

# DARK CASTLE

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# INTRODUCTION

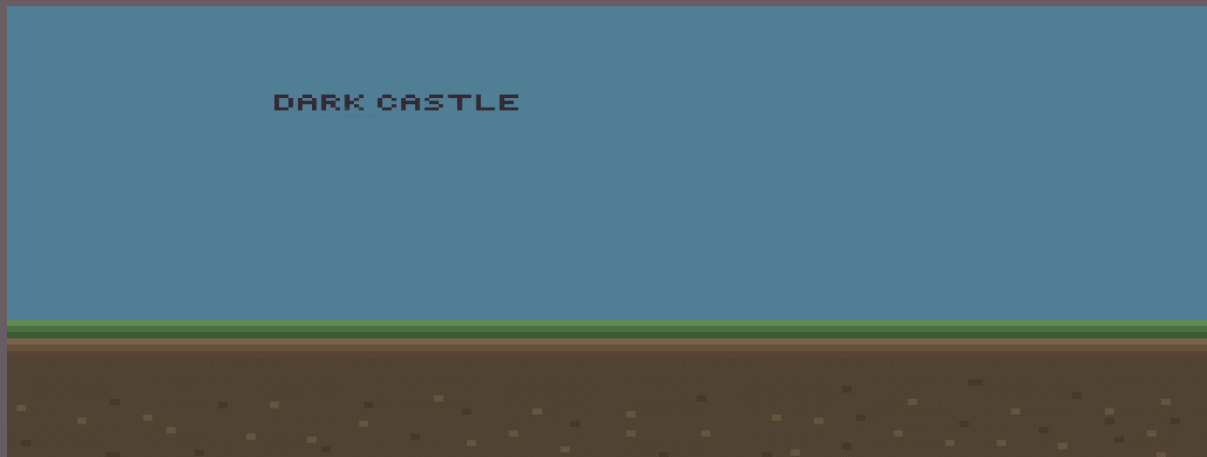


Figure 1

Dark Castle is a Thriller RPG. It is a fresh new style and idea on the take of an RPG, with the thriller aspects of the game offering a new and never seen before game.

It is a 2D game that requires the player to explore every part of the game before being able to continue past the challenges that they are faced.

The player will see new monsters, playable characters, and a traversable map, all while still getting a full and fun RPG experience.

## Game Plan

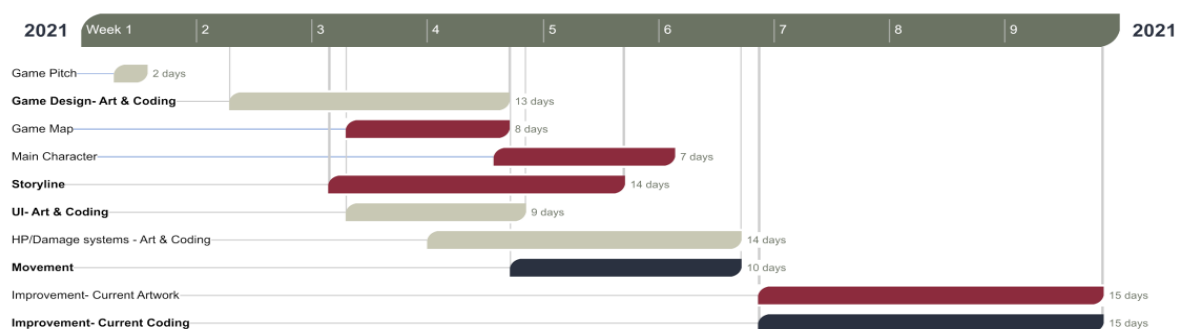


Figure 2

## MAIN CHARACTER

**Background:** Skye is the protagonist for our story. He is a 16-year-old boy, who has lost his way into the demon world, trapped and scared.



Figure 3

**Special Abilities:** When Skye entered the demon world, he has gained some mysterious powers. He can instantly attack his enemies; his agility is super-fast making him dodge his opponent attacks.



Figure 4

He mainly uses his fists to fight on demon powers he gains after beating his enemies. His most powerful move is FireBlast.



Figure 5

**Weapon:** Skye uses a magical holy sword called "Excalibur" which only appears when he is in danger or in battle.

It is the most powerful weapon in the universe, it can only be used by the purest hearts.



Figure 6

## MUSIC AND SOUND



Figure 10

The soundtrack are all original, made by one of our talented team members.

There is different genres of music in the game from intense, mysterious, sad, and exciting.

The music is for everyone from nostalgic 80s to modern arcade music.

The sounds are very unique and never heard before.



Figure 11

We wanted the player to have an immersive experience while playing the game, the music and sound tells the story of the game. When you are battling a boss, you can feel the intensity of the music rising keeping you on the edge of your seat, making you work harder and smarter than last time.

When you are casually exploring the world, the music would give u a peaceful and calming feel to the game.

## MAP

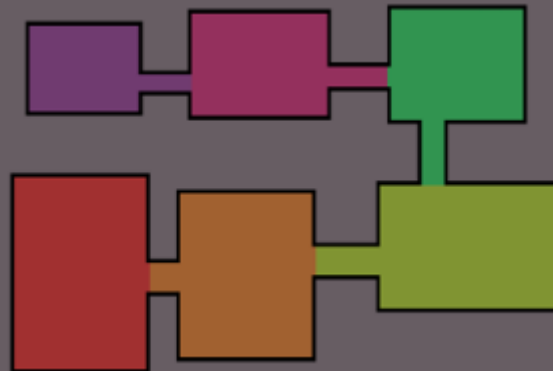


Figure 12

We made our maps unique and pixelated, to give an immersive experience. Every boss has their own unique room demonstrating their personality and powers.

