TALES OF THE ABYSS
GAMES DESIGN DOCUMENT

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GAME OVERVIEW

GAME CONCEPT

Tales of the Abyss is a 2.5D platformer game being made for the UNESCO brief. The game will start in the deep ocean, and explore how humans impacted the oceans environment for water life. The player must collect the spirit within each level to move on and get to the ocean shore.

GENRE & THEME

Genre:

- Platformer
- 2.5D

Theme:
Ocean

TARGET AUDIENCE

Age:
3+

Gender:
All

Race:
All

Language:
English (other collaborators native languages will also be considered)

Social-Grade:
E-C2 (Unemployed – Skilled Class)

VISUAL STYLING

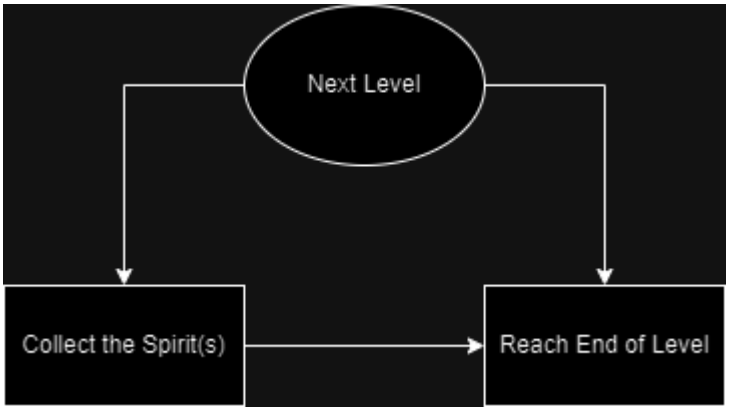
2D elements, heavy use of blues, and greens.

GAMEPLAY & MECHANICS

GAME PROGRESSION

The player must collect the soul in the level to progress to the next level. However, the levels scale in difficulty. Though, the player will receive new abilities to balance out the difficulty changes.

CORE GAMEPLAY LOOP



MISSION/STORY STRUCTURE

The game consists of four levels. Players cannot return to the previous level as the previous level destroys narratively. Players will traverse to the right, and upwards.

PUZZLE STRUCTURE

- Passing / Cutting the Source of Contaminated Water using physics
- Not being spotted by the submarine. Not being spotted by the mining bots.

OBJECTIVES

Collect the spirit, and reach the ocean shore to deliver a message to humans.

MECHANICS

Swimming:
8-Directional

Journal:
Can be opened and closed, and the player can turn pages via left and right arrow buttons on the screen (if page is unlocked). Pages are unlocked via journal triggers.

Camera Boundaries:
If the up/down/left/right value is reached by the camera, the camera will stop, else, the camera will follow the player. This stops the camera from showing the far edges of the map.

Breakable Wall
Will break on impact. This opens a path for the player.

Underwater Volcanoes:
Players must time their movement. Colliding with the volcano will respawn the player.
(Needs flowchart)

Respawn:
Spawns the player back to the current spawn point. This will turn off the character render and freeze the player, play a fade-in and fade-out animation, and allow the player to move again after reactivating the characters render.

Spirit Pickups:
The player must overlap with the spirit to unlock access to the next level. This is represented by the circular HUD on the top right. This allows the player to illuminate the level for 5-seconds.

Checkpoints:
When the player overlaps a checkpoint trigger, this will become their new spawn point.

Angler Fish (Implemented) / Mining Bots (To be implemented):
Moves between two points. Will rest when they reach a point. Will cause the player to respawn on contact.

Jellyfish:
Moves between two points. Upward movement is faster than downward movement. Will cause the player to respawn on contact.

Borders:
If the level does not contain walls, when players reach the far right of the map, the player will reach an invisible wall which they cannot pass.

Submarine:
Moves between two points, has a spotlight that shines down. If the player is caught in the spotlight, the player respawns.

