# Black Bones - Born to Evolve GAME DESIGN DOCUMENT



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# 1. Game overview

#### 1.1 Technical sheet

Name: Born to Evolve.

• Genre: Roguelike.

• Number of players: Single player.

• Language: English.

• Platform: PC.

### 1.2 Core concept

The core concept of our game is to combine the tension of survival in a hostile world with the fast-paced, strategic gameplay of roguelike adventures. Players assume the role of a lone feline navigating dangerous and changing environments to reunite with his species. The game focuses on overcoming small levels, in which players must overcome dangerous environments, confront territorial enemies and adapt to adversity through evolution. Success depends on strategic decision-making and learning from failure, creating an engaging and immersive experience focused on evolution, survival and the continuation of the species.

# 1.3 Synopsis

The protagonist of the game is a newborn feline who finds his nest empty, as its small species has migrated in search of better conditions to survive. Now, the little feline must cross hostile environments, from icy areas, dark caves, to acid-filled areas, facing predators and the adversities of the environment to reach the place where his species is sheltered.

As the feline progresses, it can evolve, improving its abilities to adapt to changing environments, but it also faces territorial enemies who share its struggle for survival. If it loses, it is reborn in its nest and must try again from scratch, hoping to find a better way to traverse the various environments in its path and save its species from extinction.

# 1.4 Topic and subtopics

#### **Evolution. Trial and error**

The game design is built around the idea of evolution and learning through failure:

- **Evolution:** The player improves character stats to adapt to changing environments. These improvements reflect the biological evolution necessary for survival.
- **Trial and Error:** Upon death, the player must restart from the nest, resetting their obtained upgrades but gaining experience over challenges along the way, ensuring a constant learning cycle.

#### **Extinction and rebirth**

The central narrative revolves around the struggle against the extinction of the protagonist's species. The rebirth after death reinforces the cycle of persistence, symbolizing the survival instinct and hope in the face of adversity.

#### **Paradox**

The game explores the paradox of survival, the protagonist must fight against other species to ensure his own, facing enemies similar to him.

An evolutionary paradox is also presented, as some upgrades may be useful in one environment but disadvantageous in another, forcing the player to make strategic decisions with consequences.

Furthermore, depending on how much you evolve, one ending or another will be unlocked.

#### **Emotional well-being**

The player has to balance between evolutioning to survive the extreme environments or try to avoid them in the default form.

If you don't evolve the necessary to adapt, your possible partner will not accept you as they don't see you as a strong candidate to reproduce.

If you evolve too much, your mental sanity is decreased as your mutation is not balanced with your wellbeing, making you aggressive towards other people (as having too many points used means that you spent them on evolving).

If you evolve the exact amount to be seen as an equal, your possible partner chooses you to reproduce. (You can still have lots of points but they should not be overspent in mutating).

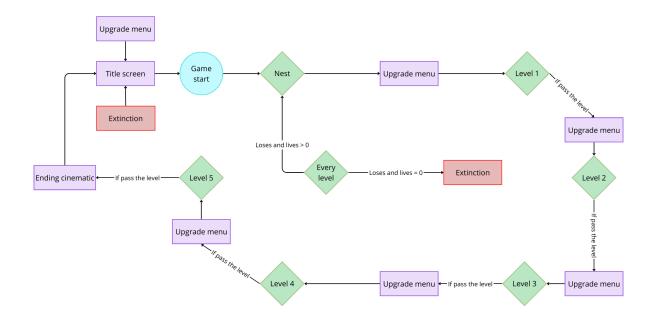
# 2. Gameplay

# 2.1 Gameplay loop

The main gameplay loop is to perform a run, in which the player has a limited number of lives to complete the 5 levels. Each level will have random adversities, which the player must deal with by using their skill points to gain resistance to these adversities.

- If the player dies but still has lives left, it can start the run from the beginning, and the
  levels will remain the same. The player will have its skill points reset, so it can try
  other combinations and change its strategy to improve its previous performance in
  the run.
- On the other hand, if the player dies and has no more lives, it will definitely lose and will have to start a new run from the beginning, where the levels will be random again.

#### 2.2 Gameflow



2.3 Combat system

• The player has one attack to damage his enemies. This attack is a short-range

horizontal attack, which is launched in the direction the player last faced.

• The enemy also has a close-range attack.

• When the enemy is hit, he receives a light knockback.

