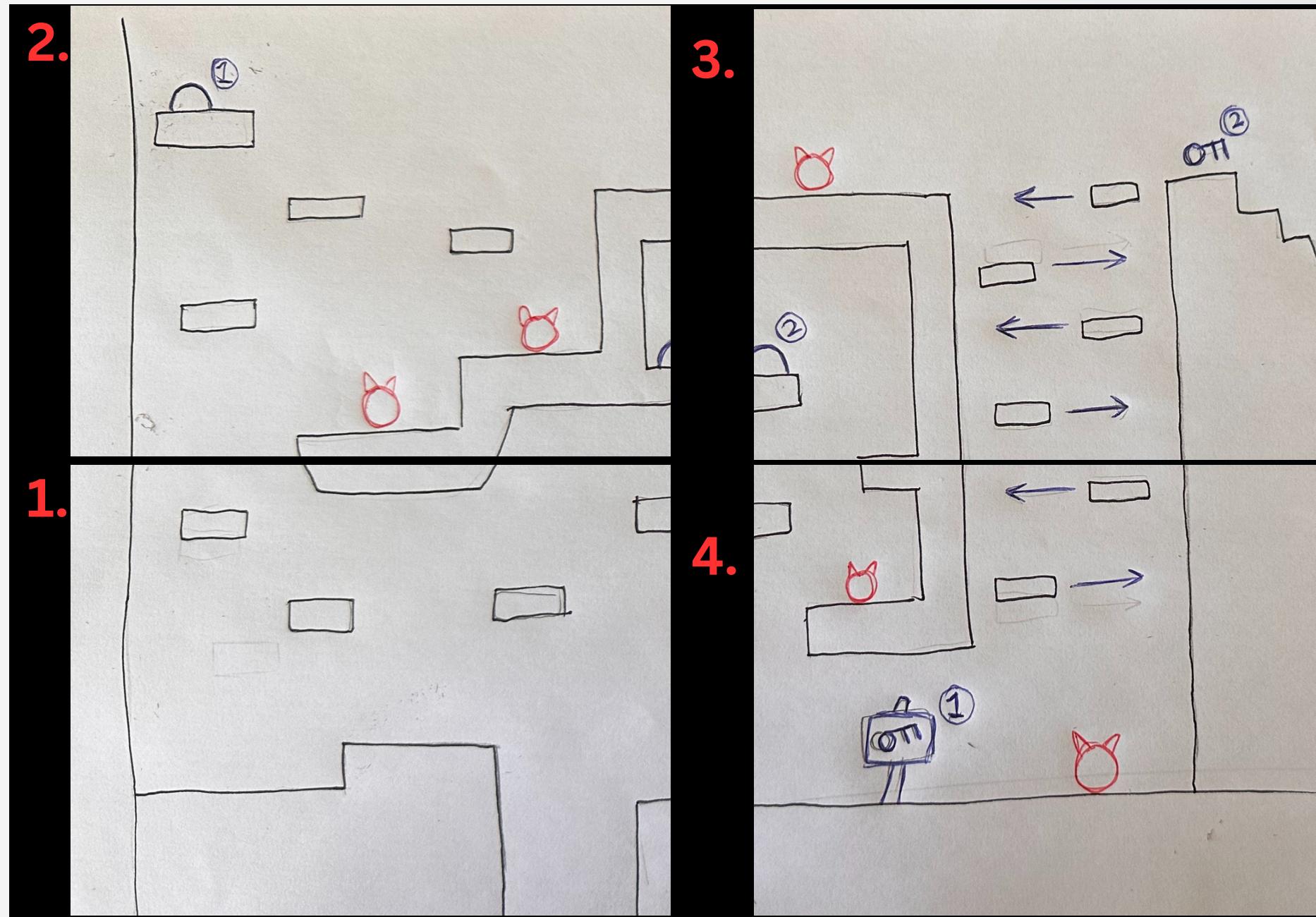
Collect 2 keys that correspond to the 2 chests, numbered 1 and 2. One key must be acquired by interacting with a signpost that will take coins in exchange for the key. Coins will be available in this level as well as the previous one for the player to purchase the key.

Defeat enemies to move around the map. Defeat Pickles himself to gather the final pie.

## Character Interactions

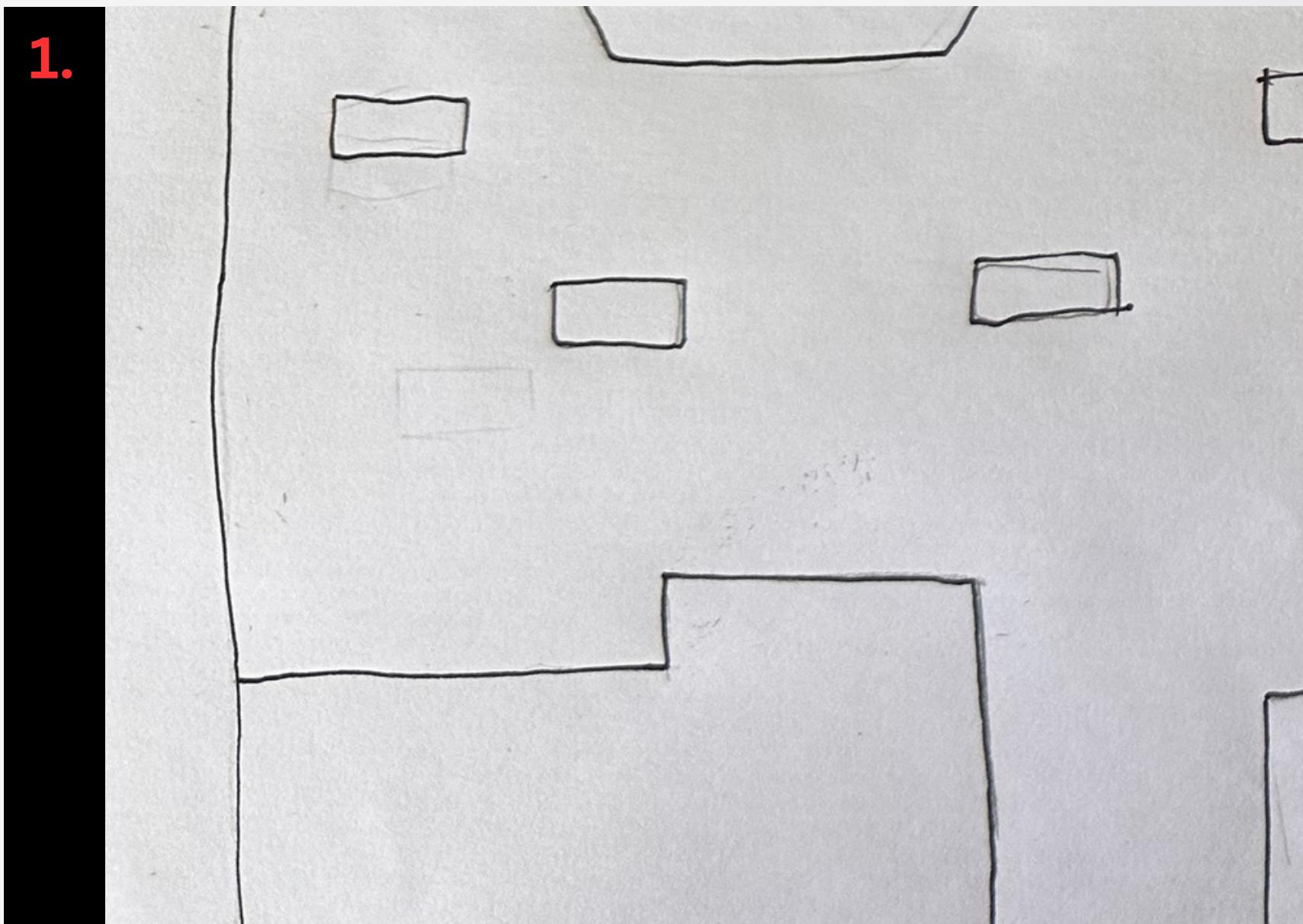
Jumping, collecting, defeating enemies, exploring, moving platforms, item exchange.

# LEVEL 2 - DETAILED



Rough layout of how I imagined the camera moves to different scenes as the player moves about the world.

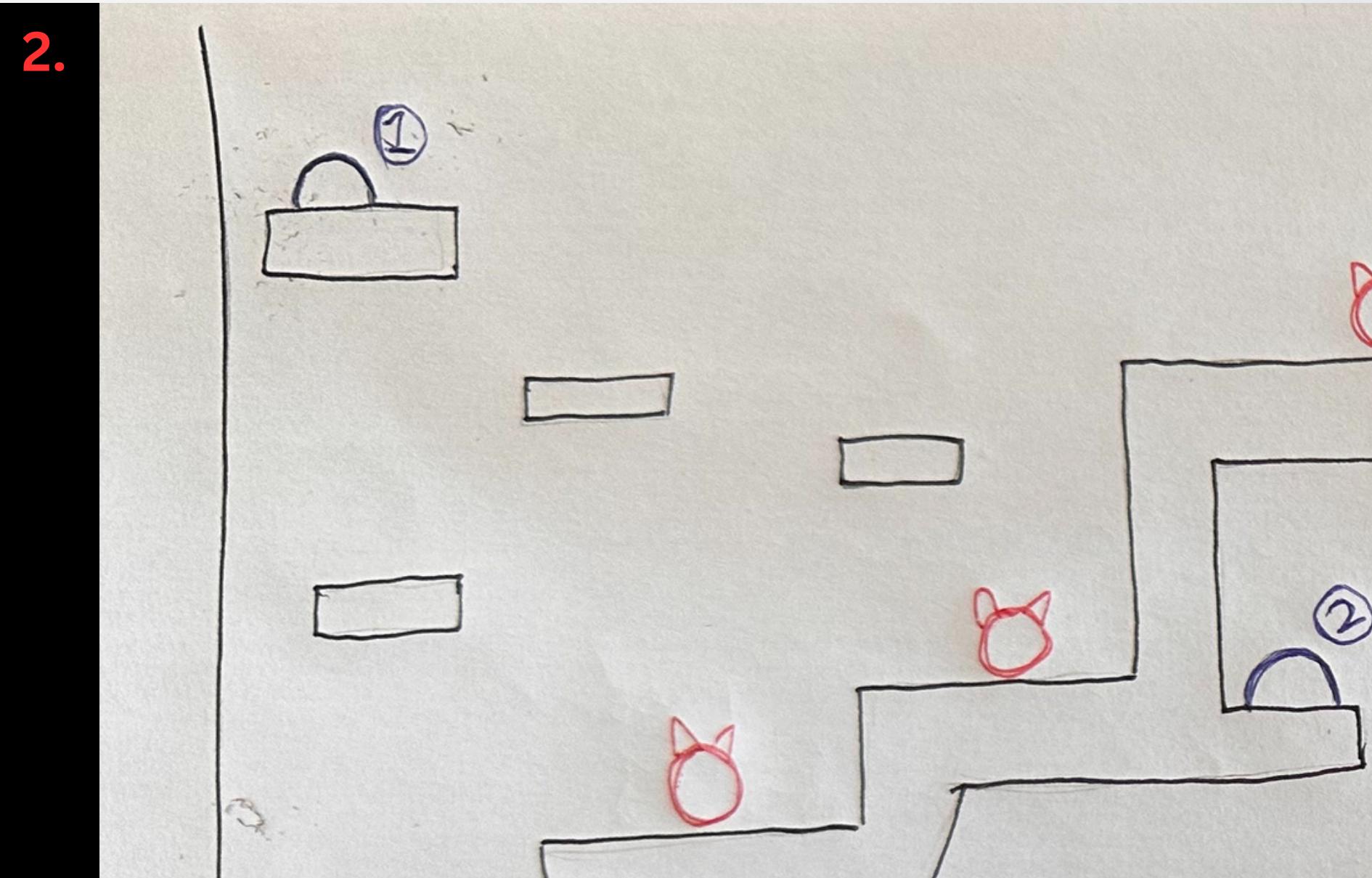
# **LEVEL 2 - DETAILED**



## **Screen 1:**

Starting point for this level, character will spawn here. No keys nor chests are visible so player will have to decide where they would like to venture first. There will be some directory sign posts and coins to collect.