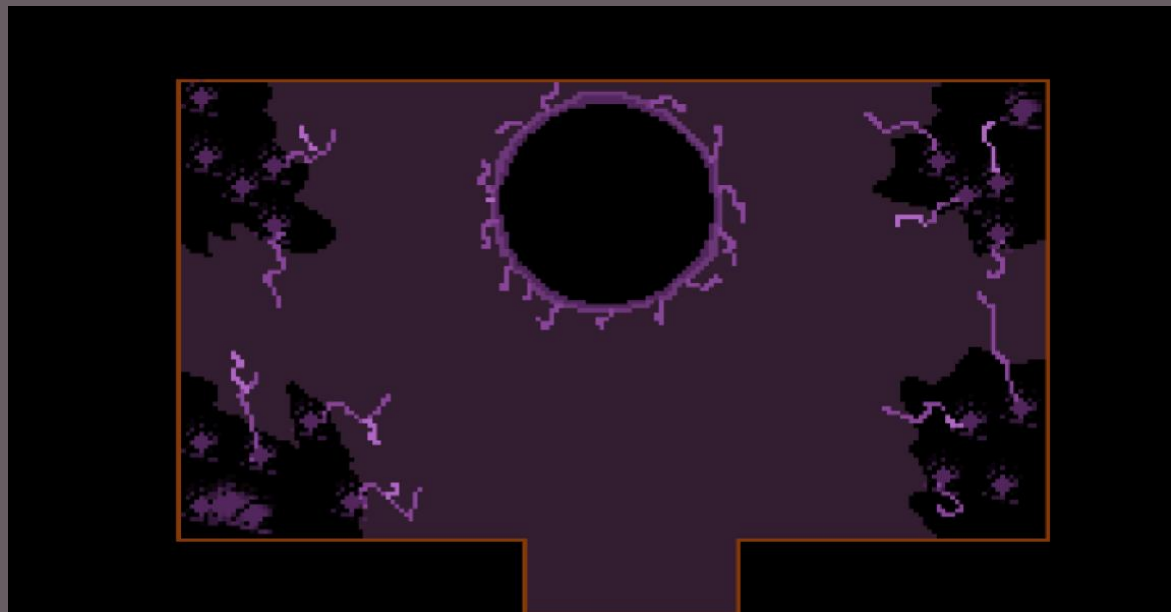


Figure 13

Our main character is trying to find his way around the map to get to the Ether. The Map is full of unique and diverse colours, making it stand out from the rest of the maps. It is where the final boss lies to torment the lost souls.

# MONSTERS

## LARTH

**Background:** Larth is the “All-Time Seeker”. This mythical creature sees everything. Larth comes from an alternate dimension that contains millions more creatures just like it. This is a very dangerous creature and is not to be messed with.



Figure 14

**Physical Description:** Larth is a dark-purple hexapod, with long limbs, short torso and a massive head. At the end of four of its long limbs are claws, which it uses to grip onto and climb surfaces, as well as attacking enemies. Its remaining two limbs are able to stretch to tremendous lengths, which Larth uses to strangle enemies. Its long limbs also provide the opportunity for Larth to move very quickly. Larth's large head allows for it to see into different dimensions, helping it predict how to survive and protect itself.

### **Skills:**

- 1) Attack Skill \_ Melee: Scratching its enemies with its claws on its long limbs that can reach long lengths.
- 2) Attack Skill \_ Melee: Strangling its enemies with its long limbs that stretch to long lengths.
- 3) Defence Skill \_ Using its eye to see into other dimensions to protect itself from attacks.

## THARNA

**Background:** Tharna is a half-ogre half-minotaur hybrid called "Mogres". It only ever eats and fights, the constant training is the reason why Tharna is super strong and crushes its opponents. It only feeds on human flesh, which is why it travelled from its home to earth, to locate food and bring it back to its family.



Figure 15

**Physical Description:** Tharna is a giant 10-foot green monster. It has massive muscles all over its body from its training and fighting. It has bright red eyes that it uses to locate its enemies through methods that could be compared to using infrared. Its two giant horns at the top of its head allows it to send and receive radio signals to Mogres that are within 100km. Tharna wears a stone diaper that allows it to never need to stop training, fighting, or eating, allowing itself to become stronger.

### Skills:

1) Attack Skill \_ Melee: Its muscles allow it to out-strength its enemies in a close combat fight.

2) Attack Skill \_ Melee: Its constant training has helped it gain lots of stamina, so Tharna can fight constantly for hours nonstop.

3) Defence Skill \_ Its bright red eyes allow Tharna to see the heat signatures of its enemies, no matter what time of the day.

4) Defence Skill \_ Its horns on it head allows it to communicate with other Mogres, which allows it to ask for help when it comes to fighting.



## GERX:

**Background:** Gerx is an annoyingly bad monster. It has no arms for balance, and constantly falls over. Its lack of balance and little legs makes it a very slow monster, allowing any new fighter the opportunity to defeat it. Due to Gerx' slow nature, it does not require a lot of food, and therefore does not need to fight as often as Tharna.



Figure 16

**Physical Description:** Gerx is a short brown monster that is covered in scars and scratches from its previous fights. Gerx has only two limbs, two short stumps for legs. It has a fat torso that it uses to store its food for the future months. Its small sunken eyes are a direct result of torso being from a planet where the sun never sets, and its eyes adapted to constant sunshine.

### **Skills:**

- 1) Defence Skill \_ Gerx has tough skin that it hard to penetrate which allows it to receive less damage.
- 2) Defence Skill \_ Gerx slow nature allows it to use less energy and therefore withstand a greater amount of hits.
- 3) Attack Skill \_ Gerx has razor sharp teeth that it uses to bite and break the toughest of materials if it gets close enough to bite it will.

## GAMEPLAY & MECHANICS

Dark Castle is a retro-styled game with a dark aesthetic, the player should expect to see gory scenery as they venture through the world that we have created. The main threat the game will feature are the Bosses and Monsters, each with unique stats and combat methodologies. The player will use the various combat options available to them in order to beat these threats however they will have to use them wisely as the enemies in this game are punishing and will pose a threat during all stages of the game.

Dark Castle will allow players to explore at their own pace \_ if you enter a new zone or level in the game, you will always be able to go back. The world is inter-connected giving the player a sense of freedom of movement to explore the map as they wish. During their travels, the player will have to conquer monsters in their path in order to progress further.

By default, your characters health points and mana will be 100, however as you level up that will increase in increments of 20. Different items being used might also increase your health points or even increase your defence for the next attack the enemy does. Similarly, without any items your character will deal a certain amount of damage which will increase as you level up and can be influenced by magic/items.

The game has turn based combat and as such it has combat options which the player will engage with in combat to overcome hostile monsters. Here is an example of these options:



Figure 17

The fight option will allow the player to deal damage directly to the enemy, the item option will allow the player to choose between items they have gathered along their journey to help them in combat making the combat more interesting, the magic option will allow the player to deal damage through magic and finally running will allow the player to escape the fight perhaps because the player health points (HP) are too low and so they need to disengage to heal. Of course, the player has a limited amount of health meaning that they must focus on their health bar.

Player Health:



Figure 18

Player Health when it's low:



Figure 19

The game will feature an inventory system for the player to be able to carry around items that they have such as potions. These items can both be used in combat. Most items will either be potions (which may heal/replenish health or mana) and equipment that can aid you in battle like a sword.



Figure 20



Figure 21

The sprites that can be found above were originally designed as simplified versions of the monsters found while fighting in the battle system and were made for the overworld, but the designs was later discontinued as they didn't look menacing enough.