2.4 Win/Lose condition

The player must progress through 5 levels to complete the game.

• If the player loses in any of the levels, must start again from the first level.

2.5 In-game pause

• The player can use the button in the upper right corner to pause the game and

access the pause menu.

• Everything in the game will stop and a menu will appear showing three options:

Continue, Settings and Main Menu.

2.6 Save/Load

During the levels and in the character upgrade screen, there will be the option to go to the

title screen. This will save the information of the run the player was in before exiting, but it

will have to start from level 1. If the game is closed, this information will not be saved and a

new run will have to be started from the beginning.

2.7 Multiple endings

There are 3 different endings, and their appearance depends on the amount of evolution

points the character has used during its journey.

• Sad ending: With less than 10 evolution points implemented.

• **Happy ending:** Between 10 and 30 evolution points implemented.

• **Dark ending:** With more than 30 evolution points implemented.

2.8 Controls

Keyboard

WASD: Movement.

• Space: Attack.

5

# 3. Character

# 3.1 Description

The main character is a kind of feline creature resembling a cat or a small lynx. In addition to the typical feline features, it has a third eye on its forehead and a kind of fur scarf covering its neck. Its fur is pink and lilac colored.



# 3.2 Evolution system

The character's appearance varies depending on which resistance stat is the most enhanced.



# 3.3 Combat

- The player has 50 HP. The player has a speed of 5.
- The player's attack does 1 point of damage, so it must hit enemies 3 times to defeat them.
- When the character attacks, the following sprite is displayed:

#### 3.4 Stats

The player gets evolution points that he can use to improve his stats. The player gains 1 evolution point every 3 enemies defeated.

Improving these stats helps the player to better cope with the adversity found in different environments. The statistics that have been uploaded cannot be changed after accessing the level. The character will have 5 stats:

- Heat resistance.
- Cold resistance.
- Water resistance.
- Toxic resistance.
- Darkness resistance.

#### 3.5 Animations

The character will have 3 types of animations:

• Idle

• Walking

• Attacking

• Attacking

# 4. Levels

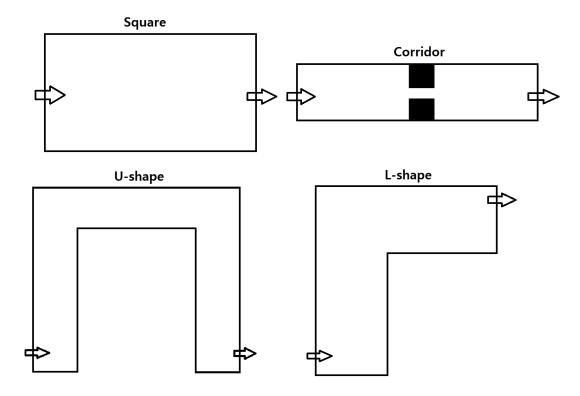
# 4.1 Level setting

- The player starts in its nest.
- To complete the game, you will have to complete 5 levels.
- At the beginning of each level, an environment is randomly assigned.
- The level 1 and 2 have 4 rooms, the level 3 and 4 have 5 rooms and the level 5 have 6 rooms.
- Each room has a random type.
- Each room has a random intensity.

#### 4.2 Rooms

There are 4 different types of rooms. Each type of room has a different shape:

- A square room.
- A long corridor-shaped room with a bridge connecting the two sides.
- An U-shaped room.
- An L-shaped room.



#### 4.3 Environments

There are 5 different types of environment. Each environment applies a disadvantage to the player that will remain for the entire level.

- Hot environment: Reduce the player's health per second.
- Cold environment: Reduce the player's movement speed.
- Aquatic environment: Reduce the player's movement speed.
- Toxic environment: Reduce the player's health per second.
- **Dark environment:** Reduce the player's vision range.

Depending on the **intensity** of each room, these disadvantages are more or less adverse. There are 3 levels of intensity.

	Intensity I	Intensity II	Intensity III
Hot environment	-1HP per second	-2HP per second	-3HP per second
Cold environment	-0.5 in speed	-1.5 in speed	-2.5 in speed
Aquatic environment	-0.5 in speed	-1.5 in speed	-2.5 in speed
Toxic environment	-1HP per second	-2HP per second	-3HP per second
Dark environment	Light range -1	Light range -2	Light range -3

Every environment and intensity is represented with an icon.