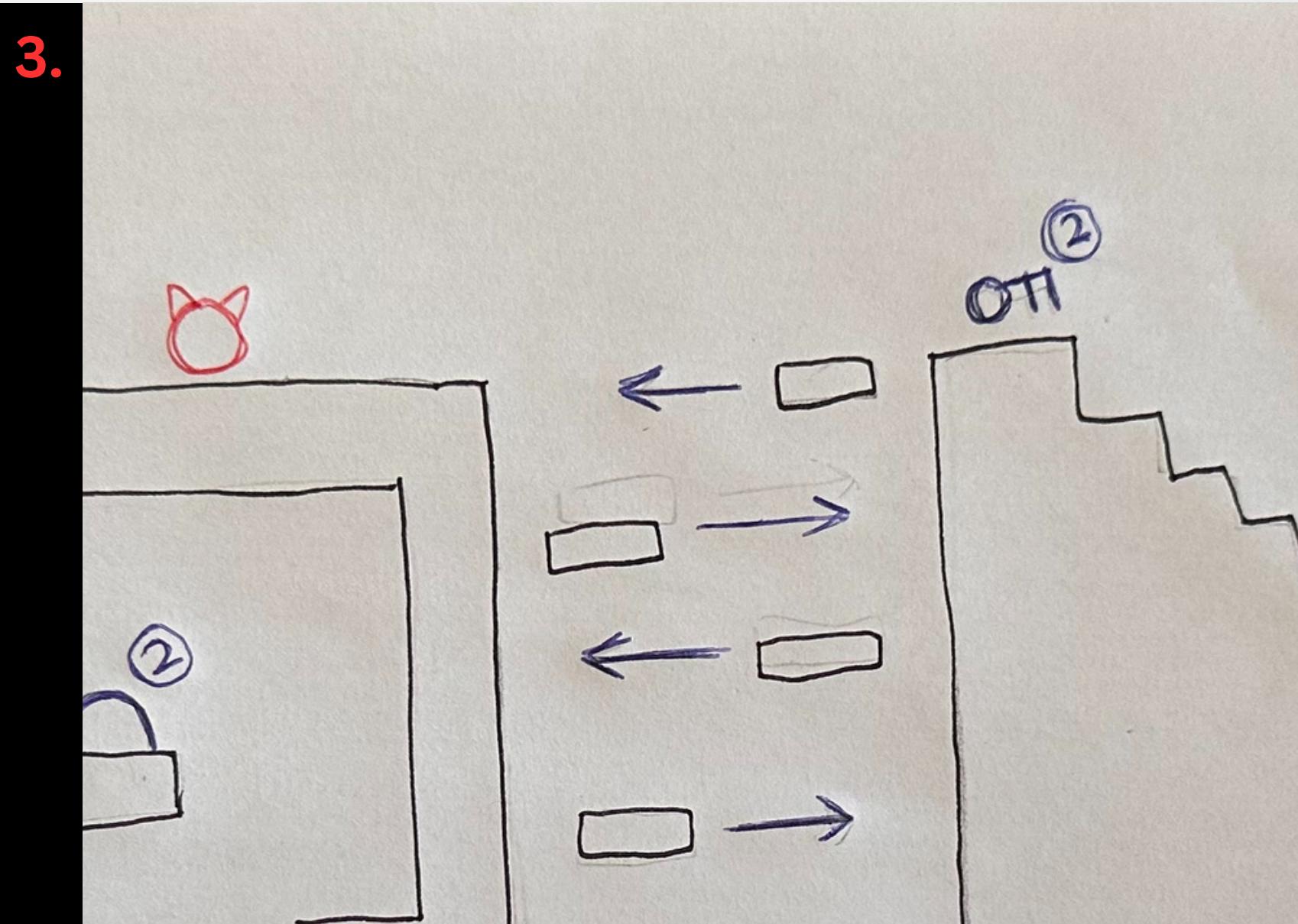
# **LEVEL 2 - DETAILED**



## **Screen 2:**

Having travelled upward from Screen 1 the player will now be faced with 2 enemies and be able to see the first and second chest, though the second chest is not able to be accessed on this screen. Gives player motive to adventure to find second chest and the keys for both of them.

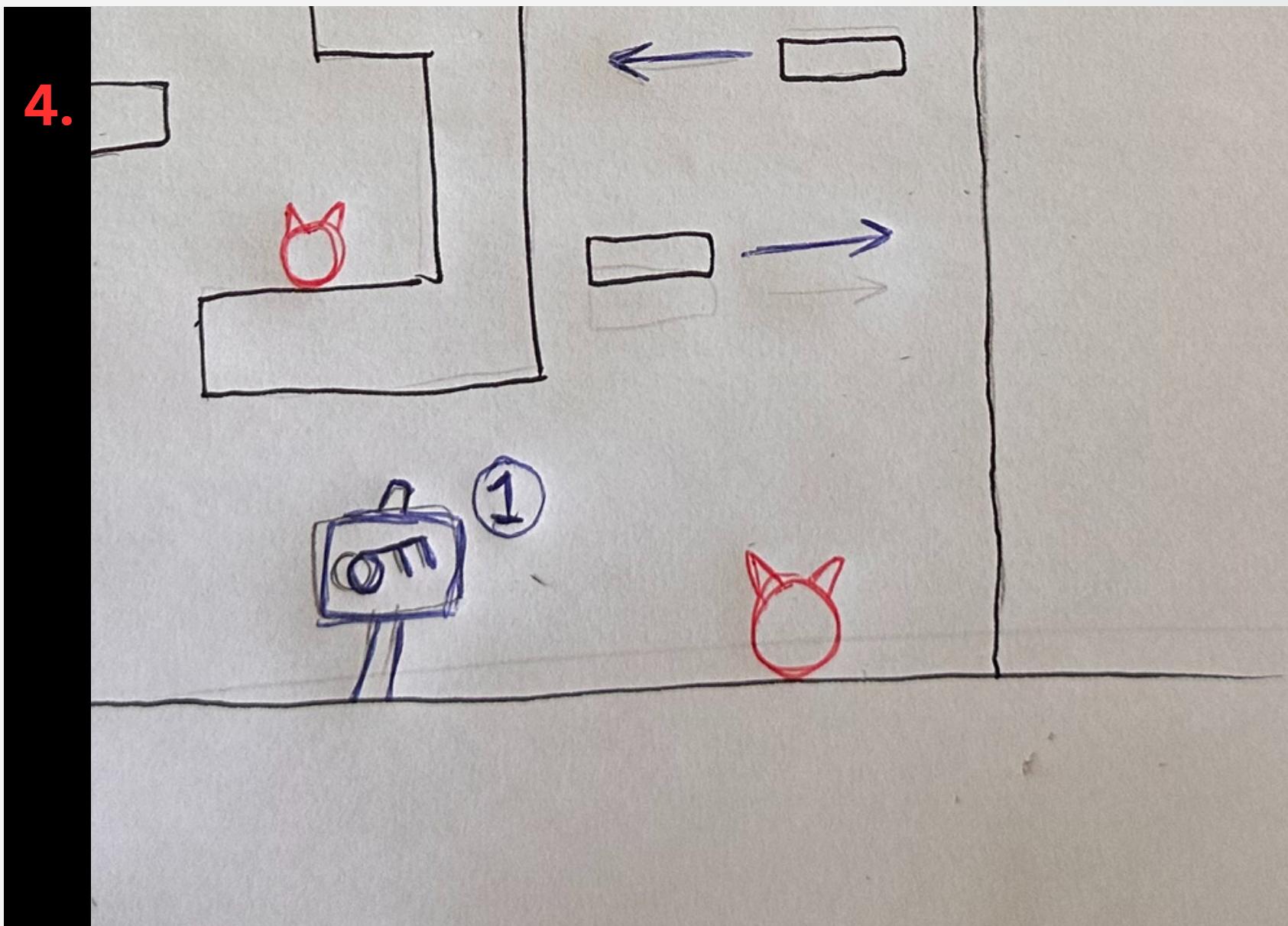
# LEVEL 2 - DETAILED



## Screen 3:

Second key is located here along with the chest that corresponds to it but not able to access the second chest on the same screen.