## THE FINAL BOSS ROOM

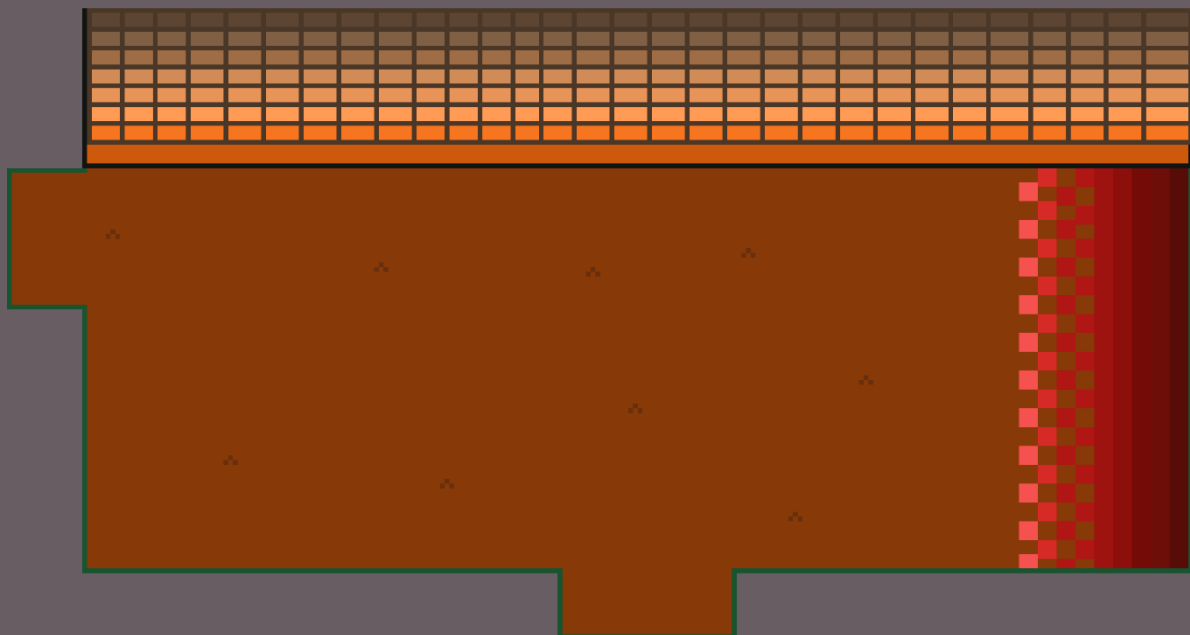


Figure 22

The monsters in Dark Castle also have tricks up their sleeves, each monster will have unique stats and will have attacks that deal different amounts of damage. Some enemies might also have magic resistance as such the player will have to approach every monster differently. In addition, the difficulty will scale as you go so do not go thinking that you beat the game when you got a powerful sword.

## THE ETHER

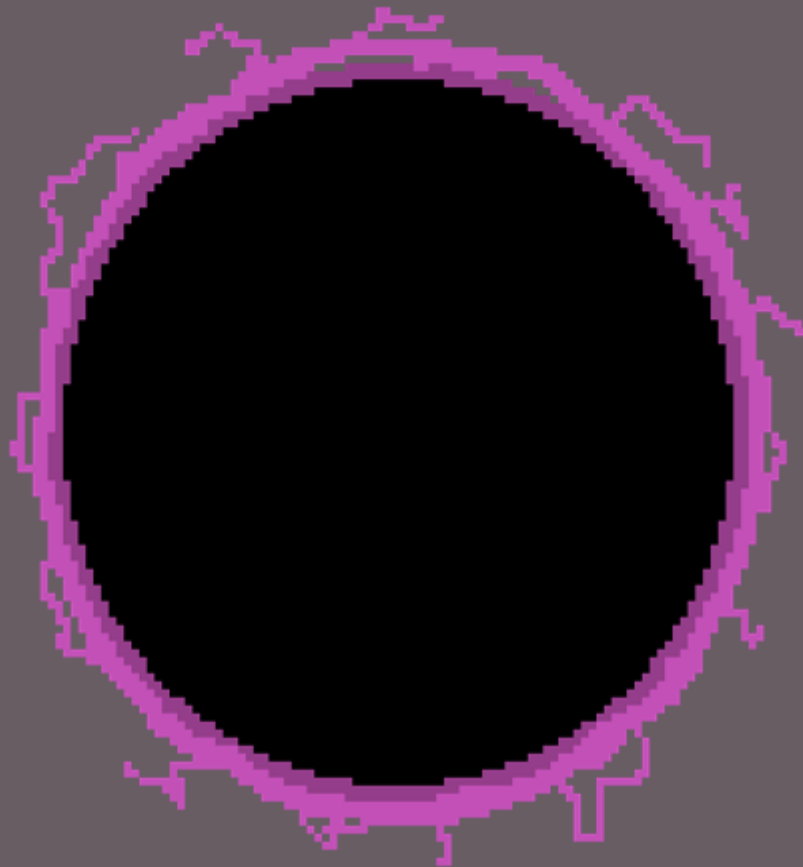


Figure 23

"The Fractured Knight was believed to come from a dimension with the hatred and lust for power."

"The Ether is pure darkness full of evil and destruction, pave the way for light to enter, and there will be peace for eternity".

\*THIS IS A HIDDEN PAGE, AND YOU  
SHALL KNOW ALL OF ITS SECRETS\*

## THE MAIN MENU

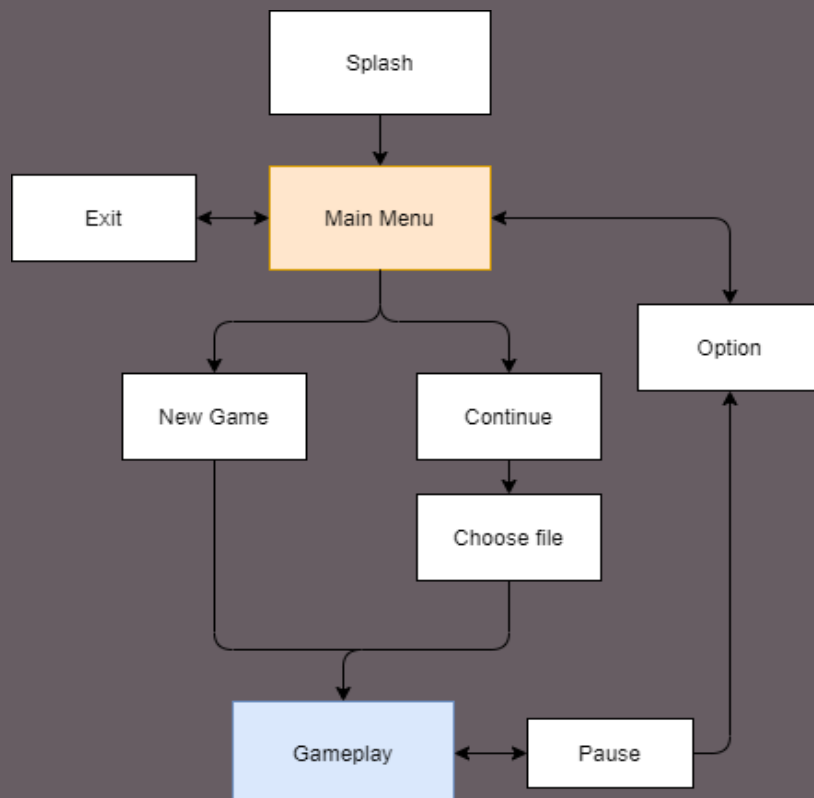


Figure 24

The main menu will appear every time when the game is started. Three main functions will be included: start new game, credits and exit. When the player clicks the credits option, it will take you to the next screen, which will show the creators and who designed the arts music and code.