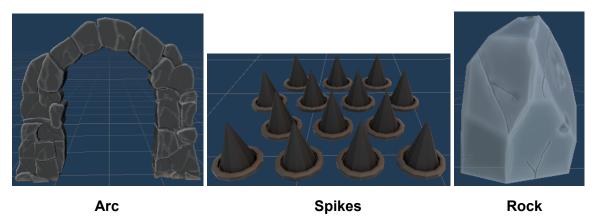
#### Intensity icons:



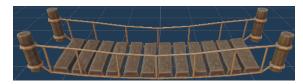
# 4.4 Assets

# **General assets**

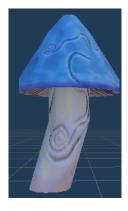
Assets used for various environments.



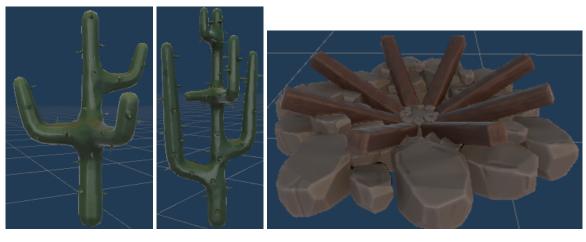
Bridge: Used only in corridor levels.



Mushrooms: Used in toxic and dark environments.

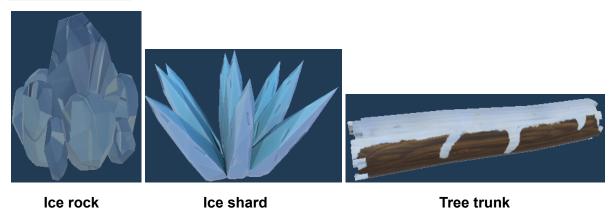


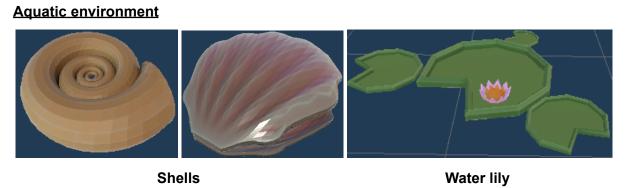
# **Hot environment**



Cactus Campfire

# **Cold environment**





# Dark environment



# 5. Enemies

# **5.1 Description**

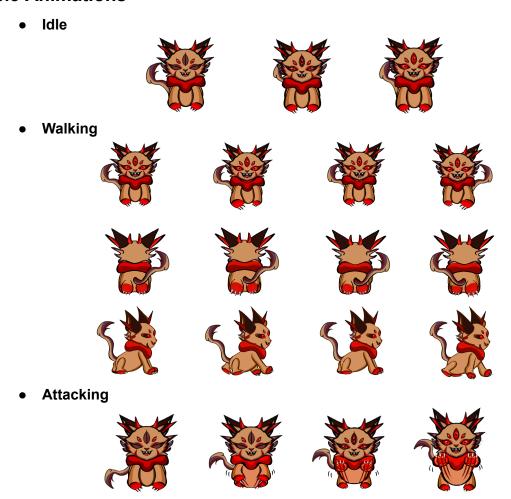
The enemies are creatures of a species quite similar to that of the protagonist. This species is very territorial and aggressive, and will confront anyone who stalks its territory. Unlike the protagonist, they have more eyes and their fur is more threatening, with sharp details.



#### 5.2 Combat

- The enemy has 3 health points.
- The enemy has only 1 attack, which does 1 point of damage to the player. The enemy also does 1 point of damage per contact.
- When the enemy is hit, it receives a light knockback.

#### **5.3 Animations**

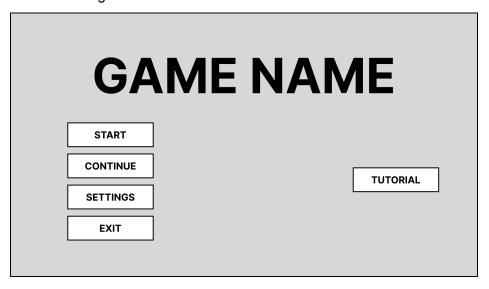


# 6. <u>User interface (UI)</u>

#### 6.1 Title screen

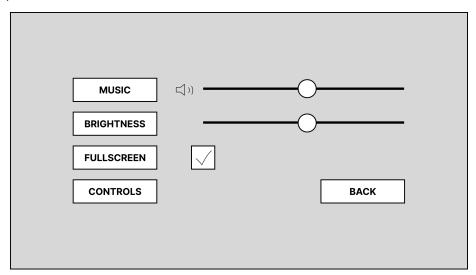
In the title screen, there are 5 buttons:

- Start: Start a run.
- **Continue:** Resume the run with the saved level information, but start again from the beginning.
- Settings: To open the settings screen.
- Exit: To exit the game.