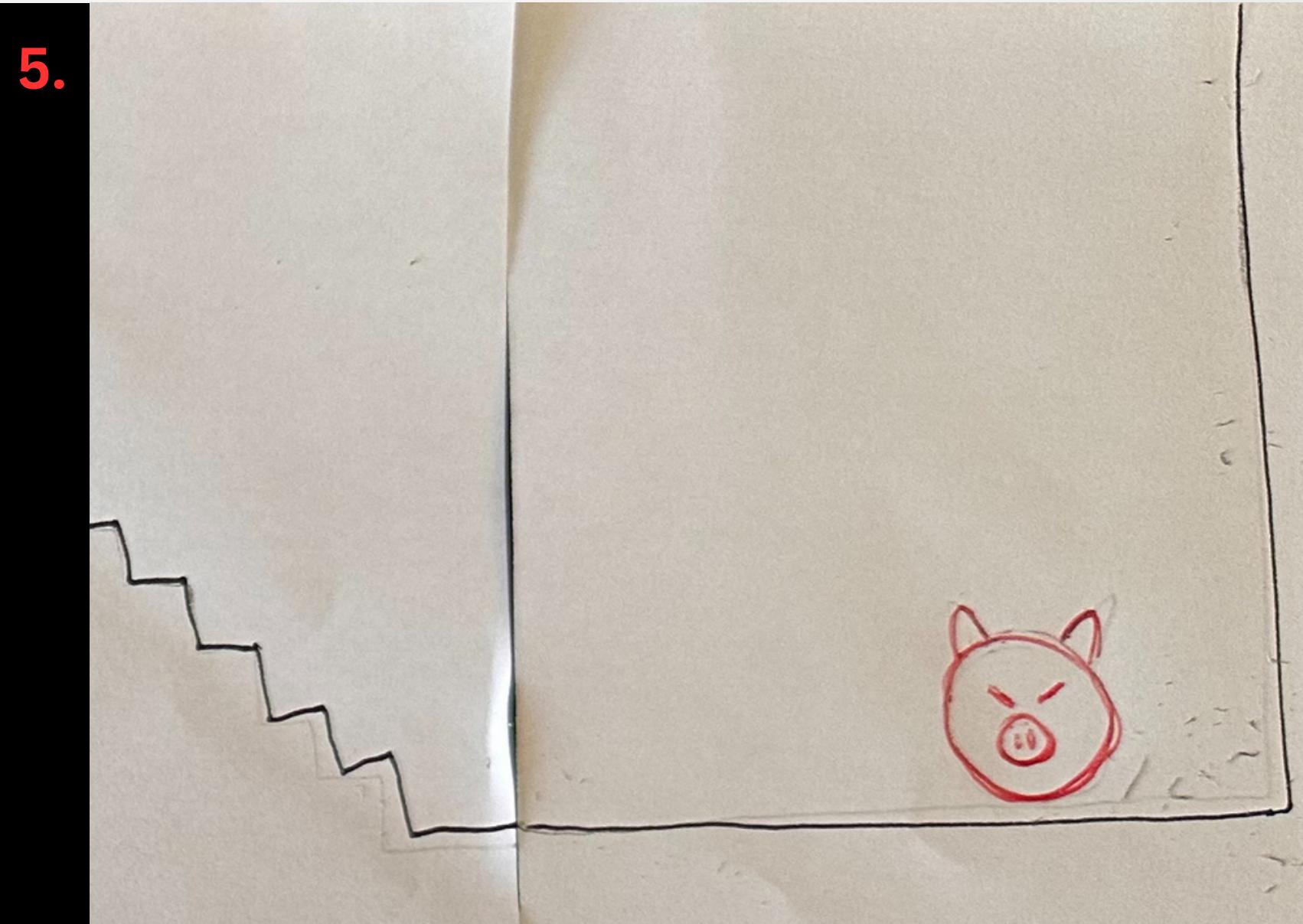
# LEVEL 2 - DETAILED



## Screen 4:

Enemies to defeat and the item exchange sign. Sign will provide key if the player has 50 or more coins in their inventory, allowing them to unlock the first chest at the top of the map. If player does not have 50 or more coins and can not attain that amount from this level they must restart the whole game from level 1 or defeat Pickles to get enough coins and the final pie.

# **LEVEL 2 - DETAILED**



**5.**

## **Screen 5:**

The boss fight with Pickles to attain the final pie and some coins that he is personally guarding. The area will be quite large to allow the player to be able to move freely enough to shoot Pickles.



**GAMEPLAY**

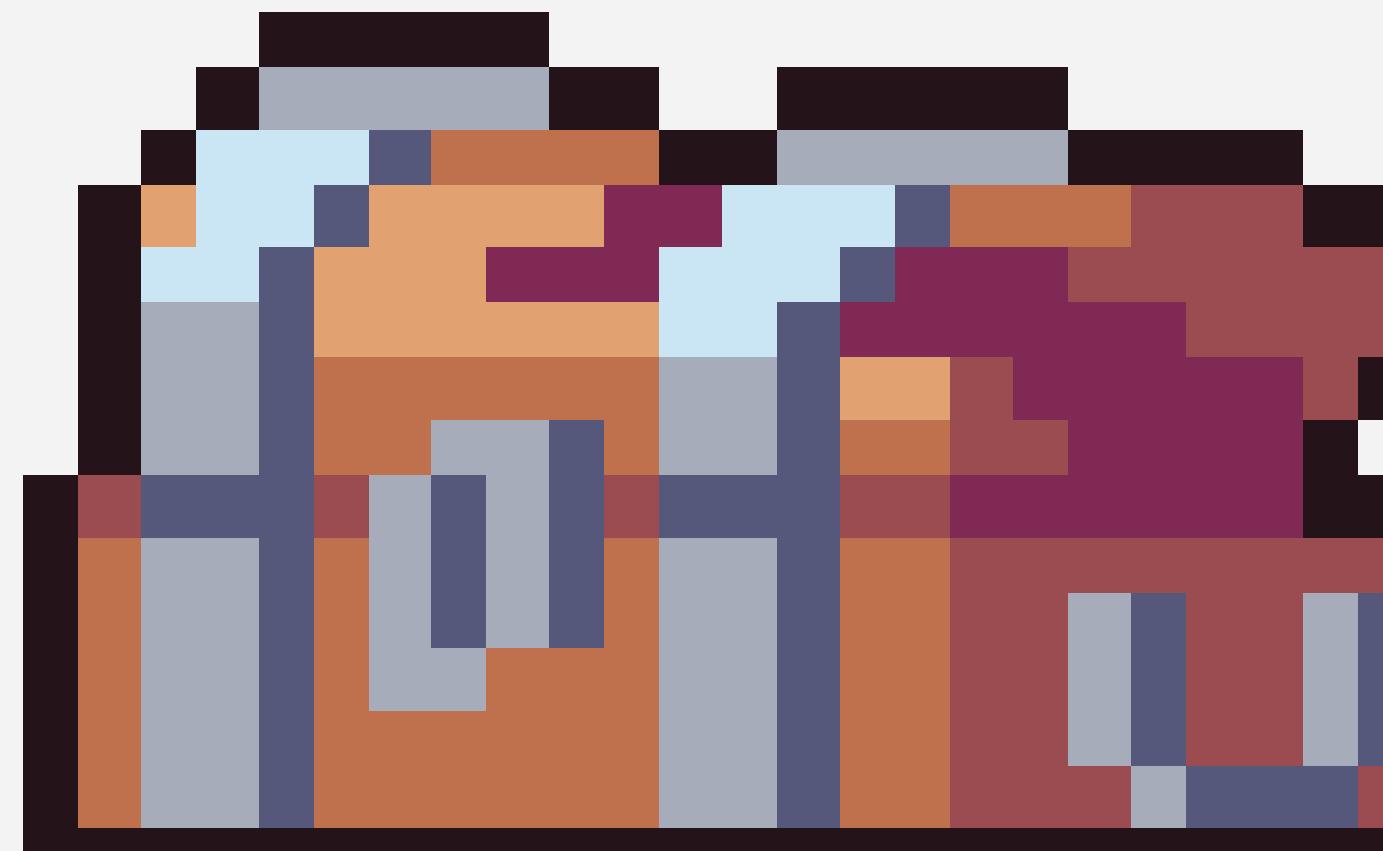
# **HOW THE GAME IS PLAYED**

The game is played using the left and right arrow keys to move up and down and the up arrow key to jump. Space bar is used to shoot fireballs and the Shift key is used to interact with objects such as chests and sign posts. Esc button pauses the game and opens the pause menu. Objects are added to inventory automatically when the player passes over them (or when the hitboxes interact). Player will die after taking 3 damage (hitbox colliding with an enemy 3 times) or instantly if falling off the world. Player health does not regenerate but is reset each level.



# *LEVEL 1 INTEGRATION AND THEORY*

The first chest and key are straightforward to find to introduce the concept to the player. The same goes for the first enemy the character will come across; it will be alone and on a larger platform to give the player room to learn how to defeat these enemies and gain that skill to be able to use throughout the game and progress through the levels. They will also discover, at this time, that enemies drop coins. This will show the player that coins are something to be collected and encourage them to kill enemies to collect more than the ones available throughout the level.



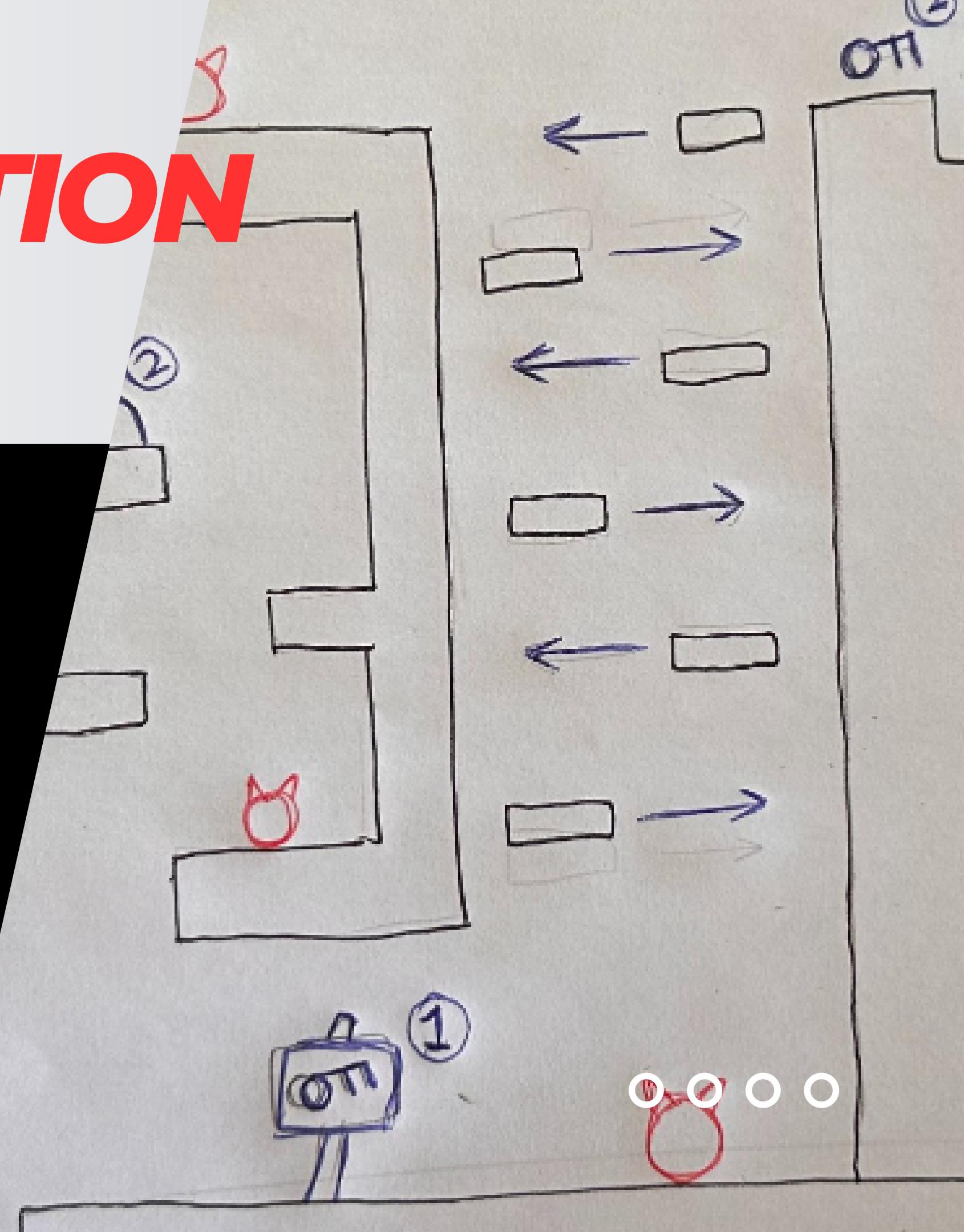
# **LEVEL 1 INTEGRATION AND THEORY**

The second and third chests will require a bit more exploring and skill to find and unlock with more enemies in their path. The second chest will be slightly hidden lower down on a different screen, so the player will have to venture downward to know it is there at all. The third chest will require the player to venture further across the map to find the key to unlock it. They will then have to find their way back to the third chest to unlock it, so hopefully they have killed all the enemies to make this easier for them, and so that they can collect as many coins as possible.



