

NIGHTMAREVANIA

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1 Document History

- Version 1 completed. (27/02/2019)
- Version 2: Player character and controls changes. (10/04/2019)
- Version 3: Level changes (15/04/2019)
- Version 4: Rules, resources and conflict changes (16/04/2019)
- Version 5: Technical Specification changes. (18/04/2019)
- Version 6: Media assets changes. (20/04/2019)
- Version 7: References section added. (21/04/2019)
- Version 8: Gameplay overview changes. (22/04/2019)

2 Overview and Vision Statement

Nightmarevania is a single player 2D platform game in which the player will be playing as Serah, the main character. Serah is trapped in her own nightmare and in order to escape, she will have to progress through different levels in an attempt to reach the boss room and defeat the boss inside. The player will return to the beginning of the nightmare (the first level), each time she is defeated.

In Nightmarevania the action takes place in a 2D perspective across different dungeon-style levels. The game operates on a fast paced, dynamic movement and combat system. Using a keyboard and mouse, the player will move the character around the levels and will be able to perform different actions like jumping, double jumping, sliding, attacking, or defending. The player will face different challenges across the levels in the form of timed traps, static traps, and different types of enemies as she advances to reach the final challenge, the boss enemy.

The game will be divided in three main types of levels with different mechanics: the first type will be an enemy chase scenario in which the player will have to run to avoid getting caught while avoiding traps along the way; the second type will be a standard platformer level with traps and different types of enemies that will have to be avoided; and the final type will be the boss level, where the sole objective is to fight the boss who will have specific behaviour patterns.

In the first two types of levels the player will have no form of defending herself, and therefore the only thing she will be able to do is to avoid the obstacles to advance. This changes as she reaches the last level as she will acquire extra equipment (a sword) that will allow her to fight the boss and survive.

What makes Nightmarevania unique is the contrast between the levels. That contrast will change the player's experience and the gameplay style - the player will need to adapt to the way in which each level is designed to be played in order to advance through them. Furthermore, this type of system facilitates the addition of more levels of each type mentioned as well as of new types.

Finally, to make the game replayable, a time score will be included in the end as a feature. In this way, the player can replay the game to reduce the time she has needed to complete all the levels and finish it.

3 Player Experience Goals

- Players will feel excitement as they progress through the levels of the game.
- Players will have to pay extra attention and be careful in certain parts of the levels.
- Players will see the game as a challenge.
- Players will enjoy the contrast between the levels.
- Players will have to adapt to the change in the gameplay style.
- Players will need to look for and learn patterns within enemy AI.
- Players will be encouraged to replay to reduce their playtime.

4 Inspirations



CASTLEVANIA

Castlevania is a single player 2D action-adventure game in which you play as a member of the Belmont clan of vampire hunters. The mission of the player is to travel to Dracula's demonic castle, fight his way through the castle and finally annihilate Dracula and the castle.



THE LEGEND OF ZELDA

The Legend of Zelda is a single player action-adventure game in which you plays as Link, who is often given the task of rescuing Princess Zelda and Hyrule from Ganon. In addition, these games feature a mixture of puzzles, action, adventure/battle gameplay, and exploration.



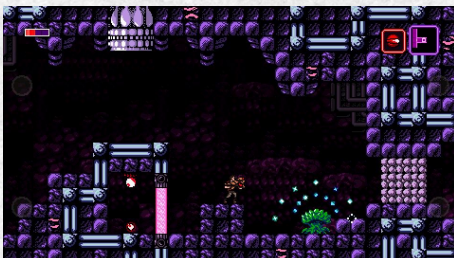
MARIO

Mario is a simplistic 2D platformer that implements a couple different level styles: player can progress at own speed; or player is forced into constant forward progression through camera movement. There is no backwards progression in either scenario. It has distinct enemies that have easily learnable characteristics and are clearly identifiable. The player learns how to defeat enemies through experience and trial-and-error.



METROID

Metroid is a large, somewhat open, 2D game that encourages exploration, both horizontally and vertically, and encourages players to return to areas with newfound skills/weapons. It provides a variety of enemies through the different levels/areas, and boss fights with learnable behaviours.



AXIOM VERGE

Similar experience to Metroid. Clear patterns to boss fights that change depending on enemy health. Many smaller enemies that have inspired our enemies such as enemies that chase when player is within sight, and enemies that will shoot a steady stream of projectiles at player's position.



SLAIN: BACK FROM HELL

Slain is a punishing 2D game that throws a lot of different styles of enemies at the player and is not generous with lives or save points. Players are expected to put time into the game to learn enemy behaviour and patterns in order to progress.