# 6.2 Settings screen

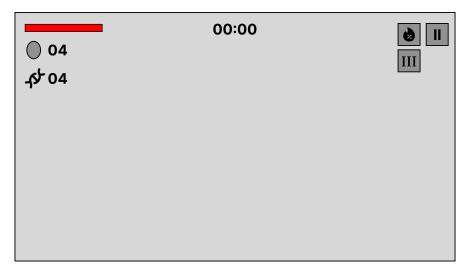
In the settings screen, the player can adjust the volume of the music and SFX, the brightness, and enable or disable the fullscreen.



#### **6.3 HUD**

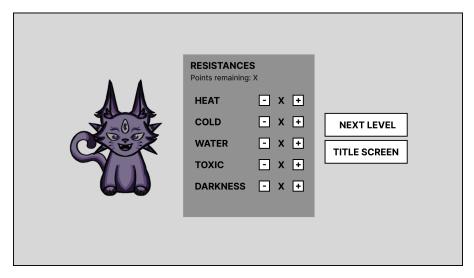
The HUD displays the following elements:

- On the left are shown the health bar, below it the number of total lives the player has left (represented by an egg), and below it the number of skill points that have been collected at the current level (represented by a DNA icon).
- The time the player has spent in the level is shown in the centre.
- On the right is an icon showing the type of environment, the intensity of the room and a pause button.



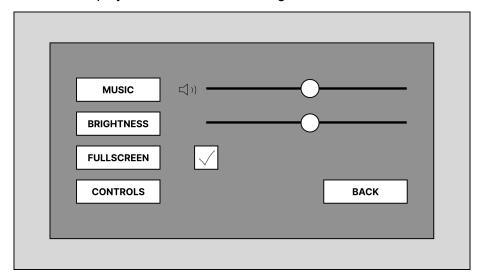
# 6.4 Stats upgrade menu

- On the left is the character's sprite and the list of the player's stats. Stats can be raised and lowered depending on the player's skill points. The character's sprite changes depending on the character's highest stats.
- On the right side, there are 2 buttons, one to advance to the next level and one to return to the Title Screen.



#### 6.5 Pause menu

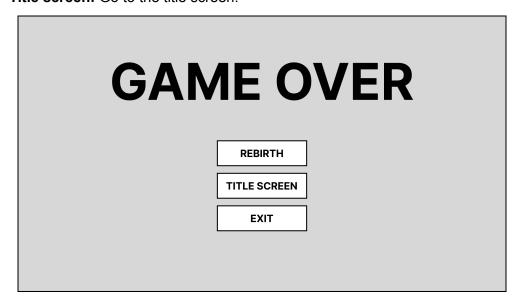
In the Pause menu, the player can access the settings.



#### 6.6 Loss screen

In the loss screen a 'Game Over' message appears. There are 3 buttons:

- **Rebirth:** Restart the run. (Only if the player have at least 1 lives)
- Settings: To open the settings screen.
- Title screen: Go to the title screen.



# 6.7 Win screen

The win screen will be the different cinematics for the different endings. The player has to click to advance the images.

Sad ending



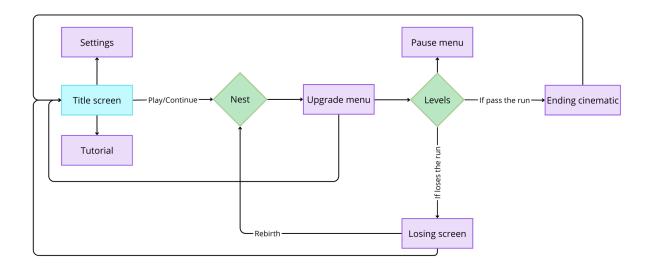
# • Happy ending



# • Dark ending



#### 6.8 Game menu flow



#### 6.9 UI Assets

#### **Game title**



#### **Box & button**



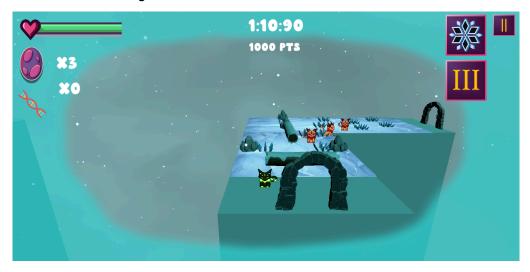
# **HP** Bar



**Egg:** Represent the player's remaining lives.



**Overlay:** It becomes more visible the stronger the intensity of the environment. Depending on the environment it changes color.