Contaminated Water: (To be included)
If the player enters the green contaminated water, they will spawn at the start of the level.

Pause: (To be reimplemented)
- Resume
- Quit

Can't be used during cutscenes/non-playable moments.

Unlockable Abilities:

- Illuminate (increase the size of the players spotlight for 5-seconds) This needs limiting.

MOVEMENT

- Swimming

ACTIONS

Basic:

- Swim

Unlockable

- Illuminate
- Teleport (To be included)

GAME OPTIONS

Menu:

- Start
- Options
- Credits
- Feedback (playtest builds only)
- Quit

Options:

- Graphics
- Audio
- Controls

Graphics:

- Brightness
- Full Screen
- Quality
- Resolution

Audio:

- Audio Slider
- Music Mute (To be implemented)

Credits:

- Member Credits
- Asset Credits

Feedback:

- Name
- Feedback
- Send Button

REPLAYABILITY

Not designed to be replayable.

SAVING AND LOADING (TO BE IMPLEMENTED)

Starting the level saves the game. The Game can be loaded through the main menu with load game. The game can be reset with a new game. Player cannot go back to previous levels via gameplay.

FLOWCHARTS

https://1drv.ms/b/s!AtLp7yrRbBZqm7JNHc4ioxVaJ-p5SA?e=lamgNb

STORY, SETTING, & CHARACTER

STORY & NARRATIVE

The mermaid goes on an adventure from the ocean bed, to the ocean shore to deliver a message to the humans. During the mermaid's journey, they will meet companions and collect spirits. Along the way, the mermaid discovers how the actions of humans have deteriorated the ocean. After each level, the mermaid discovers that the ocean is deteriorating behind them. Finally, once the mermaid reaches the ocean shore, they discover the humans are gone.

CUT SCENES

Intro level, visually introducing the story. Intro cutscene on the first level showing that the player needs to collect the spirit. Non-playable ending movement to transition to the next level.

GAME WORLD

GENERAL LOOK & FEEL

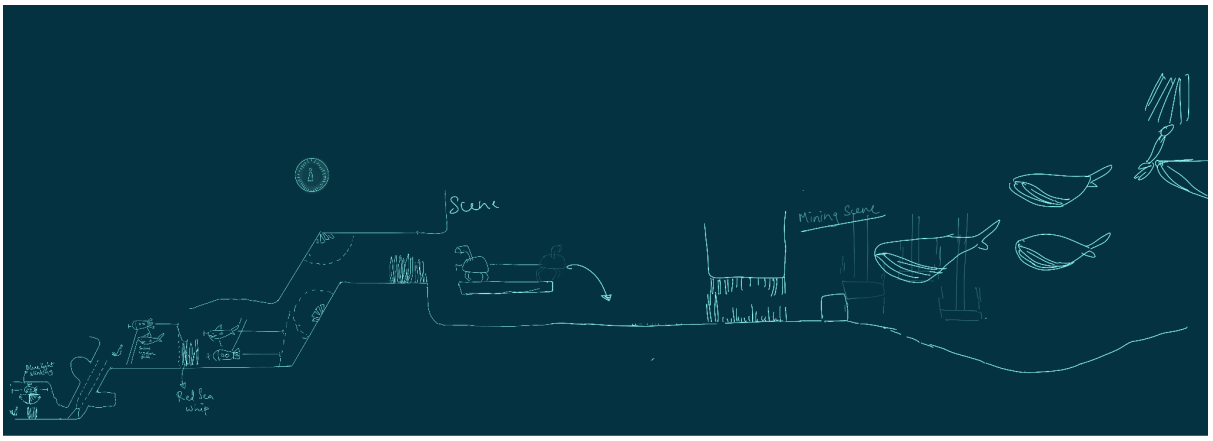
- Blue (Deep Ocean)
- Light Blue (Closer to the shore)
- Pink (Mermaid, spirit)
- Green (Contaminated water)