5 Audience and Platform

The target audience for this game will primarily be mature gamers (20+ years old) of all genders, who like 2D action-adventure games that mix elements from old and new 2D games. "Nightmarevania" will also target people who enjoy spooky or horror themed games. Examples of similar games will be "Momodora", "Death's Gambit" or "Castlevania".

The target platform for this game is PC as it is going to be developed using SFML and the hardware requirements for it will be low.

Competitors in this genre with similar mechanics, enemies, and ambience, include: "Castlevania", "Momodora", and "Death's Gambit". However, "Nightmarevania" differs slightly as it will have faster gameplay than Castlevania and it will introduce contrast in gameplay style between the different levels which is not found in the other games.

5.1 Legal Analysis

All the assets used in this game will be copyright free and proper credit will be given to the original authors. No external libraries besides those provided by SFML will be used. And finally, the game will be developed under the restrictions of SFML copyright and license agreement that can be found here: <https://www.sfm1-dev.org/license.php>.

6 Gameplay

6.1 Overview

After starting up the game, the player will be presented with the main menu which will have four options: start game, continue, configuration, credits, and exit game. 'Start game' will load the game and place the player in the first level. 'Continue' will load the last level the player was in. 'Configuration' will allow the player to change some settings like screen resolution, sound configuration, or the controls mapping. 'Credits' will take the player to the credits screen. 'Exit game' will close the game.

After starting the game, the player will spawn at level outside. There, the player will be introduced to her mission and the story of the game. After that, the player will advance through a portal towards level 1. They will start off being able to run and jump but unable to attack or defend.

In level 1, as the player reaches a certain point within the room, a ghost will appear at the entrance of the level and will start to chase the player, who will have to keep on going without slowing down while avoiding different traps along the way. If at any point the player is hit by a trap or is caught by the ghost, it will result in the player's instant death. If the player manages to escape and reach the end of the level then she will advance to level 2.

Level 2 will present a larger area with AI enemies and more traps. Now, the player will have to explore the level vertically and horizontally with the purpose of finding keys. The keys are needed to open the door that will allow the player to continue to the level sword. After unlocking the door, the player will access the next level.

Level sword will basically be an empty room with a sword in the middle, after picking it up, the player will be able to proceed towards the final level, level 3.

In the final level, an initial dialogue will explain to the player the abilities of the sword she picked up on the previous sword, after it, a short boss dialogue will take place. Once the dialogue is finished, the final boss will spawn in the room and the player will have to defeat it in order to finish the game. Finally, after

defeating the boss, the ending screen will come up and after some seconds the player will be taken to the main menu.

6.1.1 Player Mode

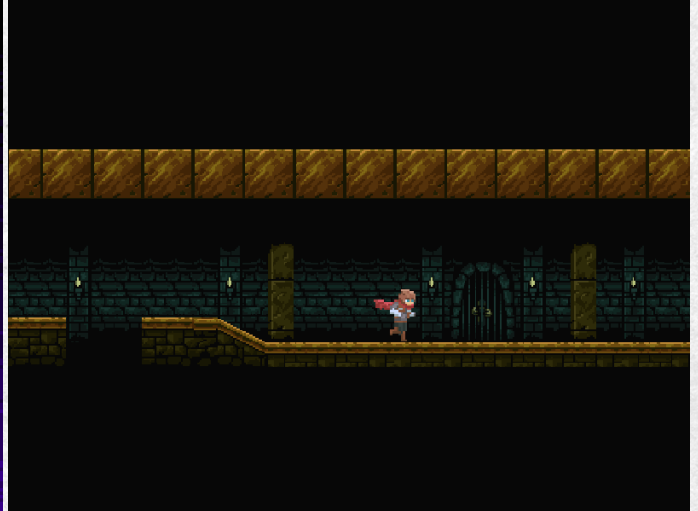
The game will be only single-player, with no online content or networking capabilities.

6.2 Screen Mockup(s)

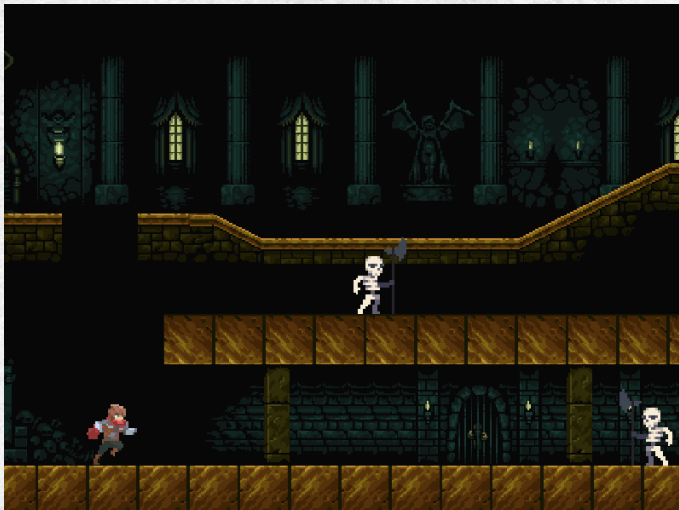
The following images are not the final product. The graphics may change.