Title screen background



# 7. <u>Audio</u>

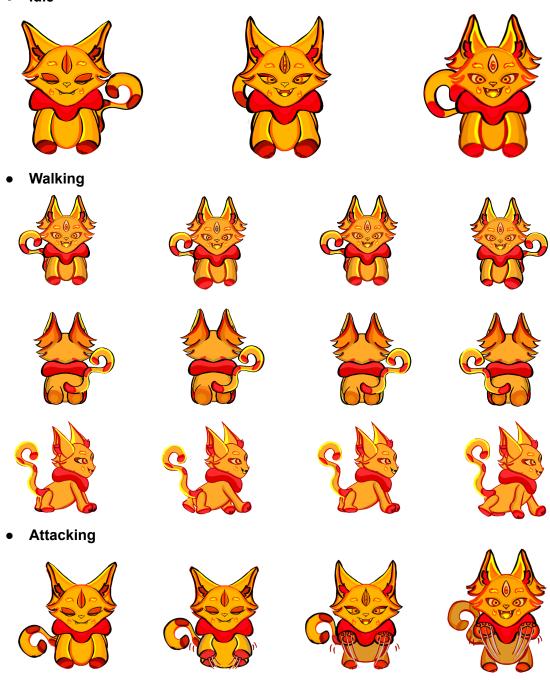
All the audios implemented in the game are third-party.

Asset	Description	Reference			
Music					
elegant-music-212148.mp3	Music for the Title screen.	elegant music   Música sin regalías - Pixabay			
harps-for-sunshine-liecio-ro driguez-109767.mp3	Music for the tutorial scene.	Harps for Sunshine-Liecio Rodriguez   Música sin regalías - Pixabay			
relax-9-174567.mp3	Music for the nest scene.	Relax 9   Música sin regalías - <u>Pixabay</u>			
kid-games-music-comedy-sit uation-soundtrack-play-arca de-283659.mp3	Music for the upgrade screen.	KID GAMES MUSIC / COMEDY / SITUATION / SOUNDTRACK / PLAY / ARCADE   Música sin regalías - Pixabay			
mistery-future-city-quest-223 588.mp3	Music for the levels.	Mistery future city Quest   Música sin regalías - Pixabay			
quiet-sleep-2-263254.mp3	Music for the losing screen.	Quiet sleep 2   Música sin regalías - Pixabay			
Sad Music.mp3	Music for the sad ending.	190923 - sad scene piano music / cinematic   Música sin regalías - Pixabay			
just-relax-11157.mp3	Music for the good ending.	Just Relax   Música sin regalías - Pixabay			
in-the-night-267247.mp3	Music for the dark ending.	In The Night   Música sin regalías - Pixabay			
SFX					
samurai-slash-6845.mp3	SFX for the player attack.	https://pixabay.com/es/sound-eff ects/samurai-slash-6845/			
Enemy01.wav	SFX for the enemies.	Very angry cat   Música sin regalías - Pixabay			
GetADN.mp3	SFX for when the player gets an evolution point.	https://pixabay.com/es/sound-eff ects/boost-100537/			