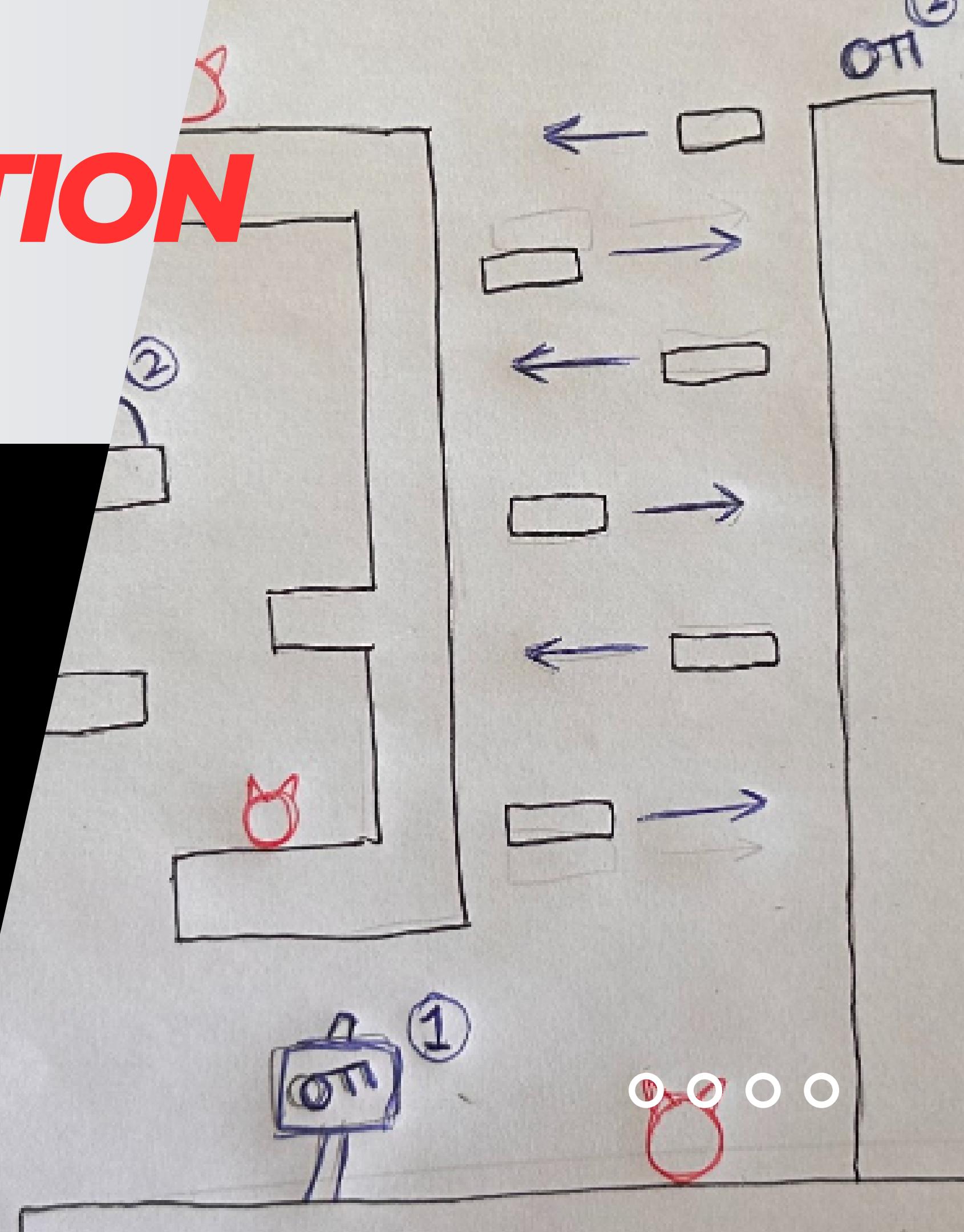
# LEVEL 2 INTEGRATION AND THEORY

Level 2 is slightly more ambiguous with its direction, having the player start with multiple possible directions to take and no chests or keys visible off the bat. It also requires a bit more exploration and backtracking, encouraging the player to work for the reward and explore the map. Depending on the way the player decides to go they will come across either a chest or the item exchange sign. The first chest stands alone on the screen guarded by enemies. Its key must be bought at the item exchange sign. To gain the key they must have at least 50 coins in their inventory.



# **LEVEL 2 INTEGRATION AND THEORY**

If the p[layer does not have enough coins they must keep exploring to gather them or find and kill Pickles for the final pie and to ensure they have enough coins for the key. The second chest and its key will be visible in the same screen but are not able to be accessed in the same screen, once again encouraging exploration and memory to find their way from the key back to where the chest stands.





**ART**

# **CHARACTER ART**

# **DANGEROUS DAG**



Idle



Jump



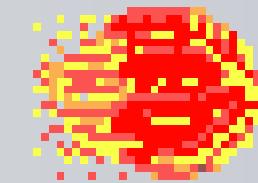
Fall



Fireball Shooting

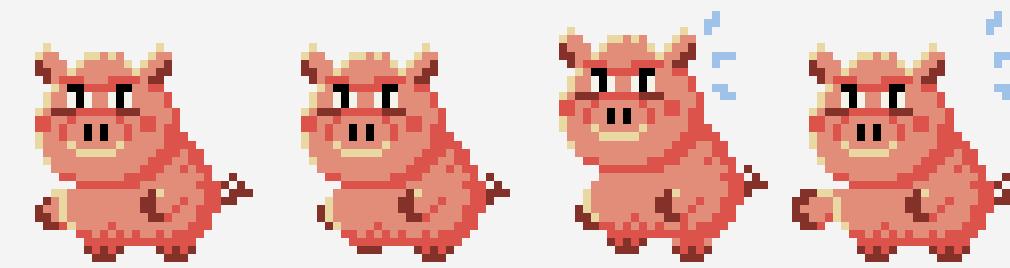


Running Spritesheet

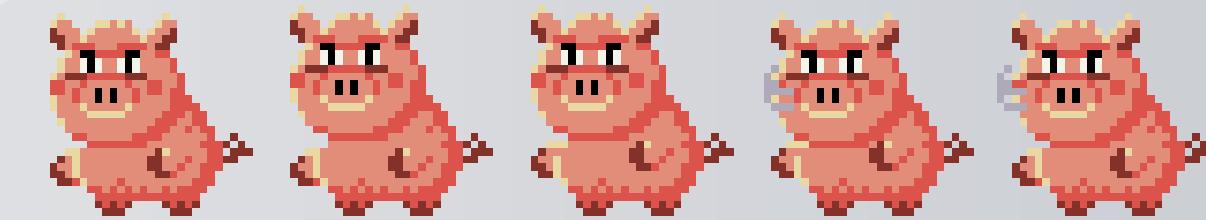


# **CHARACTER ART**

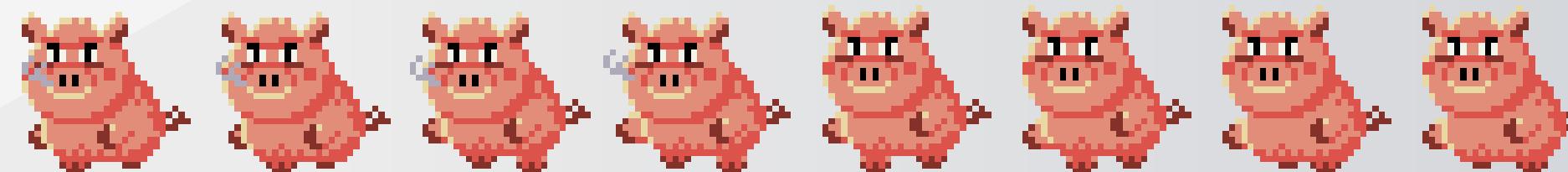
# **PICKLES**



Angry Pig Attack Spritesheet



Idle Spritesheet

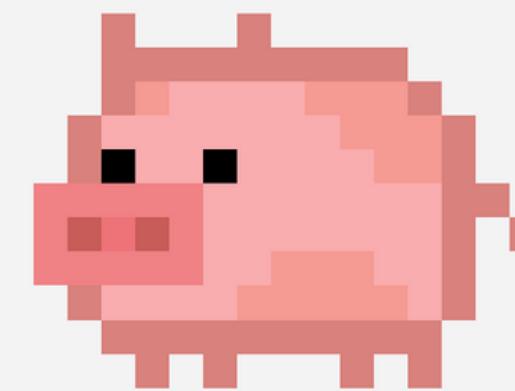


Walking Spritesheet

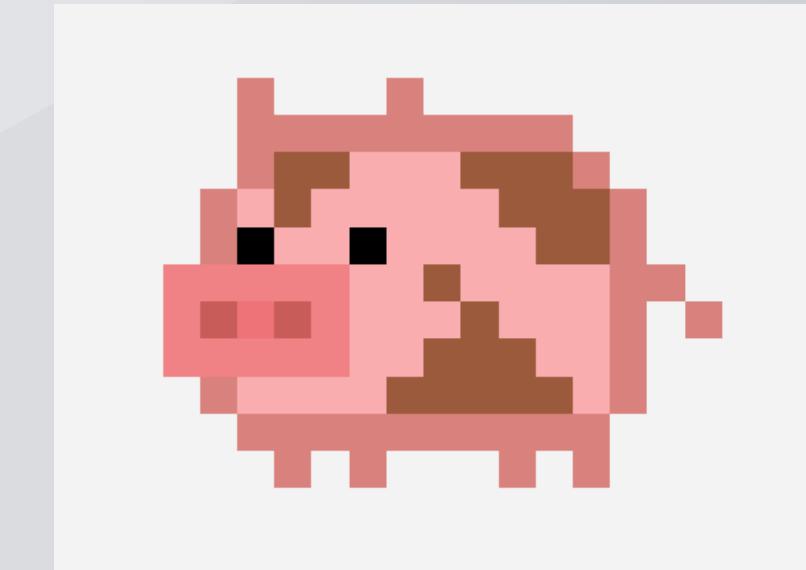
Reference: <https://leodelcastanher.itch.io/angry-pixel-32bit-animated-pig>