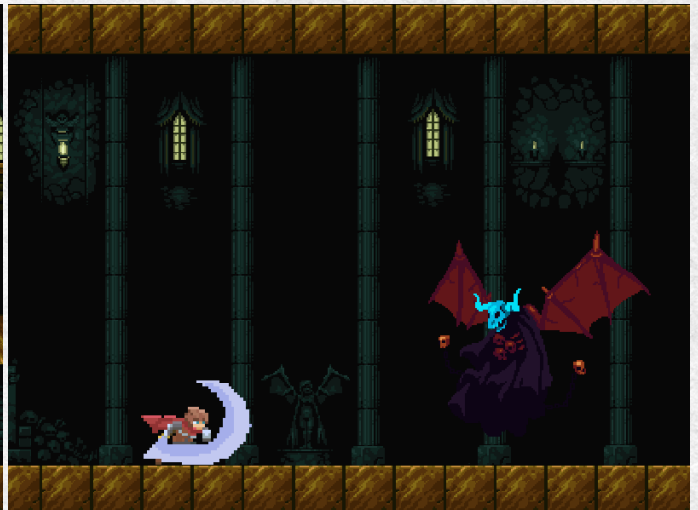
(a) Start Screen mockup



(b) Level 1 mockup



(a) Level 2 mockup



(b) Level 3 mockup

6.3 Formal Elements

6.3.1 Players

- Single player.
- The player takes the role of Serah, the main character.
- The structure of interaction is single player versus the game.

6.3.2 Objectives

There are three types of objectives in this game:

- The main objective is to escape from the nightmare by advancing through the different levels, each of which might have one of the two partial objectives of the game, and defeating the final boss.
- The first partial objective is to avoid getting caught by the ghost that is chasing you.
- The second partial objective is to explore the level to find keys that will allow you to advance to the next level.

Having those objectives in mind we can classify this game as a escape, chase and exploration game.

6.3.3 Procedures

The player can move right and left, jump, double jump, attack, defend and pick items up by running over them.

6.3.4 Rules

- The player cannot jump unless being on the ground.
- The player cannot perform the double jump unless in the air.
- The player cannot jump more than twice in one move.
- The player cannot attack or defend without the sword.
- The player cannot defend while being in the air.
- The player must have the sword in order to advance to the final boss level.
- The player can only perform horizontal and up attacks while being on the ground.
- The player can only perform down attacks while being on the air.
- The player must complete all the previous levels before reaching the final boss.
- The player must defeat the final boss enemy to complete the game.
- The player will start from the start of the level where she died.
- The sword will give the following stats to the player:
 - Health bar: 10 units.
 - Basic attack damage: 2 units.
 - Horizontal and up attacks damage: 3 units.
 - Down attack damage: 5 units.
- The player cannot return to a previous level.
- In the ghost chase level, the player will die instantly if she is caught by the ghost or if she is hit by a trap.
- In the platformer level, the player will die instantly if she is hit by an enemy or by a trap.
- In the platformer level, the player must find the keys to proceed to the next level.
- In the final boss level, the player will die if her health bar reaches 0.
- The final boss enemy has the following stats:
 - Health bar: 100 units.

- Attack damage: 1 unit.
- The final boss enemy will die if its health bar reaches 0.

6.3.5 Resources

- Health.
- Sword.
- Abilities.
- Key.

6.3.6 Conflict

In "Nightmarevania" the main source of conflict comes from different types of obstacles. The player will have to advance through the levels while avoiding traps and enemies, and to finish the game, the player will have to defeat the final boss. Obstacle types:

- Close doors - Player will need to find a key or keys to open it.
- Static spikes - Spikes remain visible, player needs to avoid.
- Skeleton soldiers - Pace when player is not within sight, rush player whilst attacking when player is within sight.
- Boss enemy - Tougher enemy that the player will need to defeat to finish the game.

6.3.7 Boundaries

In "Nightmarevania" the boundaries will be graphically defined by walls and closed doors inside the nightmare where the player is trapped. This is due to the fact the levels are going to look like the internal rooms of a castle and these provide obvious and understandable boundaries.