# 8. Annex

# 8.1 Character forms animations

# **Heat resistance**



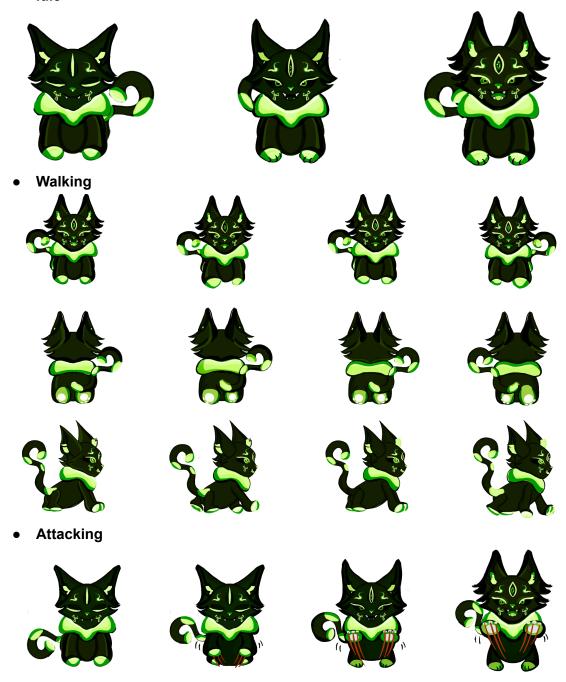
# Cold resistance



# Water resistance



# Toxic resistance

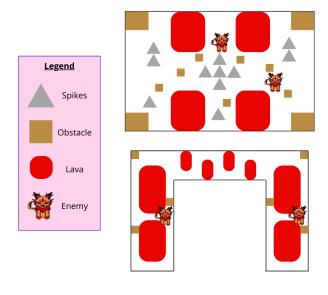


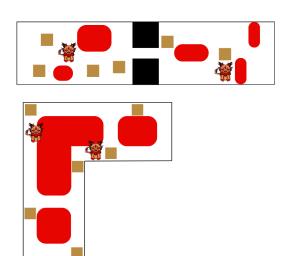
# Darkness resistance



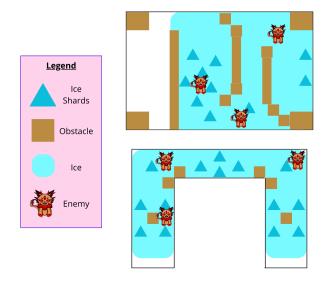
# 8.2 Levels design

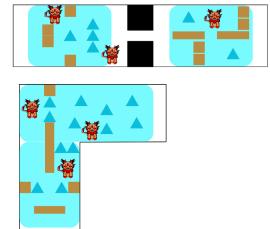
# Hot environment



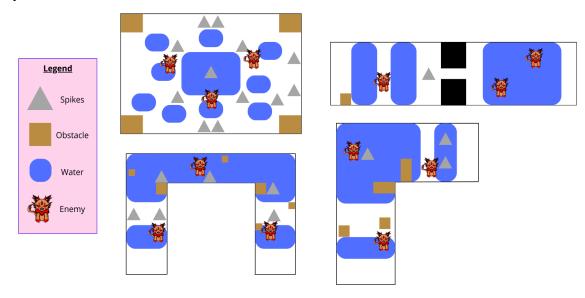


#### **Cold environment**

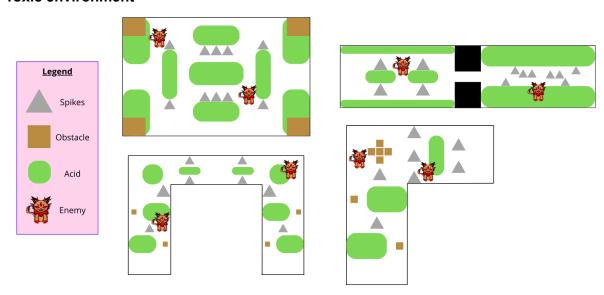




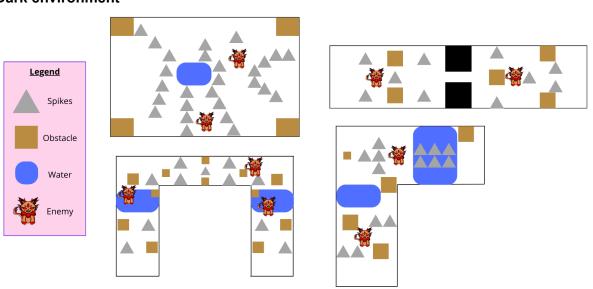
# **Aquatic environment**



# **Toxic environment**

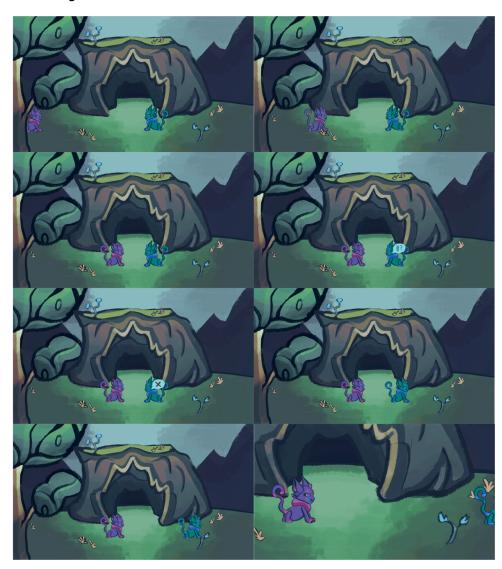


#### **Dark environment**



# 8.3 Different endings cinematics

Sad ending





# Happy ending





# Dark Ending





#### 8.4 Third-party assets

#### **Shaders**

- Fog: The fog has been made with a free image from the internet.
  - o Fog image link
- Lava, water puddle, acid puddle: All these assets have been made with a free image from the Internet.
  - Water image link
- Ice: The ice floor has been made with a free image from the internet.
  - o <u>Ice image link</u>

#### **Particles**

- Ashes, snow, rain, acid rain: All these particles were made with a free package in Unity Asset Store.
  - Hail Particles Pack | Environment | Unity Asset Store
- Campfire fire: The fire particles for the campfire are from a free package in Unity Asset Store.
  - o VFX URP Fire Package | Fire & Explosions | Unity Asset Store

#### **Font**

The font used in all the UI is a free for personal use font.

Waffle Cake Font | dafont.com

#### UI

The HUD DNA icon is a free internet icon.

ADN Icon link

#### <u>SFX</u>

All the sfx in the game are free assets from Pixabay.

Button\_09: https://pixabay.com/es/sound-effects/button-09-190435/

Sound Effect by <a href="https://pixabay.com/es/users/malwaa-42301087/?utm\_source=link-

attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=190435">มัลวาร์ มะดี เยาะ</a> from <a

href="https://pixabay.com/sound-effects//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=190435">Pixabay</a>

hover button: <a href="https://pixabay.com/es/sound-effects/hover-button-287656/">https://pixabay.com/es/sound-effects/hover-button-287656/</a>

Sound Effect by <a