# **CHARACTER ART**

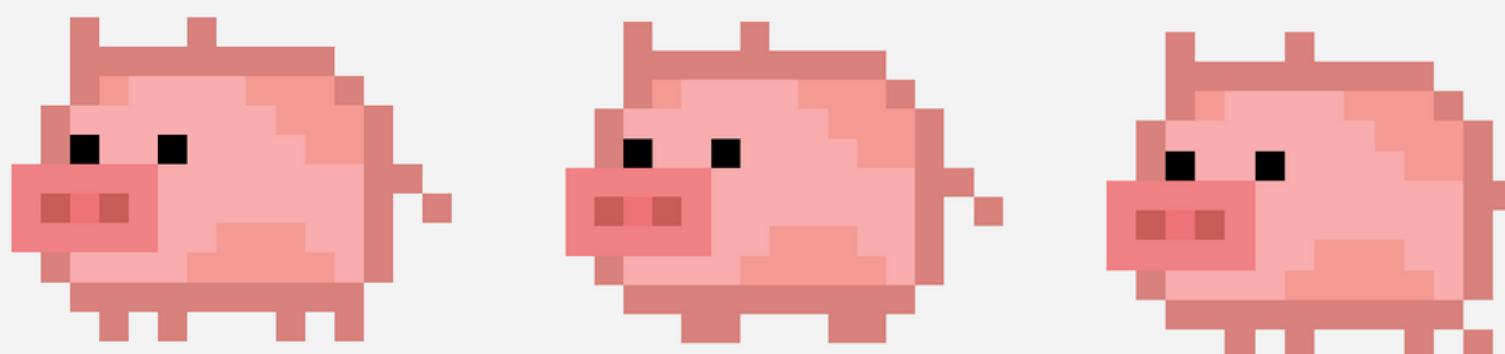
## **PIG MINIONS**



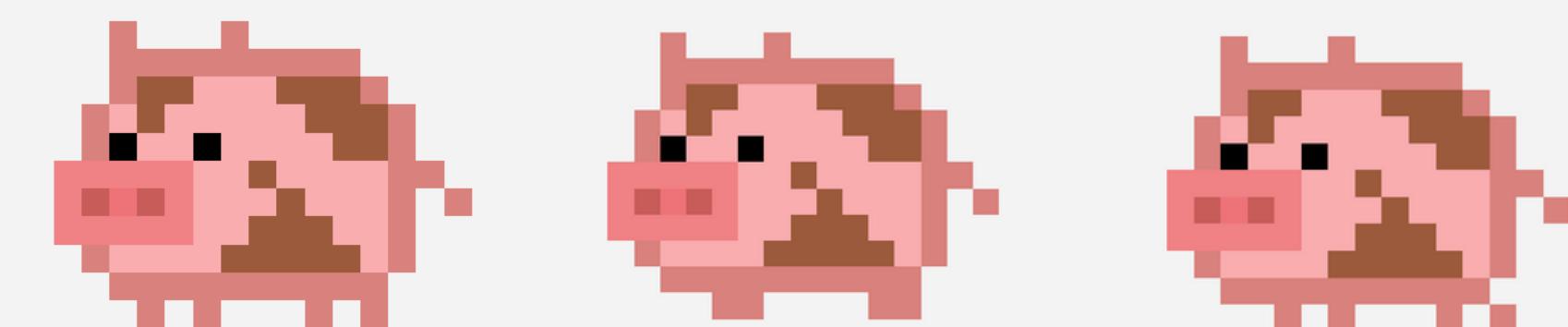
Minion 1 - Idle



Minion 2 - Idle



Minion 1 - Walking

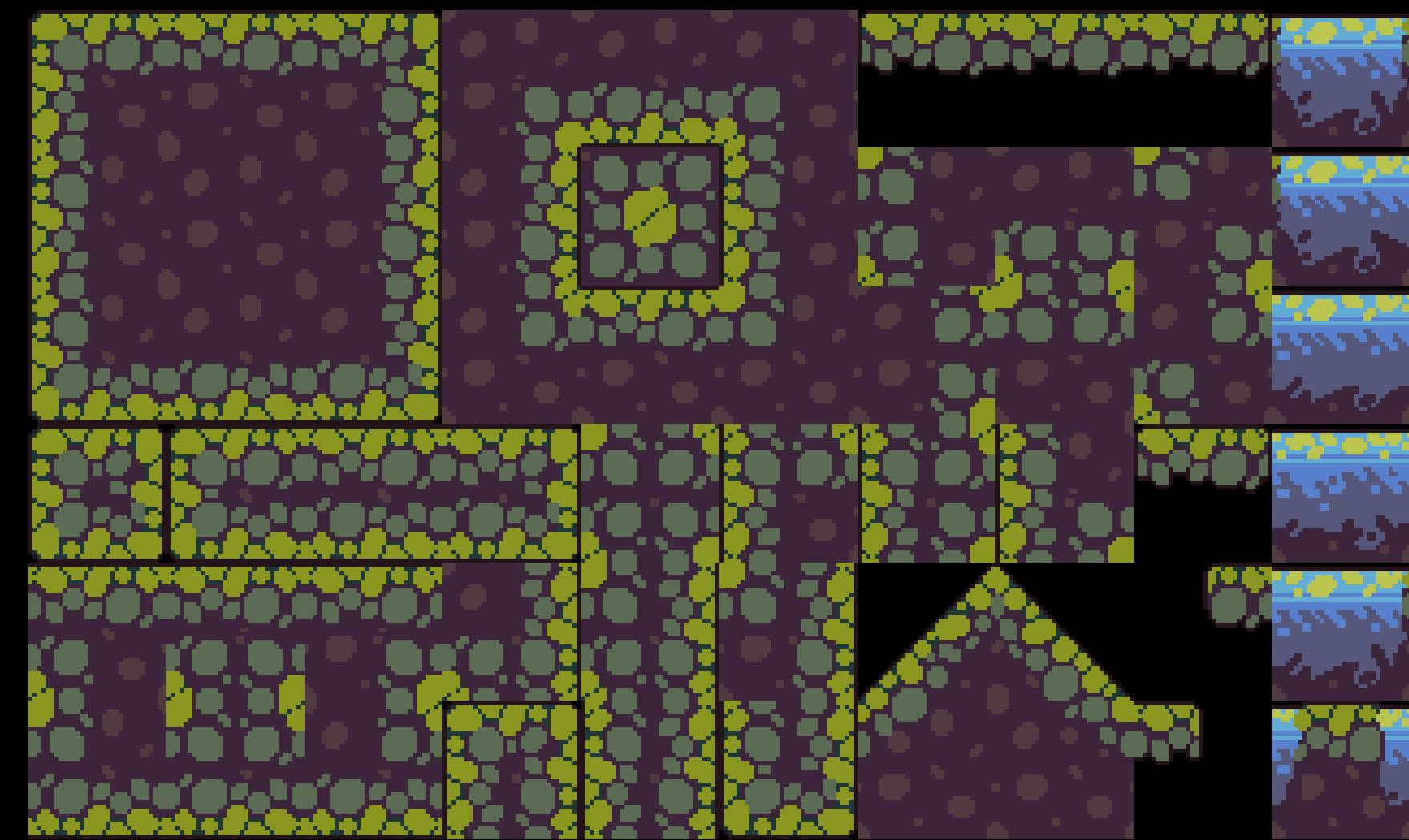


Minion 2 - Walking

# **ENVIRONMENTAL ART**

## **TILESET**

This tileset provides the perfect base for the swampy scene these levels are set in. Includes grassy, dirt and water tiles.



Reference to download: <https://free-game-assets.itch.io/free-swamp-2d-tileset-pixel-art>

License to use: <https://craftpix.net/file-licenses/>

# **ENVIRONMENTAL ART BACKGROUND**



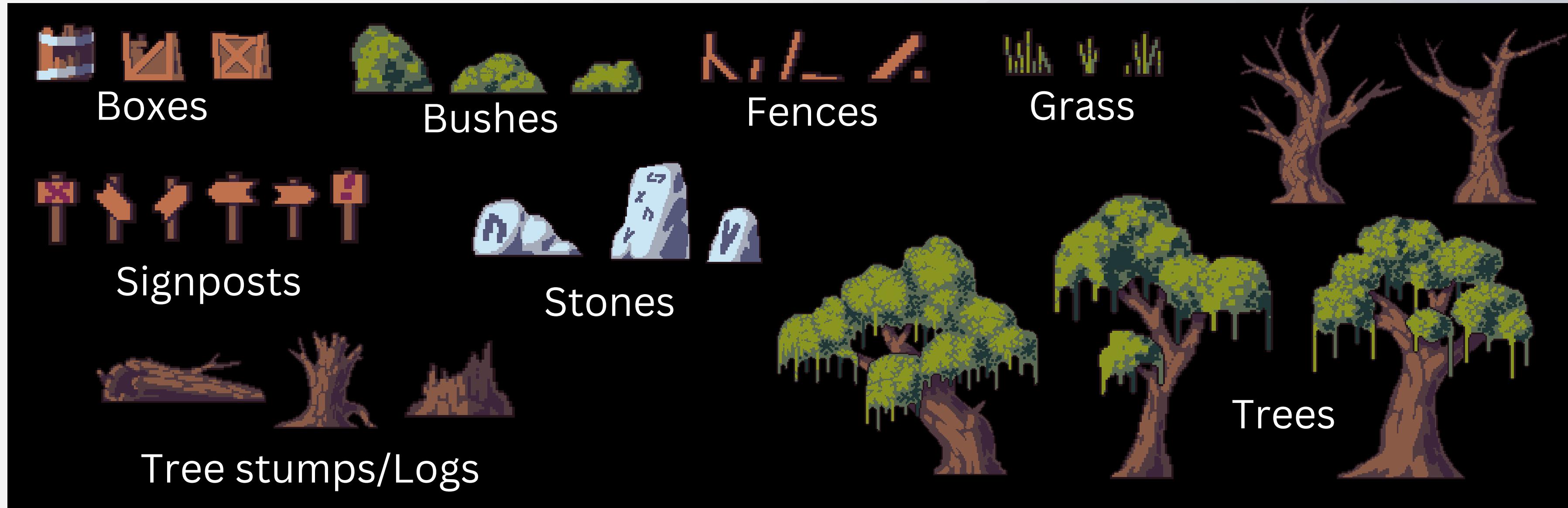
This background includes layers so that they can be animated to move differently or flipped around for added interest.