6.3.8 Outcome

The outcome of "Nightmarevania" is escaping the nightmare, in which the player is trapped, after defeating the final boss. Furthermore, the player will have a time score to see how much time she needed to complete the game and what her best times are with the purpose of encouraging her to reduce that time score by replaying the game.

6.4 Controls

The following controls are the standard implementation, however, they can be remapped in game.

- *A Key* | *L.Stick Left*: Run to the left.
- *D Key* | *L.Stick Right*: Run to the right.
- **Space Bar** | **A button**
 - *Jump*: If the player is on the ground.
 - *Double Jump*: If the player is on the air.
- **Mouse Left Button** | **X Button: Attack**.
 - *Ground Attack*: If only the attack button is pressed while on the ground.
 - *Air Attack*: If only the attack button is pressed while on the air.
 - *Horizontal Attack*: If A-D | L.Stick Right-Left is pressed while attacking on the ground.
 - *Up Attack*: If W | L.Stick Up is pressed while attacking on the ground.

- *Down Attack*: If S | L.Stick Down is pressed while attacking on the air.
- *Mouse Right Button* | *B Button*: Defend.

6.5 Levels

To be implemented:

- Level Outside - Initial level:
 - The game introduces to the player her mission and the story.
- Level 1 - Chase level:
 - The player will have to avoid getting caught by a ghost while dodging traps along the way.
- Level 2 - Platformer level:
 - The player will have to explore the area to find keys that will allow her to progress to the next level, avoiding traps and enemies at the same time.
- Level Sword - Sword room:
 - The player will pick up the sword to fight the final enemy.
- Level 3 - Boss fight:
 - The player will face the boss and finish the game if it is defeated.

Could be implemented:

- Other chase levels spread throughout a larger game. The idea will be that the ghost keeps hunting you down and finding you.
- Other platformer levels. The game would be bulked out mostly by levels of this type if expanded where the player needs to find other game objects.
- Other boss fights that will break the game up into logical sections like chapters.

6.6 Editor

Notepad ++ as level editor.

6.7 Characters

- Serah: This is the main character of the game and will be controlled by the player.
- Wraith: Ghost that will chase you through the first level.
- Skeleton soldiers: These enemies will be spread across the second level and will attack the player if she gets too close to them.
- Erebus: The final boss of the game with a more advance AI.

6.8 Story

Serah has been having nightmares every night lately and in this particular night it gets so bad that she gets dragged inside the nightmare itself. When she wakes up, she finds herself inside a castle and it seems familiar to her but she does not know the reason why, the only thing she knows for sure is that whatever is going on, it can not be just a nightmare.

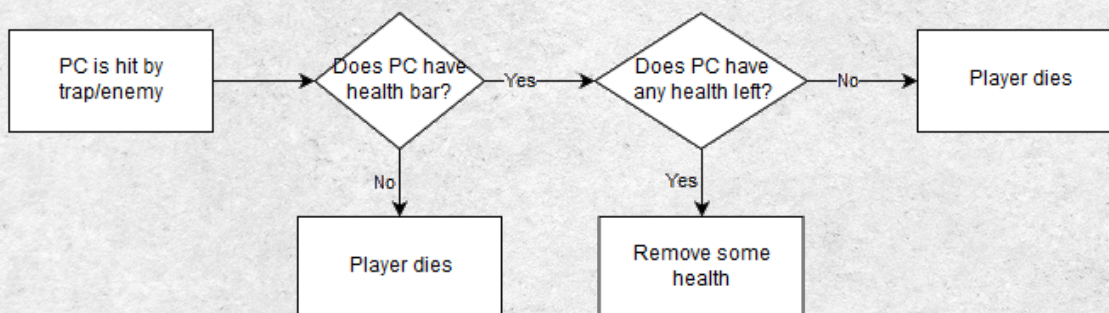
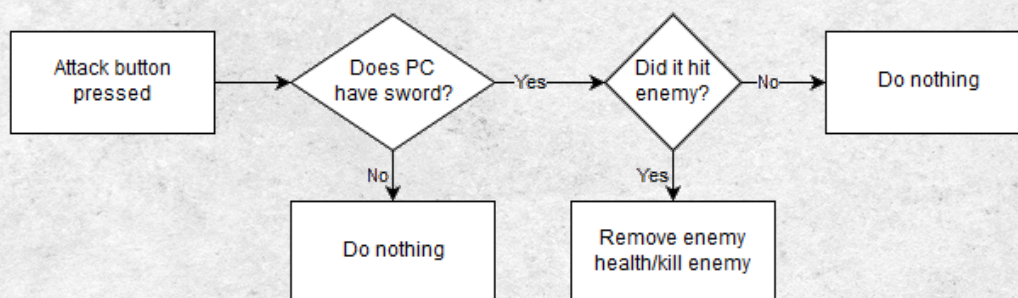
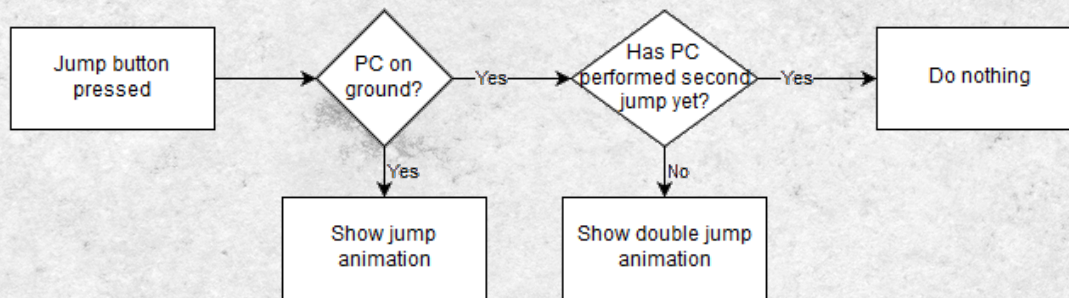
After awaking from her daze she starts hearing a voice, this voice tells her that she needs to find a sword to escape from the castle, and that without it the only thing she can do is to avoid the dangers along the way. In this world, Serah's physical abilities went beyond normal as she advanced through the castle, she did not know why but she was feeling better than ever.