href="https://pixabay.com/es/users/karim-nessim-40448081/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=287656">karim nessim</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=287656">Pixabay</a>

**Level win:** https://pixabay.com/es/sound-effects/level-win-6416/

Sound Effect by <a

href="https://pixabay.com/es/users/freesound\_community-46691455/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=6416">freesound\_community</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=6416">Pixabay</a>

WinDoot: https://pixabay.com/es/sound-effects/windoot-96335/

Sound Effect by <a

 $href="https://pixabay.com/es/users/freesound_community-46691455/?utm\_source=link-attribution\&utm\_medium=referral\&utm\_campaign=music\&utm\_content=96335">freesound\_community</a> from <a href="https://pixabay.com/es/users/freesound_community-46691455/?utm_source=link-attribution\&utm_medium=referral\&utm_campaign=music\&utm_content=96335">freesound_community-46691455/?utm_source=link-attribution\&utm_medium=referral\&utm_campaign=music\&utm_content=96335">freesound_community-46691455/?utm_source=link-attribution\&utm_medium=referral\&utm_campaign=music\&utm_content=96335">freesound_community-46691455/?utm_source=link-attribution\&utm_medium=referral\&utm_campaign=music\&utm_content=96335">freesound_community-46691455/?utm_source=link-attribution\&utm_content=96335">freesound_community-4669145/?utm_source=link-attribution\&utm_source=link-attribut$ 

href="https://pixabay.com/sound-effects//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=96335">Pixabay</a>

Slash: https://pixabay.com/es/sound-effects/slash-21834/

Sound Effect by <a

href="https://pixabay.com/es/users/666herohero-25759907/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=21834">666HeroHero</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=21834">Pixabay</a>

Slash1: https://pixabay.com/es/sound-effects/slash1-94367/

Sound Effect by <a

href="https://pixabay.com/es/users/freesound\_community-46691455/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=94367">freesound\_community</a> from <a

href="https://pixabay.com/sound-effects//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=94367">Pixabay</a>

Very angry cat: <a href="https://pixabay.com/es/sound-effects/very-angry-cat-101289/">https://pixabay.com/es/sound-effects/very-angry-cat-101289/</a>