Reference to download: <https://free-game-assets.itch.io/free-swamp-2d-tileset-pixel-art>

License to use: <https://craftpix.net/file-licenses/>

# **ENVIRONMENTAL ART**

# **OBJECTS & IMMERSION**



Reference to download: <https://free-game-assets.itch.io/free-swamp-2d-tileset-pixel-art>  
License to use: <https://craftpix.net/file-licenses/>

# **ENVIRONMENTAL ART**

# **INTERACTIVE OBJECTS**



Coins



Flag



Chest



Key

Reference to download: <https://free-game-assets.itch.io/free-swamp-2d-tileset-pixel-art>  
License to use: <https://craftpix.net/file-licenses/>



**SOUND  
AND  
MUSIC**

# INTRO MUSIC

**Love Planet by Komiku**

[https://freemusicarchive.org/music/Komiku/Po  
upis\\_incredible\\_adventures\\_/Komiku\\_-  
\\_Poupis\\_incredible\\_adventures\\_-  
\\_32\\_Love\\_Planet/](https://freemusicarchive.org/music/Komiku/Po upis_incredible_adventures_/Komiku_-_Poupis_incredible_adventures_-_32_Love_Planet/)



# MAIN MENU MUSIC

**Mr Paillettes Theme by Komiku**

[https://freemusicarchive.org/music/Komiku/Po  
upis\\_incredible\\_adventures\\_/Komiku\\_-  
\\_Poupis\\_incredible\\_adventures\\_-  
\\_31\\_Mr\\_Paillettes\\_Theme/](https://freemusicarchive.org/music/Komiku/Po upis_incredible_adventures_/Komiku_- _Poupis_incredible_adventures_- _31_Mr_Paillettes_Theme/)



# LEVEL MUSIC

**Chocolate Valley by Komiku**

<https://www.chosic.com/download-audio/25483/>



# **END CREDITS MUSIC**

**Ending by Komiku**

<https://www.chosic.com/download-audio/24210/>



# BOSS FIGHT MUSIC

**Universe Big Takedown by Komiku**

<https://www.chosic.com/download-audio/25142/>



# DEATH SCENE MUSIC

**Big Crumble by Komiku**

[https://freemusicarchive.org/music/Komiku/Poupis\\_incredible\\_adventures\\_Komiku-\\_Poupis\\_incredible\\_adventures\\_-\\_65\\_Big\\_Crumble/](https://freemusicarchive.org/music/Komiku/Poupis_incredible_adventures_Komiku-_Poupis_incredible_adventures_-_65_Big_Crumble/)



# **AMBIENT LEVEL SOUNDS**

**Swamp Sounds at Night**

[https://www.youtube.com/watch?v=ih4\\_1FyVjaY](https://www.youtube.com/watch?v=ih4_1FyVjaY)

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# **ENEMY & PICKLES SOUNDS**

**Pig Oink by qubodup**

<https://pixabay.com/sound-effects/pig-oink-47167/>

**Pig Grunt by qubodup**

<https://pixabay.com/sound-effects/pig-grunt-100272/>

**080190 Pig by pixabay**

<https://pixabay.com/sound-effects/080190-pig-86603/>



# **FIREBALL ABILITY SOUND**

**Short-Fireball-Woosh by wjl**

<https://pixabay.com/sound-effects/short-fireball-woosh-6146/>



# JUMP SOUND

**Swing Whoosh by Jofae**

<https://pixabay.com/sound-effects/swing-whoosh-110410/>



# COIN SOUND

**Money Bag Drop**

<https://mixkit.co/free-sound-effects/coin/>



# KEY SOUND

**Key Pickup From Ground by  
Schlussel Von Boden Aufheben**  
[https://www.youtube.com/watch?  
v=VSOH9GVP6jk](https://www.youtube.com/watch?v=VSOH9GVP6jk)



# PIE PICKUP SOUND

Archive Sound by Liecio

<https://pixabay.com/sound-effects/archive-sound-132273/>



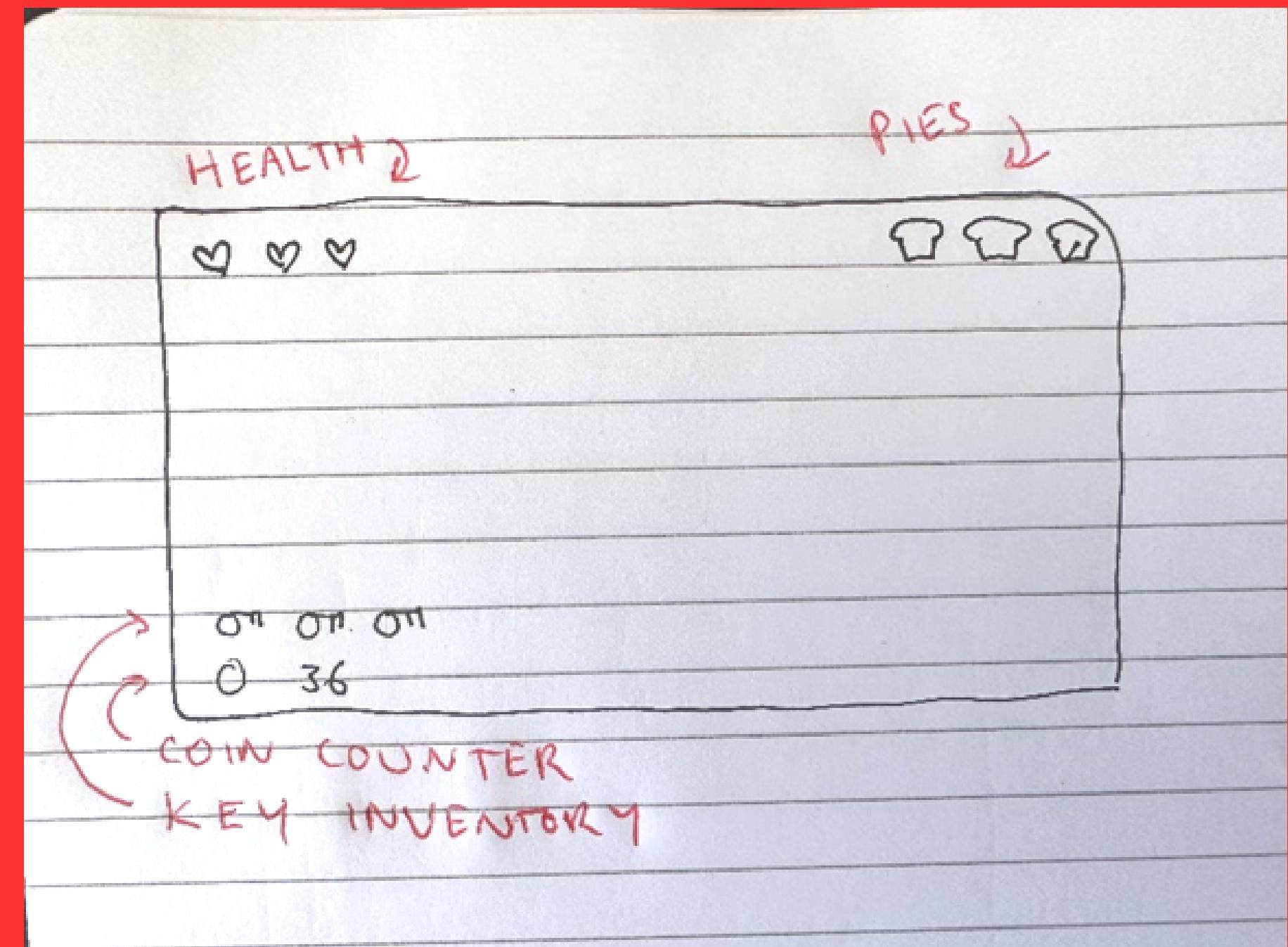


# **USER INTERFACE & GAME CONTROLS**

0 0 0

# HEADS UP DISPLAY

- Health indicator top left corner - 3 hearts at 10 HP each.
- Pie counter top right corner.
- Key inventory bottom left corner - space for up to 3 keys.
- Coin counter under key counter - shows total number of coins collected. Carries over to next level.



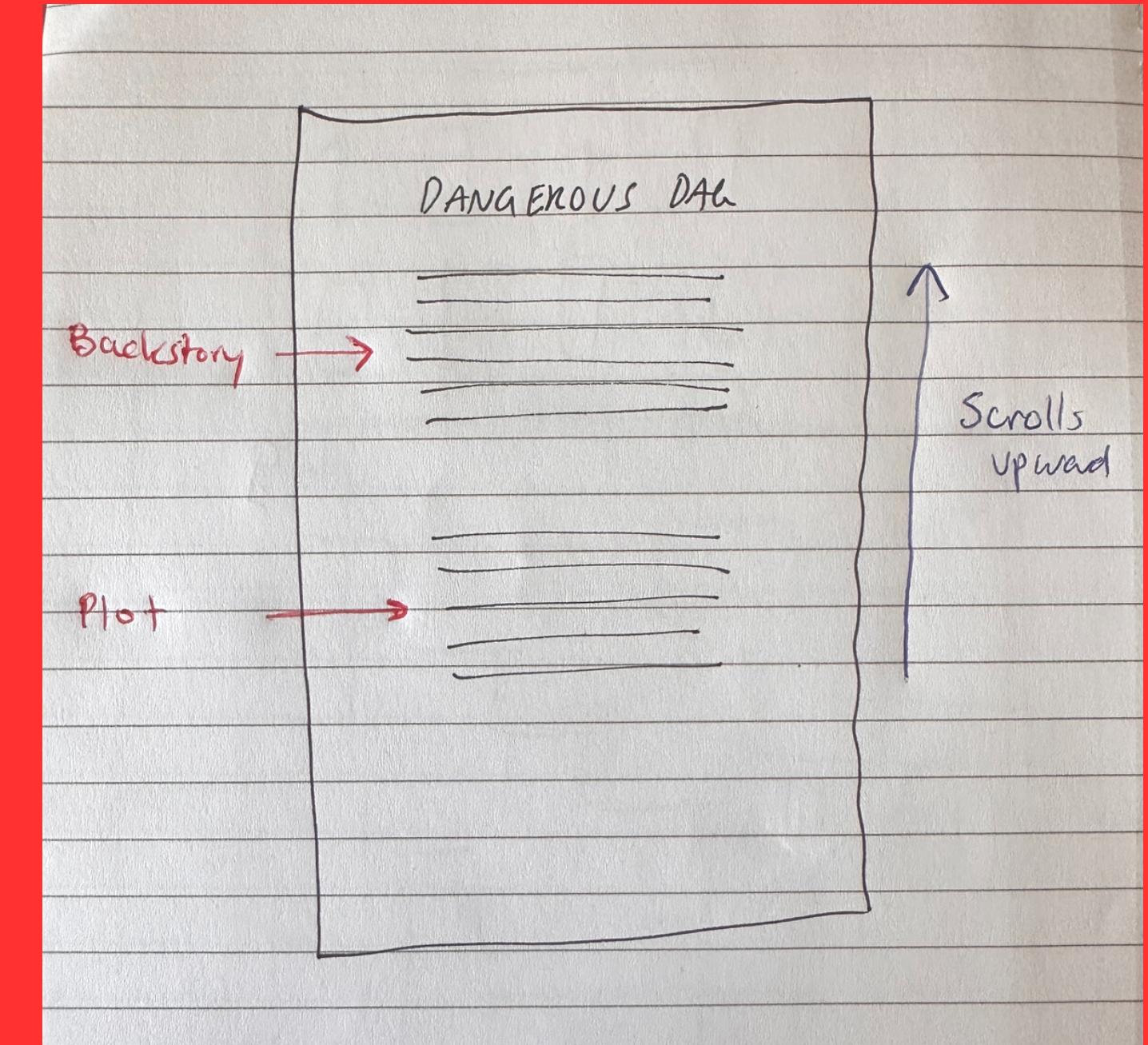
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# **USER INTERFACE**

# **INTRODUCTION**

# **SCENE**

Simple and brief scrolling paragraph providing player with a backstory and plot for game.