**New Game:** Shows the character selection screen where the user can see our main character, that we will be playing as, we also included a brief information on the character's bio and stats.

**Credits:** This will show you the creators of the game. And a short summary on what inspired us to make this game.

**Exit:** This will close down the game and bring you back to your desktop.

## CONCEPT ART & DESIGN

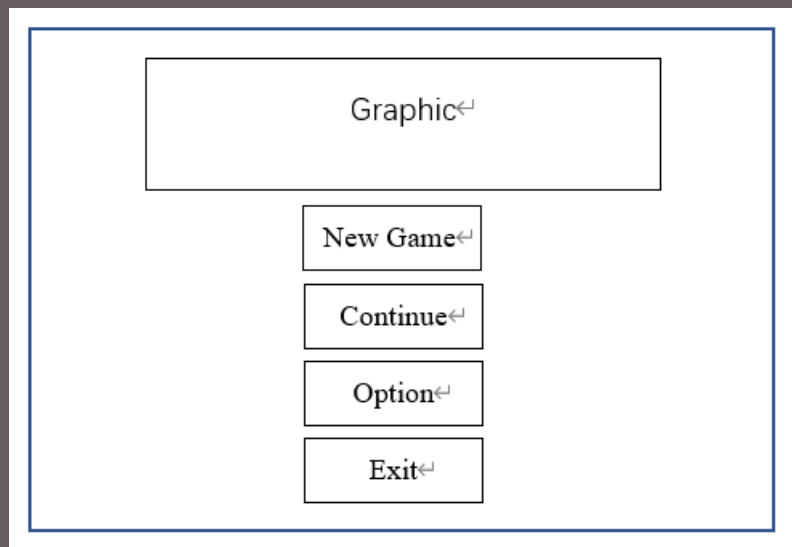


Figure 25

### MAIN MENU EXAMPLE:

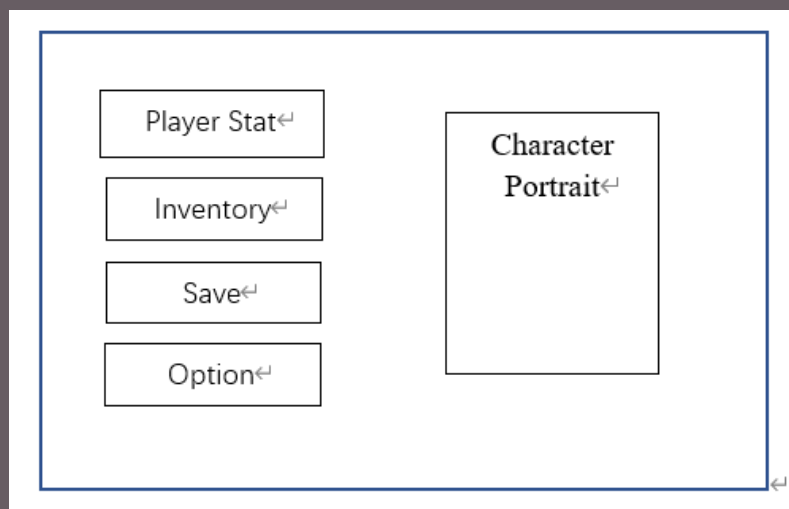


Figure 26

### IN-GAME MENU EXAMPLE:



## Targets Audience

According to the game pitch, the game is suitable for people of all ages to play, But because the game contains horror elements and has an obvious retro style, it is more suitable for players who are interested in turn based rpg game and enjoy art style like undertale.

## Device

The game will be available to play on PC. The reason why this game is best suitable for PC is because it is made and tested on PC and it will be easier to control the characters. However, in the future it may be open to other platforms too.

## Development System

Godot is a 2D and 3D, cross-platform, free and open-source game engine which can create game with a variety of programming languages including C++, C#, and GDScript.

Since it is free and easy to use, it can greatly reduce our development costs and time.

## STORY



Figure 32

This is the story of a conflict that took place over 70 years ago, of an era before the human and non-human worlds were forever divided. Back then both the human and monster factions both inhabited the same world but as a result of the monsters constantly preying on the humans for food an incredibly ferocious war broke out and continued to rage on for 10 years.

With no end to the war in sight the leaders of the monsters and humans both came together to make a deal. Once the deal was decided upon the leaders of both the monsters and humans combined their magical powers to open gateways all over the earth that the monsters could retreat through. The gateways led to a parallel version of the earth but without any humans.

However, with the war coming to an end and the separation of the two species some of the humans and monsters chose to break the promise and the monsters took some humans with them to satisfy

their hunger and the humans restrained and kept some of the monsters for scientific research.

Even though both factions had small groups of people who broke the deal this matter was overlooked in order to keep the peace and once all the monsters had retreated through the gateways, they were deactivated and sealed off. Although a few of them were lost to time and some people say that they were never deactivated.

## CURRENT EVENTS



Figure 35

Our games takes place in the current day with the main character Skye finding himself having found his way into the world of the monsters and with no memory of how he got there he is tasked with the mission of finding his way back home. Through overhearing monsters talking about the protector of the final gateway Skye

figures out that there is only one gateway left still activated that leads back to the human world in the world of the monsters and that it is protected by a ferocious guard,

The Fractured Knight. However, getting to this gateway won't be so simple as he will still have to make his way through the world of the monsters in order to reach the gate. So, Skye concludes that if he wants to have even the slightest chance of getting home, he will need to be able to defeat these monsters in battle.

From that moment on Skye decides to embark on a dangerous quest through the world of the monsters slaying any one of them that tries to stand in his way in a desperate attempt to reach the gateway and return home. However even if he does defeat all those monsters and makes it to the final gateway he will be faced with the final challenger, the fractured Knight and from what Skye has heard about him he has no intention of letting anyone through the gate.

## THE BATTLE SYSTEM



Figure 36

This is an image of the battle system that we have designed for our game and once a fight has been initiated by a human or a monster this is the screen that you will be brought to, to continue the fight. We have chosen to go with a very simplistic look for the battle system as we feel there is no point in cluttering up the screen with information or options the player doesn't need. Everything you could need to win the fight is present on the screen of the battle system and nothing more.

Your main options for the fight are at the bottom of the screen and will appear in cyan blue as the default option but will change to a bright yellow when you're hovering over the option you want to select. An example of this is given below:



Figure 37

The box above the 4 main options is a multipurpose space where text will appear so that the main character and monster can converse and it can also be used as a selection screen for attacks, magic item usage and more.

The remaining 2 areas on the screen are taken up by the monster itself which will switch between regular and damage animations as the fight goes on and the top of the screen where the players health bar can be found in red, and the enemies health bar can be found in purple.