Sound Effect by <a

href="https://pixabay.com/es/users/freesound\_community-46691455/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=101289">freesound\_community</a> from <a

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**Boost:** <a href="https://pixabay.com/es/sound-effects/boost-100537/">https://pixabay.com/es/sound-effects/boost-100537/</a>

Sound Effect by <a

href="https://pixabay.com/es/users/freesound\_community-46691455/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=100537">freesound\_community</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=100537">Pixabay</a>

Samurai slash: https://pixabay.com/es/sound-effects/samurai-slash-6845/

Sound Effect by <a

href="https://pixabay.com/es/users/freesound\_community-46691455/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=6845">freesound\_community</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=6845">Pixabay</a>

#### Music

All the music in the game are free assets from Pixabay.

**Just Relax:** <a href="https://pixabay.com/es/music/hermosas-obras-de-teatro-just-relax-11157/">https://pixabay.com/es/music/hermosas-obras-de-teatro-just-relax-11157/</a> Music by <a href="https://pixabay.com/es/music/hermosas-de-teatro-just-relax-11157/">https://pixabay.com/es/music/hermosas-de-teatro-just-relax-11157/</a> Music by <a href="https://pixabay.com/es/music/hermosas-de-teatro-just-relax-11157/">https://pixabay.com/es/music/hermosas-de-teatro-just-relax-11157/</a> Music by <a href="https://pixabay.com/es/music/hermosas-de-teatro-just-relax-11157/">https://pixabay.com/es/music/hermosas-de-teatro-just-relax

href="https://pixabay.com/es/users/music\_for\_video-22579021/?utm\_source=link-attributio n&utm\_medium=referral&utm\_campaign=music&utm\_content=11157">music\_for\_video</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=11157">Pixabay</a>

#### **Kid Games:**

https://pixabay.com/es/music/melodias-para-ninos-felices-kid-games-music-comedy-situation-soundtrack-play-arcade-283659/

Music by <a

href="https://pixabay.com/es/users/chakong-39837526/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=283659">Angel Chacón</a> from <a href="https://pixabay.com/music//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=283659">Pixabay</a>

Elegant music: <a href="https://pixabay.com/es/music/optimista-elegant-music-212148/">https://pixabay.com/es/music/optimista-elegant-music-212148/</a>

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href="https://pixabay.com/es/users/amadozapana-25778582/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=212148">amado zapana</a>

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campa ign=music&utm\_content=212148">Pixabay</a>

#### **Mystery future city quest:**

https://pixabay.com/es/music/techno-y-trance-mistery-future-city-quest-223588/ Music by <a

href="https://pixabay.com/es/users/land\_of\_books\_youtube-7733644/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=223588">Jimmy F.</a> from <a

href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=223588">Pixabay</a>

#### Quiet sleep 2: <a href="https://pixabay.com/es/music/ambiente-quiet-sleep-2-263254/">https://pixabay.com/es/music/ambiente-quiet-sleep-2-263254/</a>

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href="https://pixabay.com/es/users/pablogaez-23162048/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=263254">Pablo Gaez</a> from <a href="https://pixabay.com/music//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=263254">Pixabay</a>

#### Sad piano music:

https://pixabay.com/es/music/clasico-moderno-190923-sad-scene-piano-music-cinematic-1 43431/

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 $href="https://pixabay.com/es/users/welc0meu0-12042425/?utm\_source=link-attribution\&utm\_medium=referral\&utm\_campaign=music\&utm\_content=143431">WELC0MEU0</a> from <a$ 

href="https://pixabay.com/music//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=143431">Pixabay</a>

#### **Harps for Sunshine:**

https://pixabay.com/es/music/pulsos-harps-for-sunshine-liecio-rodriguez-109767/ Music by <a

href="https://pixabay.com/es/users/liecio-3298866/?utm\_source=link-attribution&utm\_medi um=referral&utm\_campaign=music&utm\_content=109767">LIECIO</a> from <a href="https://pixabay.com//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=109767">Pixabay</a>

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href="https://pixabay.com/es/users/emmraan-24732583/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=267247">Emmraan</a> from <a href="https://pixabay.com/music//?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=267247">Pixabay</a>

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href="https://pixabay.com/es/users/magentasix-40459079/?utm\_source=link-attribution&utm\_medium=referral&utm\_campaign=music&utm\_content=174567">MagentaSix</a> from <a

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