Scattered throughout the castle Serah found some old looking notes, talking about a family of demon hunters whose duty was to protect the real world from a demon called Erebus. These notes mentioned that certain members of the family, those chosen to fight against Erebus, were connected by more than just blood and that their skills could be transferred between them in limbo where the castle is. After collecting all the notes Serah realized that her situation was worse than she expected, that her nightmares were caused by Erebus and she had to do something about it, after all, one way or another - that was the only way of going back home. Serah's determination had never been stronger.

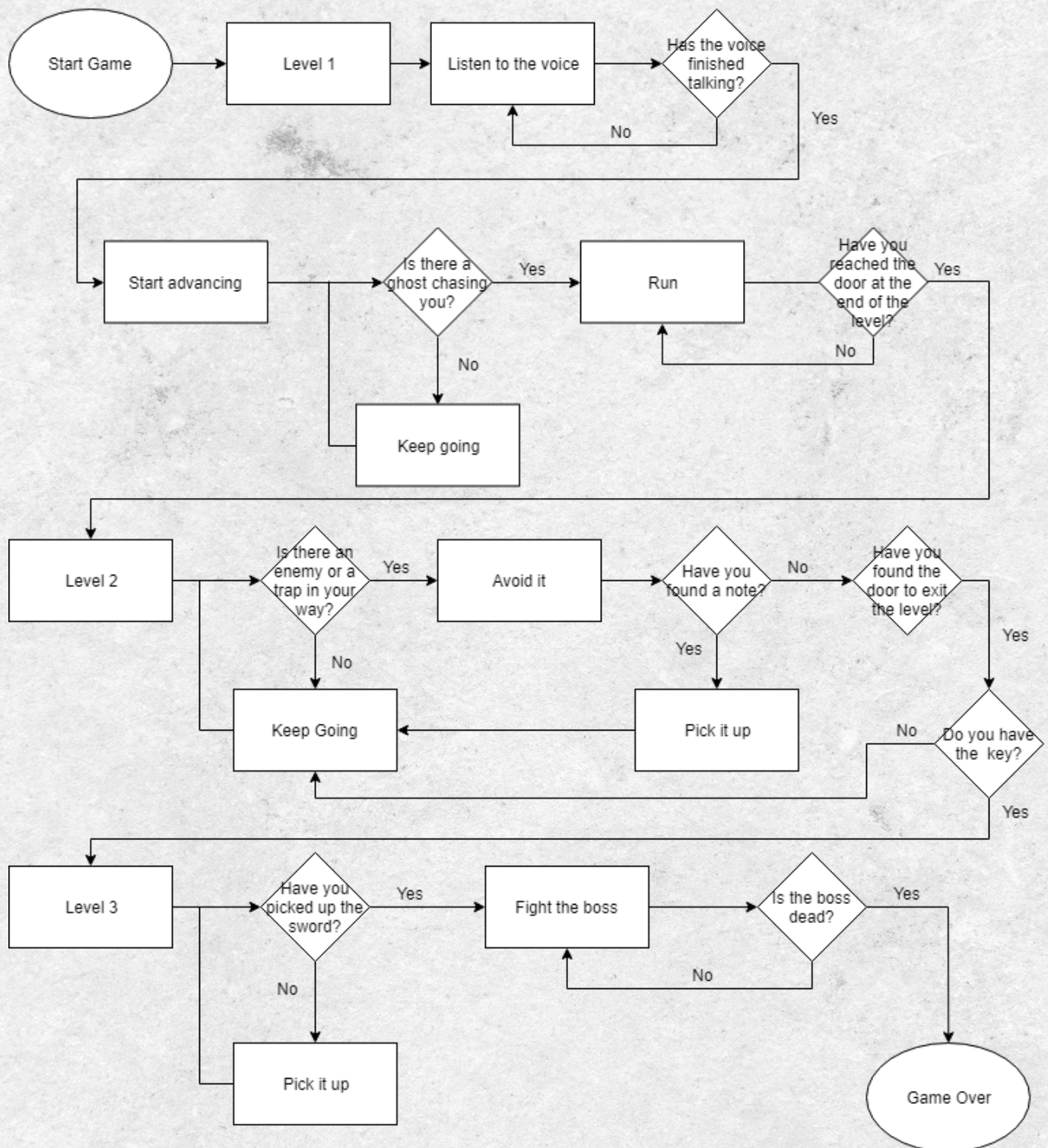
After finding the sword that the voice mentioned, Erebus appears in front of her. Erebus tried to shake Serah's determination by taunting her about not being as good hunter as her ancestors. However, Serah was completely aware of that - she did not have any knowledge whatsoever of the Netherworld, Limbo, Erebus, or even the secrets of her family until that day. But that did not change what she had to do: defeating Erebus. She was not really interested in the secrets of her family or in saving the world, that was just a bonus of defeating the demon. What she hated most was being disturbed in her sleep and, having had nightmares for just too long due to Erebus, she saw it as an opportunity to make him pay.