## THE FINAL BOSS

These guys are a lot easier to categorize than the other entities in the game as they seemingly only have one goal which is to kill or capture you. They are also a lot harder to avoid because as soon as they notice your presence in their immediate vicinity, they will instantly initiate a fight and will refuse to back down. The only way that their thirst for violence and desire for food can be quenched is if they capture you or you happen to kill them, well in which case I do not think they will have much of a choice anymore.



Figure 38

### THE FRACTURED KNIGHT:

The Fractured Knight will serve as the final boss for our game and is the guardian of the final gateway that leads back to the human world. He has been standing guard over the gateway for sixty long years and has no intention of letting anyone through it now.

Immediately after meeting him the player will notice something different about him

as he doesn't act like the regular monsters roaming around in the game. He is a lot more serious than the others and doesn't fight for the thrill or violence or desire to satisfy his hunger.

His only goal is to protect the gateway from any humans or monsters foolish enough to try pass through it in an attempt to get to the human world and he will deflect anyone who tries to challenge him. If you do

happen to lose to him in battle, he will simply return you back to the monsters roaming the streets. What happens after that is anyone's guess as no human has ever survived to tell the tale.

The win and loss conditions are very simple, if the player dies or losses, they reset to the current room they were battling and get a short dialogue for example "You are too weak for me boy", every boss has a different dialogue when they defeat you or when you defeat them, and you have multiple chances to beat the boss.

If the player wins, they get to move on to the next room, meeting a new boss with new dialogues. By beating bosses, you get to learn about the storyline and lore of the demon world.

## **CODE FUNCTIONS**

### **Movement function:**

Two variables, a variable called velocity and variable called speed.

If the move right button is pressed, velocity.x is equal to the speed (the player moves right, towards the positive x figures on a graph).

If the move left button is pressed, velocity.x is equal to the negative speed (the player move left, towards the negative x figures on a graph).

If the move up button is pressed, velocity.y is equal to the speed (the player moves up, towards the positive y figures on a graph).



If the move down button is pressed, velocity.y is equal to the negative speed (the player moves down, towards the negative y figures on a graph).

### **Health Function:**

Variable called Health.

Give health a max value, a min value and a starting value (max could be equal to starting value as well).

### **Battle System:**

Four separate functions.

Three separate variables.

One variable has the damage a monster deals/ the player deals (alternatively, add in more variables for damage for as many different attacks that you would like). This would be used the fight function for the player. The fight function will determine through maths, the odds of if the attack hits the monster and then the monster loses health.

Another variable has the damage the player deals when using magic. This will be similar to the fight function, and checks if the odds of if the magic hits the monster. The monster then loses health if the magic hits.

The third and final variable will contain the value of health the player will regain if they use t

he potion. This will use the potion function that guarantees an increase in health, however the player must forfeit the chance to attack the monster that round.

The final function will be a run function. This function will also use maths to check if the player can successfully evade the monster if their health becomes too low. If unsuccessful the player cannot evade the monster for the rest of the fight.

### **Collision function:**

There is a function that determines if the player has come into contact with an overlapping body while pressing down on one of the movement buttons. This will then either trigger a battle, stop the player from walking out of the walls, or continue on to the next room, depending on what the character overlaps with.

## Code Listings:

### Movement:

```
extends KinematicBody2D

export (int) var speed
var velocity = Vector2()

func _physics_process(delta):
    if Input.is_action_pressed("ui_right"):
        velocity.x = speed
    elif Input.is_action_pressed("ui_left"):
        velocity.x = -speed
    else:
        velocity.x = 0
    if Input.is_action_pressed("ui_down"):
        velocity.y = speed
    elif Input.is_action_pressed("ui_up"):
        velocity.y = -speed
    else:
        velocity.y = 0
    move_and_slide(velocity)
```

Figure 39

### Collision:

```
extends Area2D

export(PackedScene) var Scene_2
func _ready():
    pass

func _input(event):
    if Input.is_action_pressed("ui_right"):
        if get_overlapping_bodies().size() > 0:
            next_level()

func next_level():
    # $Camera_2.set_current(true)
    get_tree().change_scene_to(Scene_2)
```

Figure 40

### Health:

```
extends TextureProgress

export(int) var health =100
onready var health_bar = get_node(".")

func _ready():

    health_bar.max_value = health
    health_bar.value = health
```

Figure 41

## SUMMARY

Dark castle is an action-packed retro-styled game with elements of horror, the world is gory and full of monsters around every corner. The game revolves around its interesting story which you uncover as you progress in the game.

- Lots of unique monsters each with different personalities and attributes.
- Fun turn-based combat system with focus on outwitting your enemies.
- An interesting story which you engage in as you progress in the game.
- Gory world with multiple levels each featuring unique looks and challenges.
- Item system – potions that are gathered in the world can be used inside and outside of the combat.
- Immersive music making you feel emotionally attached to the game.
- Old-school retro-styled graphics which appeal to a wide target audience.

## POSTPRODUCTION

The Start Menu:



We made our start menu have retro vibes, which will give many players a unique or nostalgic feeling.

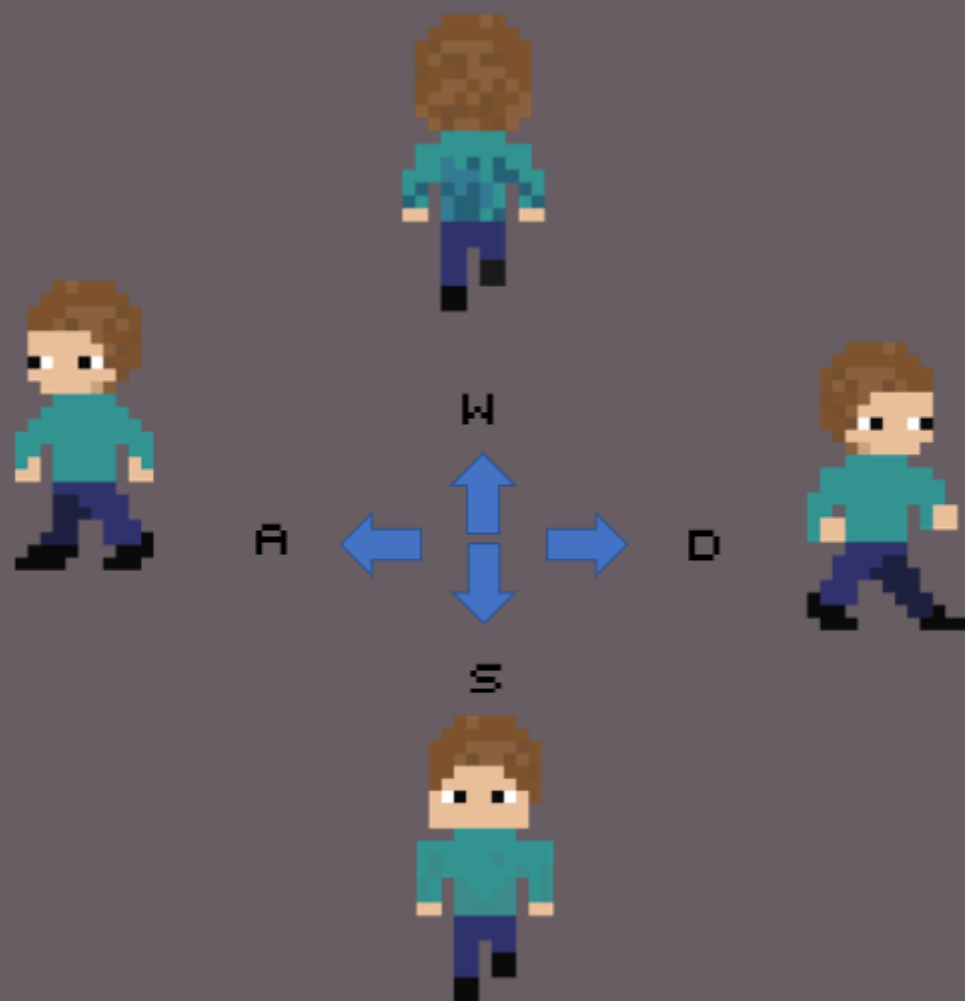
We tried to stick with our main game plan as much as possible but due to the time we had left, we had to modify some content and add in new ones. We tried to make our game as enjoyable as possible so it can attract new players.