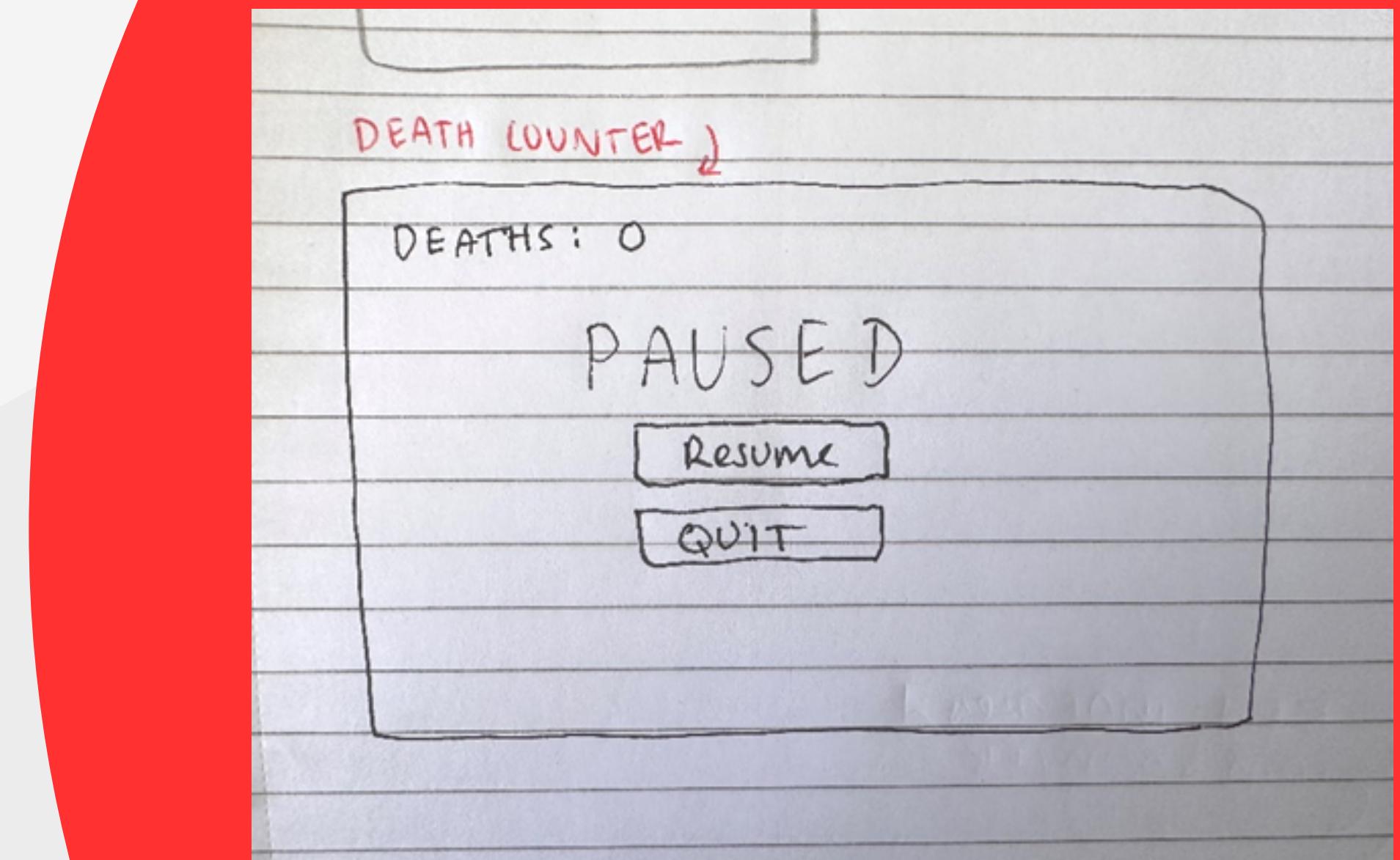


0 0 0

# **USER INTERFACE**

# **PAUSE MENU**

- In game pause menu accessed in game with Esc key.
- Shows death counter in top right corner.
- Ability to resume game or quit to main menu.
- Buttons clicked using mouse.
- Quit to main menu will not save game progress no matter which level the player is on.

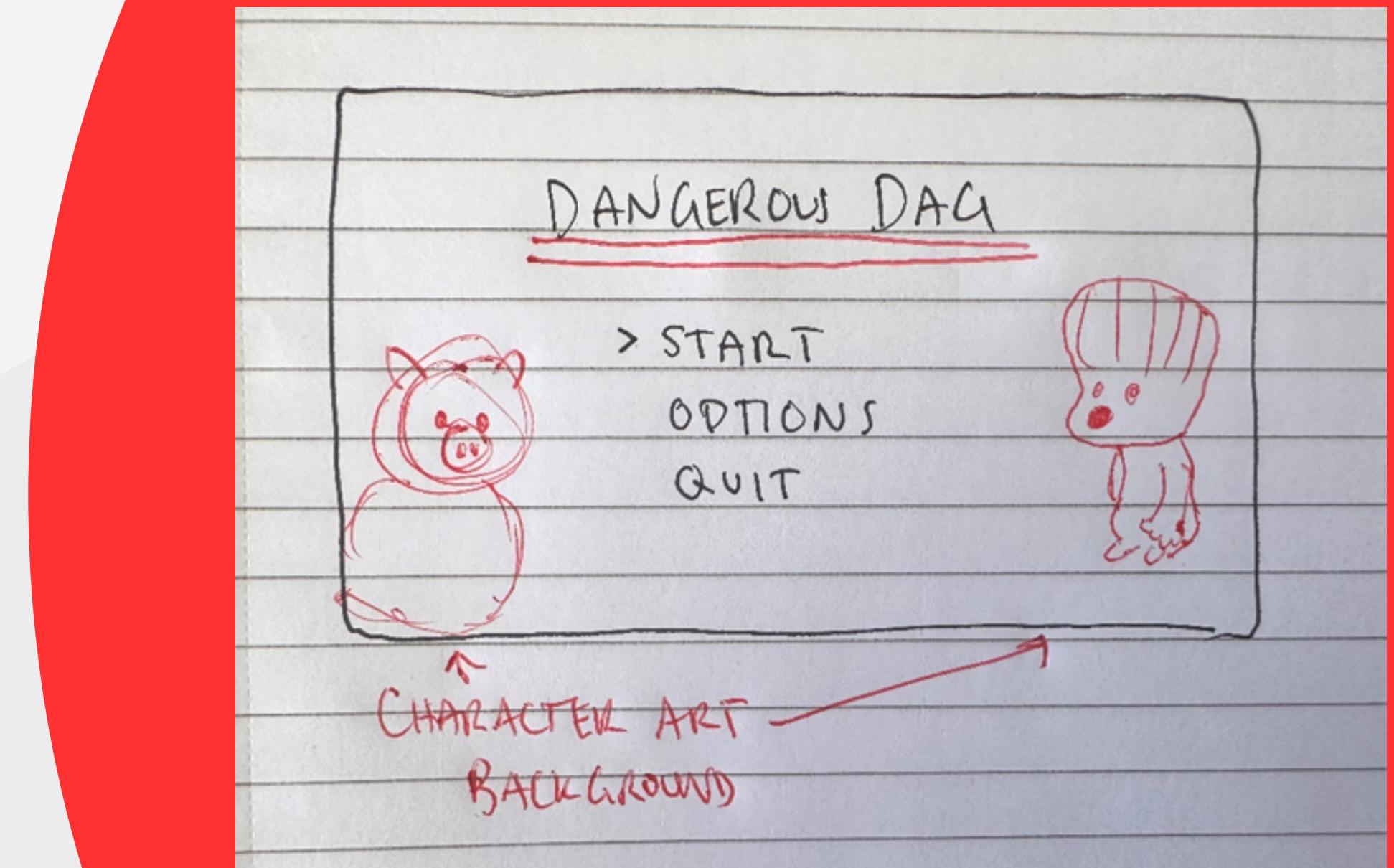


0 0 0

# USER INTERFACE

# MAIN MENU

- Main characters displayed as background art.
- Buttons are clicked using mouse.
- Start button starts a new game from scratch with all coins, keys and enemies reset to default.
- Options button brings up new screen with options, game controls and how to play.
- Quit button quits the game, shuts down all game processes.