6.9 Flowchart

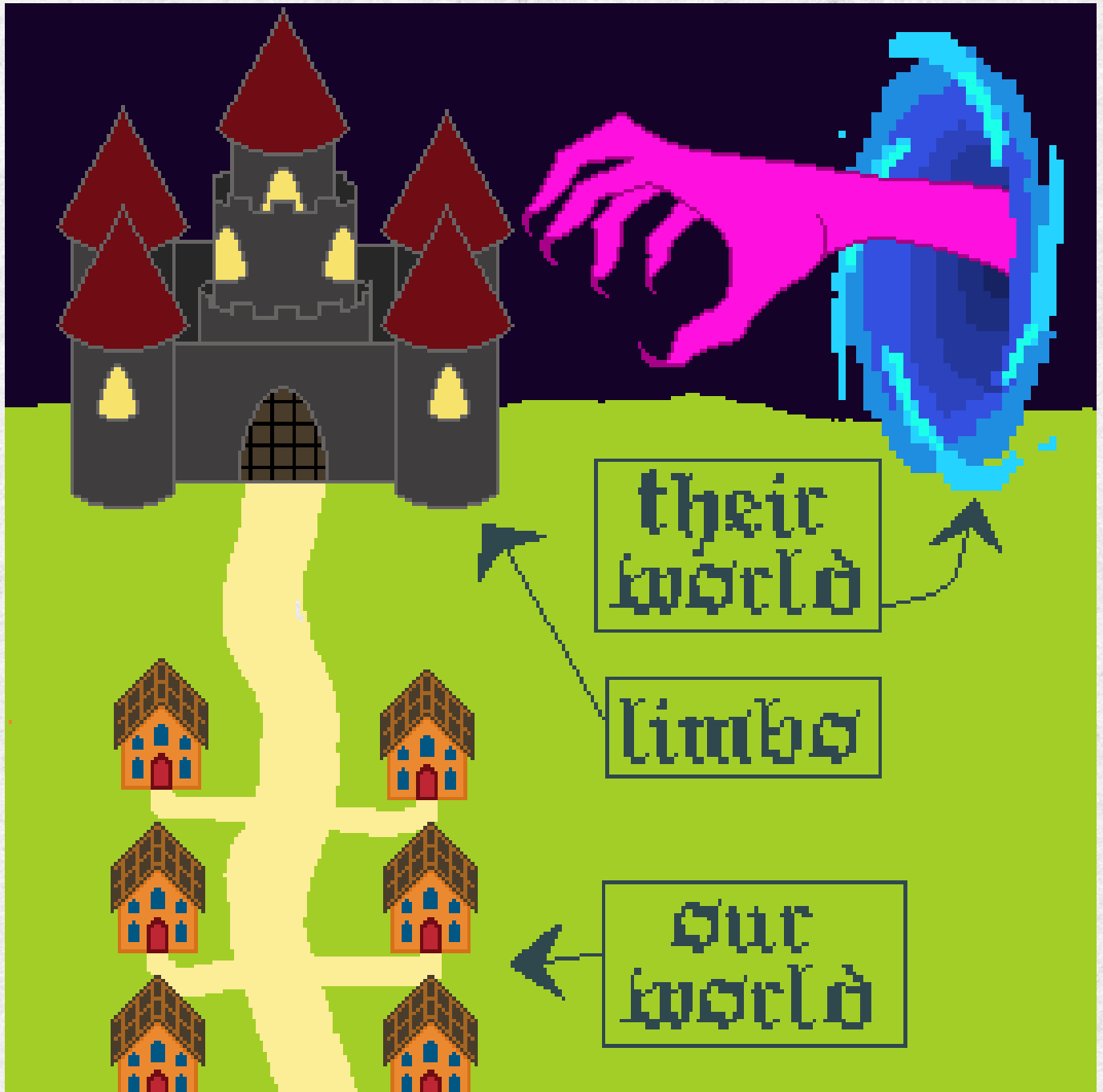
PLAYER



GAMEPLAY



6.10 Game World



The game is set in Serah's nightmare which is actually a dream world, or limbo, taking the form of a castle. This castle is the connection between the demons of the Netherworld and the human world. In here, it is perpetual night and the only human is Serah herself. The rest of the entities are ghouls, skeletons, and different kinds of demons moving from the Netherworld into limbo in the hopes of entering the real world unless Erebus is defeated.

The castle will have a medieval style and the overall style of the game will be dark and gloomy.

7 Required Media List

7.1 User Interface Assets

Title	Description
Bitmgothic	A gothic-style font.
Player health bar	Health bar with the form of a sword.
Combat icons	Small icons to know which abilities are available.
Boss Healthbar	Long health bar with multiple sections.

7.2 Environment Assets

Title	Description
Castle Interior	Stone floors and walls, wooden doors, platforms.
Castle Decoration	Chains, wall torches, stained glass windows.
Castle Exterior	Creepy night exterior.
Key	Old door key.
Sword	Epic sword.
Traps	Spikes.

7.3 Character-based Assets

Title	Description
Serah	Adventurer sprite.