## UPDATED MOVEMENT CODE:

We have updated and modified our code movement code so the walking animation can be seamless.

```
1 extends KinematicBody2D
2
3 export (int) var speed
4 var velocity = Vector2()
5
6 func _physics_process(delta):
7
8     var stop_movement = false
9     if stop_movement == true:
10         pass
11
12     if Input.is_action_pressed("ui_right"):
13         velocity.x = speed
14         $AnimatedSprite.play("Move_Right")
15
16     elif Input.is_action_pressed("ui_left"):
17         velocity.x = -speed
18         $AnimatedSprite.play("Move_Left")
19
20     else:
21         velocity.x = 0
22
23     if Input.is_action_pressed("ui_down"):
24         velocity.y = speed
25         $AnimatedSprite.play("Move_Down")
26
27     elif Input.is_action_pressed("ui_up"):
28         velocity.y = -speed
29         $AnimatedSprite.play("Move_Up")
30
31     elif Input.is_action_pressed("ui_up") and Input.is_action_pressed("ui_right"):
32         velocity.y = speed
33         $AnimatedSprite.play("Move_Right")
34
35     elif Input.is_action_pressed("ui_up") and Input.is_action_pressed("ui_left"):
36         velocity.y = speed
37         $AnimatedSprite.play("Move_Up")
```

```
38
39     else:
40         velocity.y = 0
41
42     if velocity.y == 0 && velocity.x == 0:
43         $AnimatedSprite.play("Idle")
44
45     move_and_slide(velocity)
46
47
48
49
```



We have made the character movement controls very simple, it consist of the keys "w a s d" which a lot of gamers are already used to. When you play the game, you can also see the controls that you have to use for players who have never played any pc games before. The way to fight each monsters is to you your mouse to press the battle button or if you are scared you can just run and try another time.

## BATTLE TRIGGER CODE:

The battle trigger works by having the player move near a monster then it will activate battle mode.

```
1  extends Area2D
2
3  func _process(delta):
4  > if bool(Input.is_action_pressed("ui_right")):
5  > > if get_overlapping_bodies().size() > 0:
6  > > > start_combat()
7  > elif bool(Input.is_action_pressed("ui_up")):
8  > > if get_overlapping_bodies().size() > 0:
9  > > > start_combat()
10 > elif bool(Input.is_action_pressed("ui_down")):
11 > > if get_overlapping_bodies().size() > 0:
12 > > > start_combat()
13 > elif bool(Input.is_action_pressed("ui_left")):
14 > > if get_overlapping_bodies().size() > 0:
15 > > > start_combat()
16
17 func start_combat():
18 > get_tree().change_scene("res://Battles/Battle_Purple.tscn")
19
20
21
```

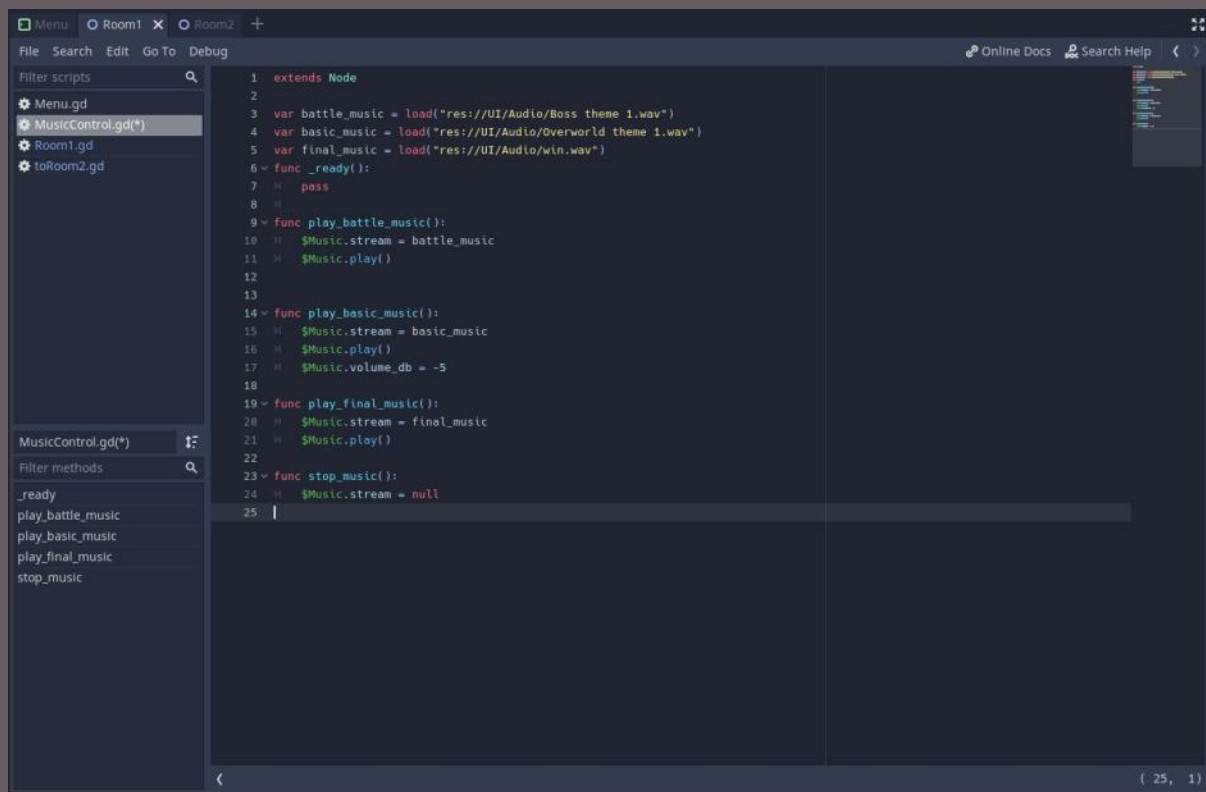
Here is an example of what it looks like when the battle trigger is activated.