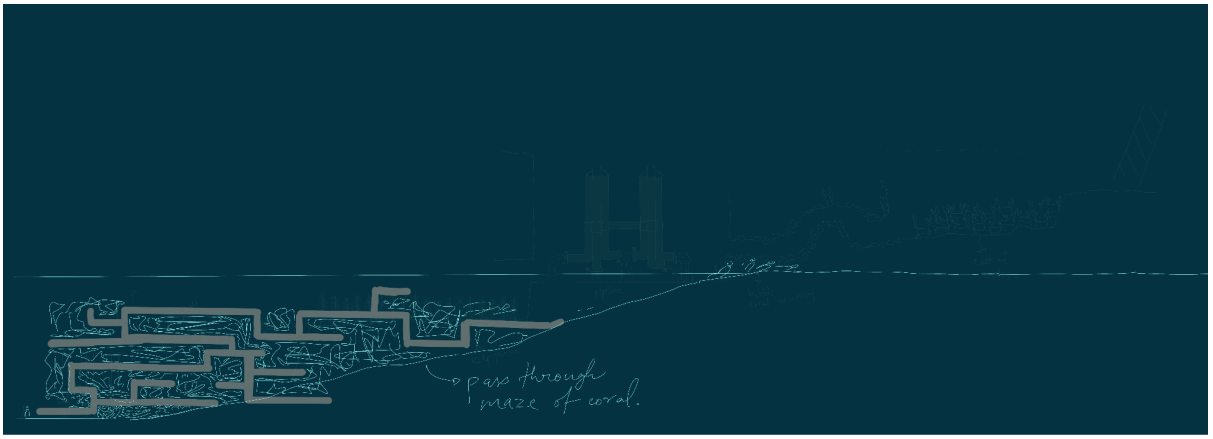
AREAS OF THE WORLD

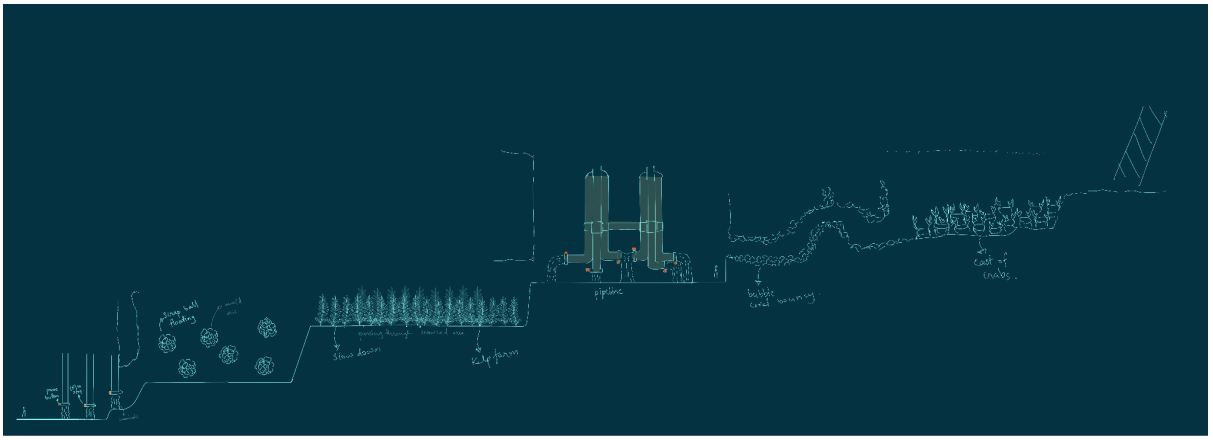
- Chemical Sea Area (To be implemented)
- Deep Ocean Cave
- Deep Ocean Mining/Industrial Area (To be implemented)
- Ocean Fishing Area (To be implemented)
- Ocean Shore (end, to be implemented)