Wraith	Ghost-like sprite.
Skeletons	Tiny skeleton sprite.
Erebus	Skeleton boss sprite.

7.4 Animations Assets

Title	Description
Player attack	Series of sword positions.
Player jump	Jumping from the ground.
Player double jump	Flip in the air.
Player defend	Defend stand.
Skeleton animations	Walk, death, idle and attack.
Boss animations	Walk, death, idle and attack.

7.5 Music Assets

Title	Description
Main menu	Piano only music.
Outside and Sword levels	Mystique music.
Level 1	Fast persecution music.
Level 2	Creepy music.
Level 3	Epic boss battle music.

7.6 Sound Effect Assets

Title	Description
Pick-up SFX	For they key and the sword.
Attack SFX	Sword swings.
Player hurt SFX	Female grunt.
Player death SFX	Female death.
Skeleton and Boss attack SFX	Monster like grunt.
Boss death SFX	Monster like howling to death.

8 Technical Specification

8.1 Development Platform and Tools

PC and SFML.

8.2 Delivery Mechanism

Github, Itch.IO and in personal portfolios through download link.

8.3 Game Engine

SFML with libraries already provided and self made libraries.

8.4 User Interface Technical Requirements

- 1920x1080.
- 1600x900.
- 1280x720.
- 1024x576.

8.5 Controls Technical Specification

- Keyboard and mouse.
- Controller.