## MUSIC CODE:

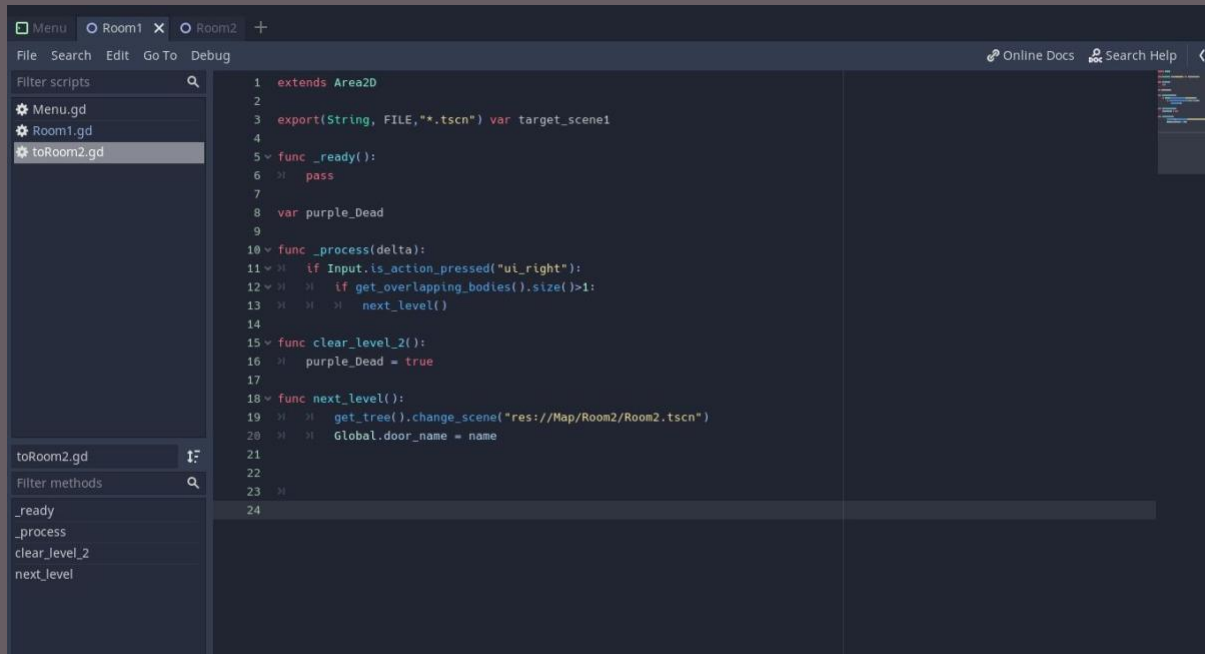
This is the code we used to loop our soundtrack and the soundtrack changes when we are fighting a monster or a boss.



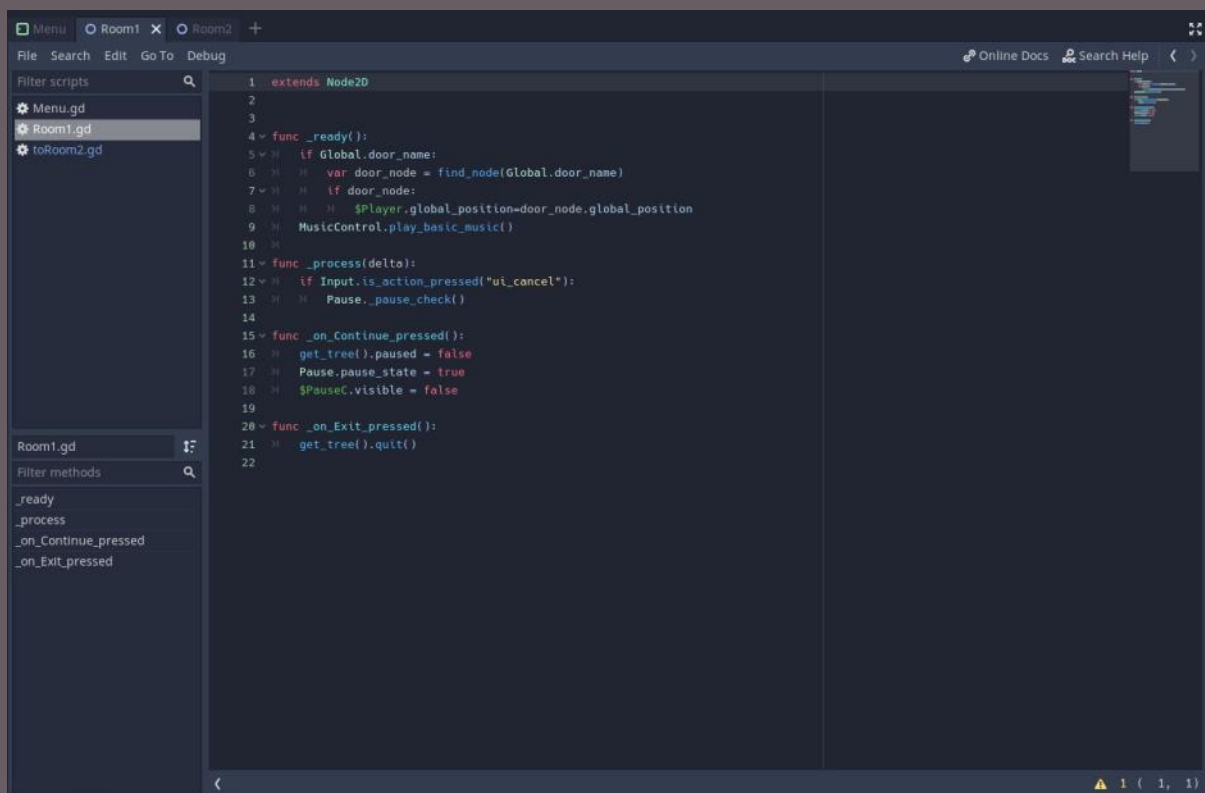
Our music is very unique, and it is made by one of our team members he used "FL studio 12" to make the soundtrack you hear in the game. The code loops the main theme, but when you get into battle a monster the music changes dramatically into a more intense and exciting song, this will keep the players on edge at all times.

## ROOM TRANSITION CODE:

This is the code we used to transition our player from room to room.