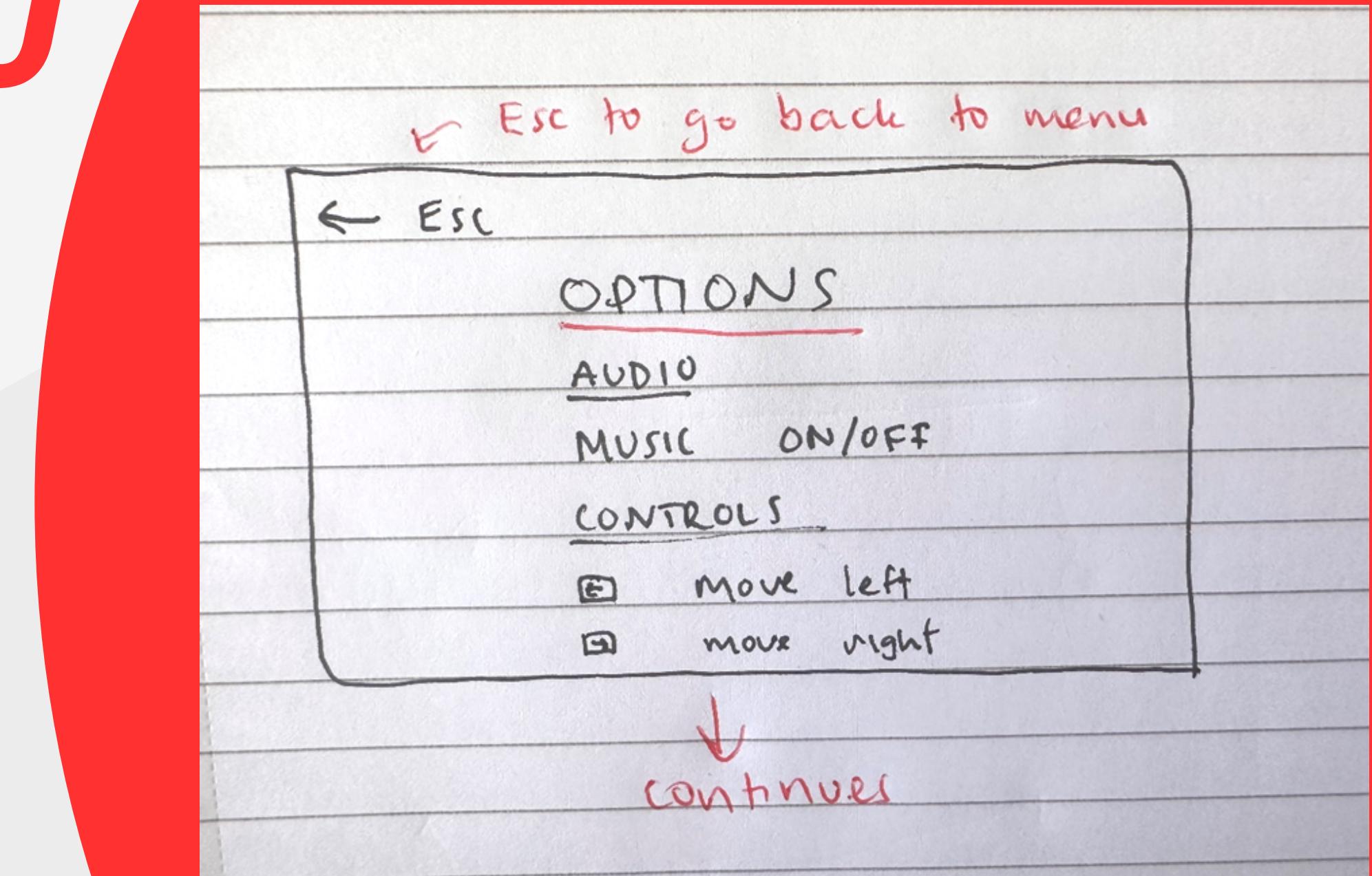


0 0 0

# USER INTERFACE

# OPTIONS MENU

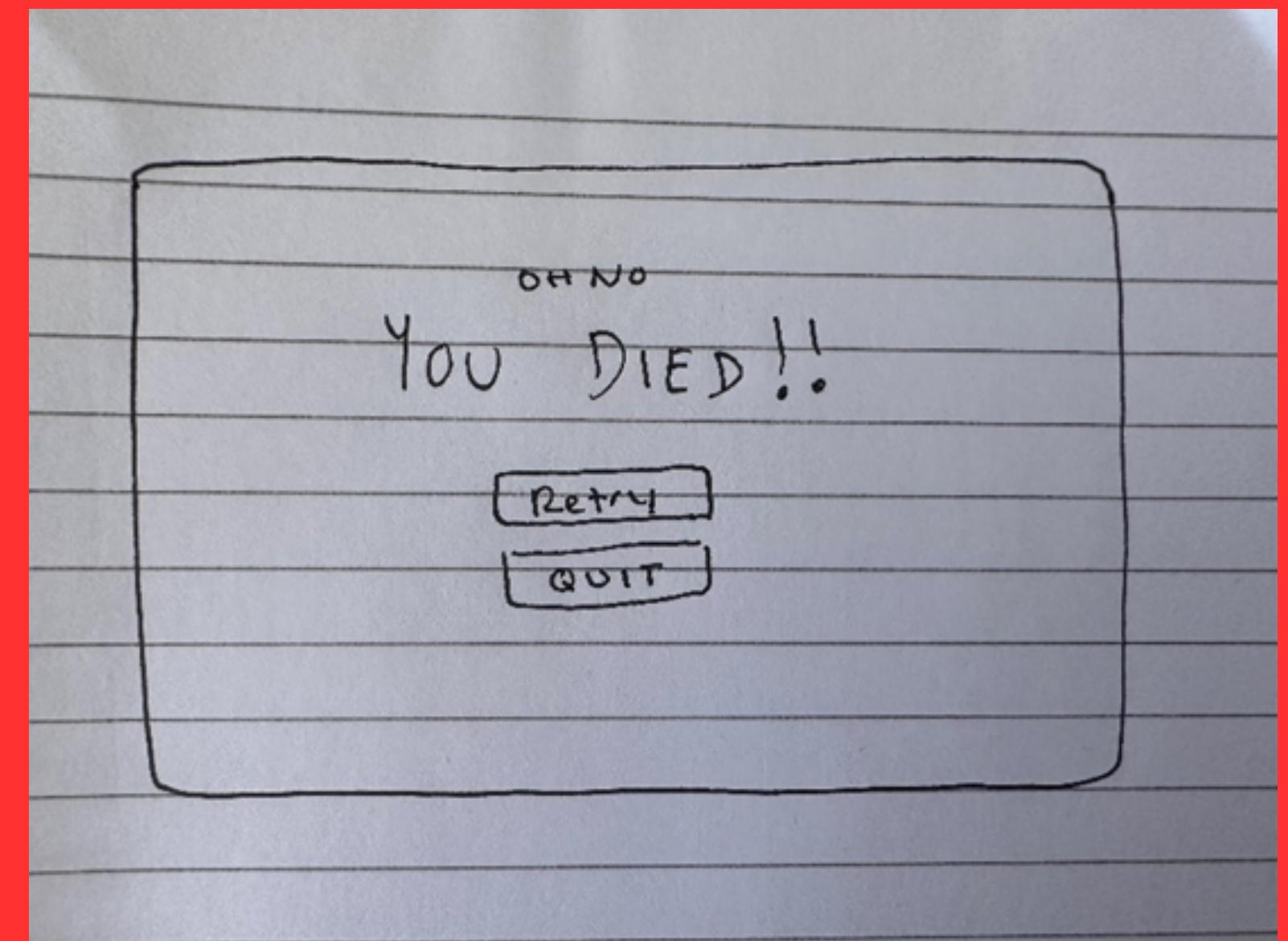
- Options menu provides space to turn music on or off, clickable on/off button.
- Shows the player controls in a list. Not interactive.
- Gives player brief outline of How to Play and objectives. Not interactive.
- Esc button to return to main menu, displayed in top left corner of screen.



0 0 0

# DEATH SCREEN

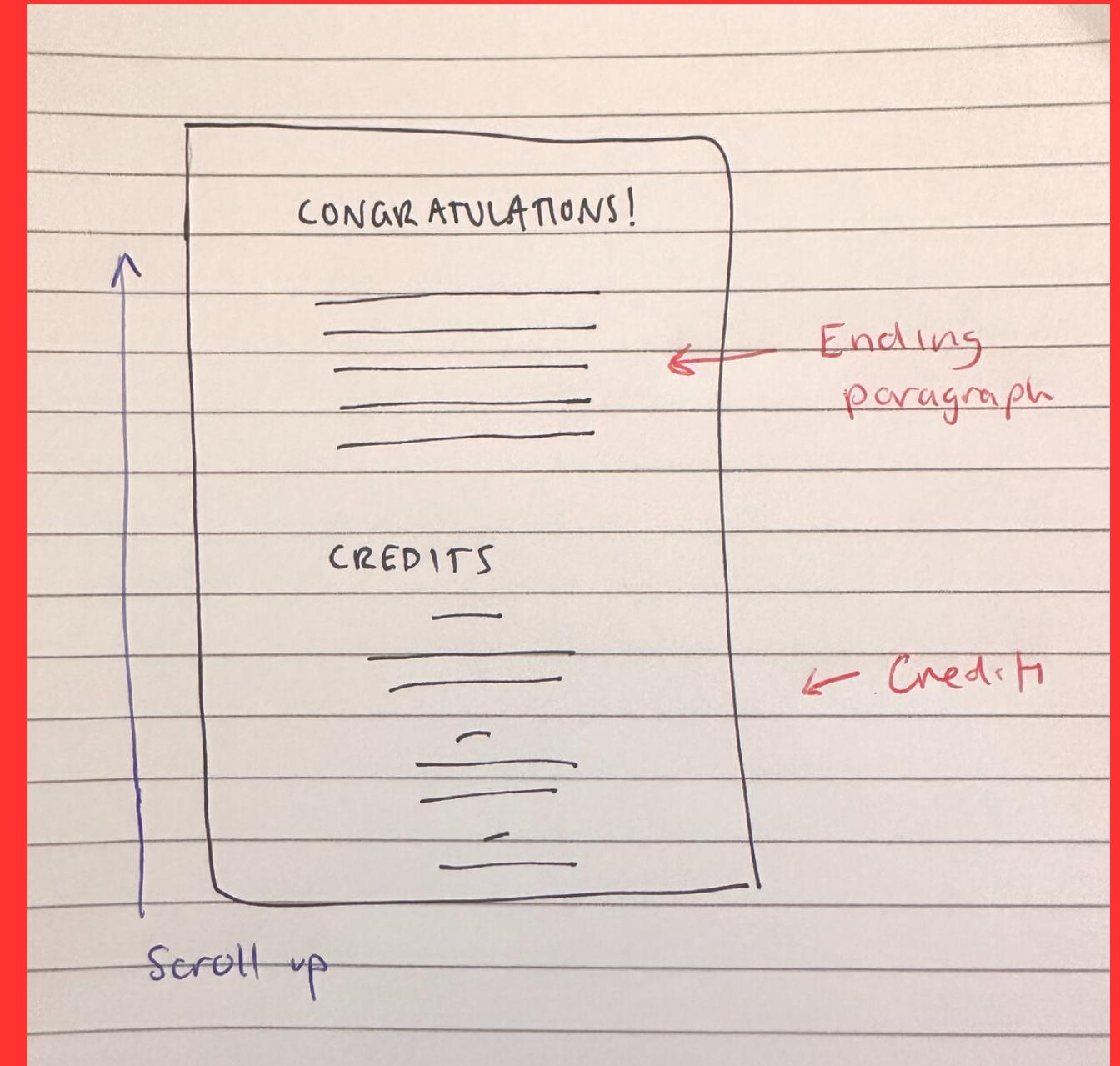
- Comes up upon death.
- Retry button allows player to restart the level, everything is reset.
- Quit button allows player to quit to Main Menu.



0 0 0

# ENDING SCENE

- Simple congratulatory screen
- Brief scrolling paragraph about how Dag has returned the pies to the village and it is a happy ending.
- Short credits follow and the game returns to Main Menu.



# GAME CONTROLS

- **Left arrow key** - move character left.
- **Right arrow key** - move character right.
- **Up arrow key** - jump
- **Space Bar** - shoot fireball, one at a time.
- **Shift Key** - interact with signs and chests, to unlock or buy key
- **Esc key** - pause game and access pause menu.