8.6 Network Requirements

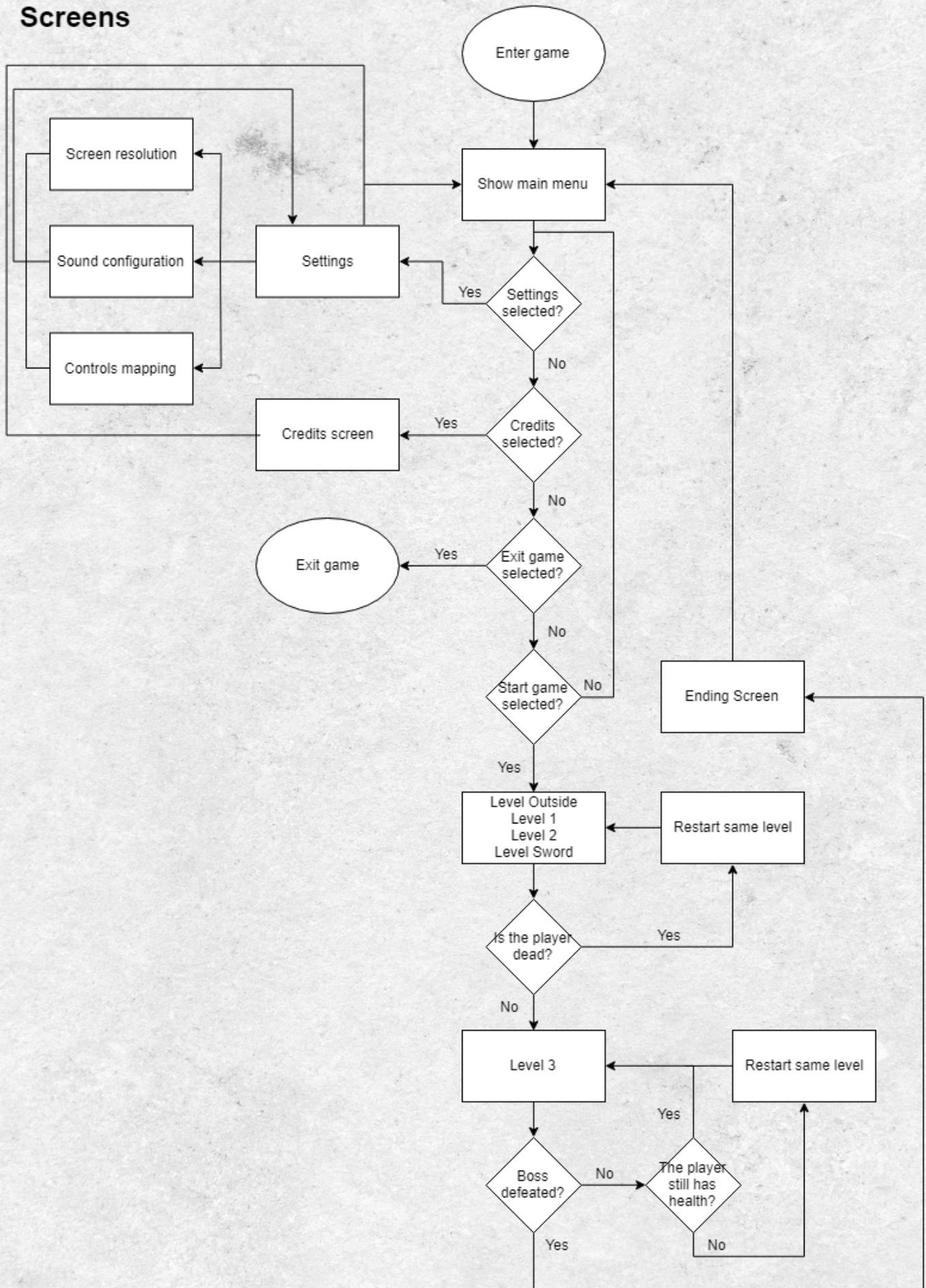
Standalone single player game.

8.7 System Parameters

Single player, offline game.

8.8 Flowchart

Screens



9 Assets references

Levels 1 and 3 music: <https://wingless-seraph.net/en/index>

Level 2 music: <https://opengameart.org/content/dungeon-theme>

Main menu music: <https://tungerman.itch.io/tearjerker-music-pack>

Mystique music: <https://freesound.org/people/lamburg/sounds/177831/>

Character voice: <https://jumpcut.itch.io/sdap>

Pick up sound effect: <https://freesound.org/people/TreasureSounds/sounds/332629/>

Sword attack sound effect 1: <https://opengameart.org/content/spell-4-fire>

Sword attack sound effect 2: <https://freesound.org/people/qubodup/sounds/59992/>

Sword attack sound effect 3: <https://freesound.org/people/nextmaking/sounds/86016/>

Sword attack sound effect 4: <https://freesound.org/people/nextmaking/sounds/86049/>

Boss roar: <https://opengameart.org/content/big-scary-troll-sounds>

Other boss sounds: <https://opengameart.org/users/ogrebane>

Button sound: https://freesound.org/people/cabled_mess/sounds/350859/

Boss health bar: <https://opengameart.org/content/enemy-health-bars>

Portal sprites: <https://elthen.itch.io/2d-pixel-art-portal-sprites>

Skeleton soldiers sprite: <https://jesse-m.itch.io/skeleton-pack->skeleton>

Boss sprite: <https://stensven.itch.io/>

Ghost sprite: <https://lionheart963.itch.io/>

Character sprite: <https://rvros.itch.io/animated-pixel-hero>

Sword alone sprite: <https://opengameart.org/content/fantasy-swords>

Level sprites: <https://ansimuz.itch.io/>