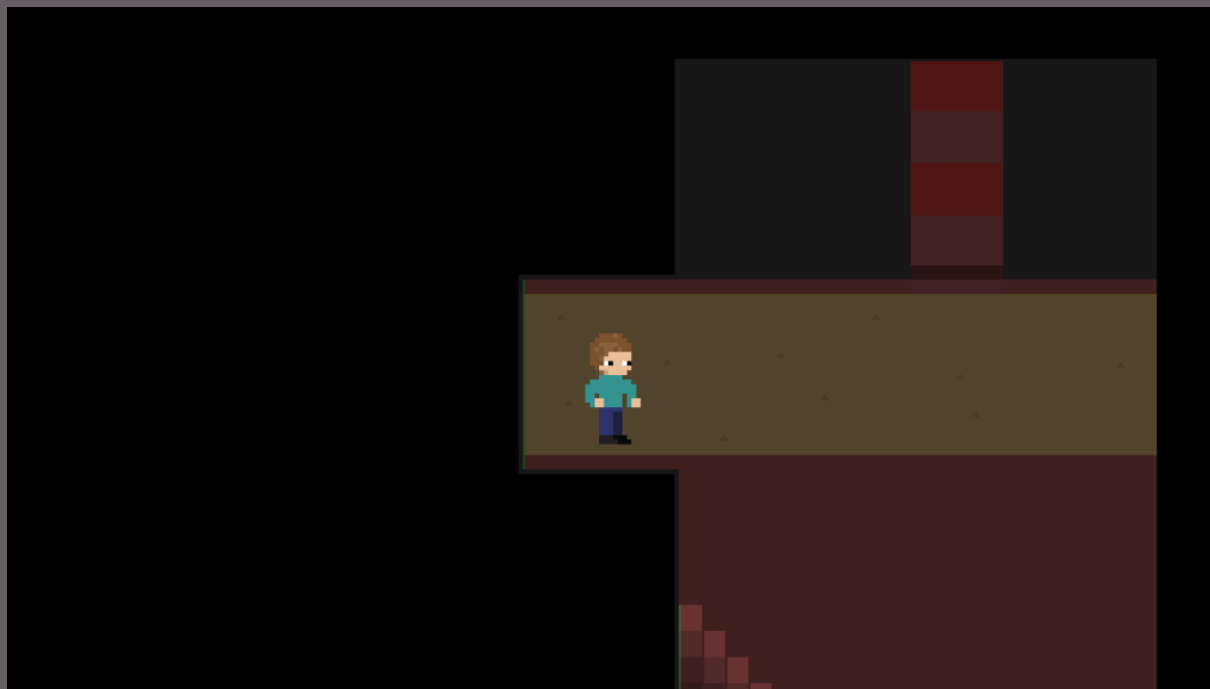
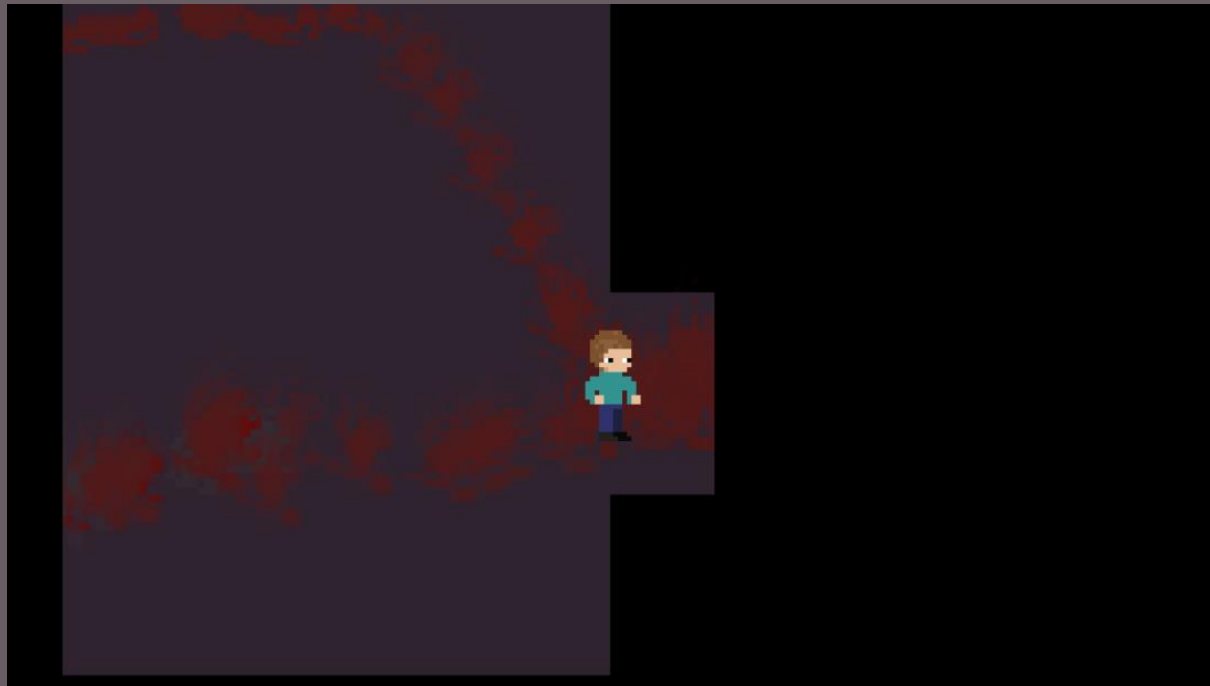


```
1 extends Area2D
2
3 export(String, FILE, "*.tscn") var target_scene1
4
5 func _ready():
6     pass
7
8 var purple_Dead
9
10 func _process(delta):
11     if Input.is_action_pressed("ui_right"):
12         if get_overlapping_bodies().size()>1:
13             next_level()
14
15 func clear_level_2():
16     purple_Dead = true
17
18 func next_level():
19     get_tree().change_scene("res://Map/Room2/Room2.tscn")
20     Global.door_name = name
21
22
23
24
```



```
1 extends Node2D
2
3
4 func _ready():
5     if Global.door_name:
6         var door_node = find_node(Global.door_name)
7         if door_node:
8             $Player.global_position=door_node.global_position
9             MusicControl.play_basic_music()
10
11 func _process(delta):
12     if Input.is_action_pressed("ui_cancel"):
13         Pause._pause_check()
14
15 func _on_continue_pressed():
16     get_tree().paused = false
17     Pause.pause_state = true
18     $PauseC.visible = false
19
20 func _on_exit_pressed():
21     get_tree().quit()
22
```

HERE IS AN EXAMPLE OF HOW IT LOOKS LIKE WHEN THE PLAYER IS TRANSITIONING FROM ROOM TO ROOM.



## UPDATED GAME PLAN FOR WEEK 10-13:

### GAME PLAN

WEEK 10	WEEK 11	WEEK 12	WEEK 13
Battle trigger coding and transition	Finishing Design of monsters		
	Music and new soundtrack	Completing Art and room design	
		FINISH CODING THE GAME	Polishing the game
			FIXING BUGS

For the last few weeks, we have spent our time trying to find and fix bugs or improve our codes. We have spent multiple hours playing the game and seeing what can be improved, we have added multiple improvements like smoother scene transition. A bug that occurred was when you could spam attack and kill the boss quickly, we have removed that which would be unfair for the boss and would made the game less fun and exciting. There are always new bugs that kept appearing, but we always manage to find it and fix it. To make the game enjoyable for our players.

# CREDITS

## Coding:

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## Art & Design:

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## Story:

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## Music & Sound:

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