2D Level Layout

USS
Johnston
shipwreck.
Atoka jellyfish.
avoid it.
Bg
obstacle
+
chem.
Hide behind.
foreground.
Tube worms


Scene
Mining Scene
Red Sea
whip


pass through
maze of coral.


pipeline
bubble
coral bouncy.
cast of
crabs.
Slow down
Kelp farm

CHARACTERS

PLAYABLE CHARACTERS

Mermaid

NON-PLAYABLE CHARACTERS

- Anglerfish
- Danio
- Glowing Plants
- Jellyfish
- Sharks
- Submarines
- Tetra

LEVELS

LEVELS

1. Main Menu
2. Intro

3. CHAPTER 1 - (DEEP)
    - Deep sea cave (dark, peaceful, Spirit light, glowing fishes)
    - Makes player comfortable about the basic controls (running, jumping, crouching, pushing, pulling)
    - Wall carving tells our mission about collecting ocean spirit and getting on shore.
    - Fish soul 1 met - Intro to boost swim

    - Specific fauna used to jump more or see more (using deep sea plants)
    - Hurdles - Underwater volcanoes (time well and avoid / use it to go through objects)

4. CHAPTER 2 - (MINING, TO BE IMPLEMENTED)
    - Deep ocean mining machines (dark, chaotic, large fishes, ocean bed destruction) - industrial equipment and all.
    - Shaky platforms
    - Path extender (move fish spirit to specific spot that will create a path made of specific fauna/bubble/something that can help to walk)
    - Intro to mining bots (mini enemy) - if spotted by them the player gets killed.
    - Use fauna / equipment to hide from bots.
    - Meets Fish soul 2 - more jump boost - travels to higher ocean level.

5. CHAPTER 3 - (TOXICITY, TO BE IMPLEMENTED)
    - A bit brighter sea with large fishes and dead fishes in background (chemical scraps in environment)
    - Move fish spirits to specific spots and unlocks paths or get more
    - Chemicals flowing are toxic and contact with them is harmful.
    - Some areas need to be cleared so that the player can go there.
    - Use fish spirit to revive fauna

6. CHAPTER 4 - (FISHING, TO BE IMPLEMENTED)
    - Lots of fishing (nets, hooks, bots fishing)
    - Set some fishes free without getting caught
    - Meet Fish soul 3
    - After setting free, bots get behind you chasing you.

7. CHAPTER 5 - (SHORE, TO BE IMPLEMENTED)
    - After chase using all 3 Fish Spirit to swim up

- Gets on shore

8. END

INTERFACE

VISUAL SYSTEM

- Collect spirit shown on the top right of the screen
- Post-Processing for spawning back at start (fade to black)
- Post-Processing for mining bot chase (flashing red, to be implemented)

CONTROL SYSTEM

Starting Controls:

- Swim = A, S, W & D OR Left, Down, Up & Right Arrow OR Gamepad Left Stick X-Axis = Move
- Journal Toggle - Tab

Ability Controls:

- Pathway = E OR Gamepad Face Button Left (PS: X / XBOX: B)

AUDIO, MUSIC, AND SOUND EFFECTS

Music:

Connor Hawthorne
Copyright Free Music Underwater Level Platformer.
https://www.youtube.com/watch?v=8sjrJNUmBew

SFX:

Free Audio & Sound Effects Channel
Water Splash Bucket Sound Effects | Best Quality HD - Free Audio & Sound Effects No Copyright

Free Sound Effects
Underwater Bubbles - Sound Effect

SFX sounds
Brick wall broke - sound effect - [High quality]

Sound Effects - No Copyright & Free Download
Scribble Sound Effect - Free Download & No Copyright

Sound Effect Database
Game item Pickup Sound Effect

sound effect LNC
Page Flip Sound Effect No copyrhgt ...sound effect LNC

SOUNDS HUB
Underwater Ambience: Royalty Free Sounds

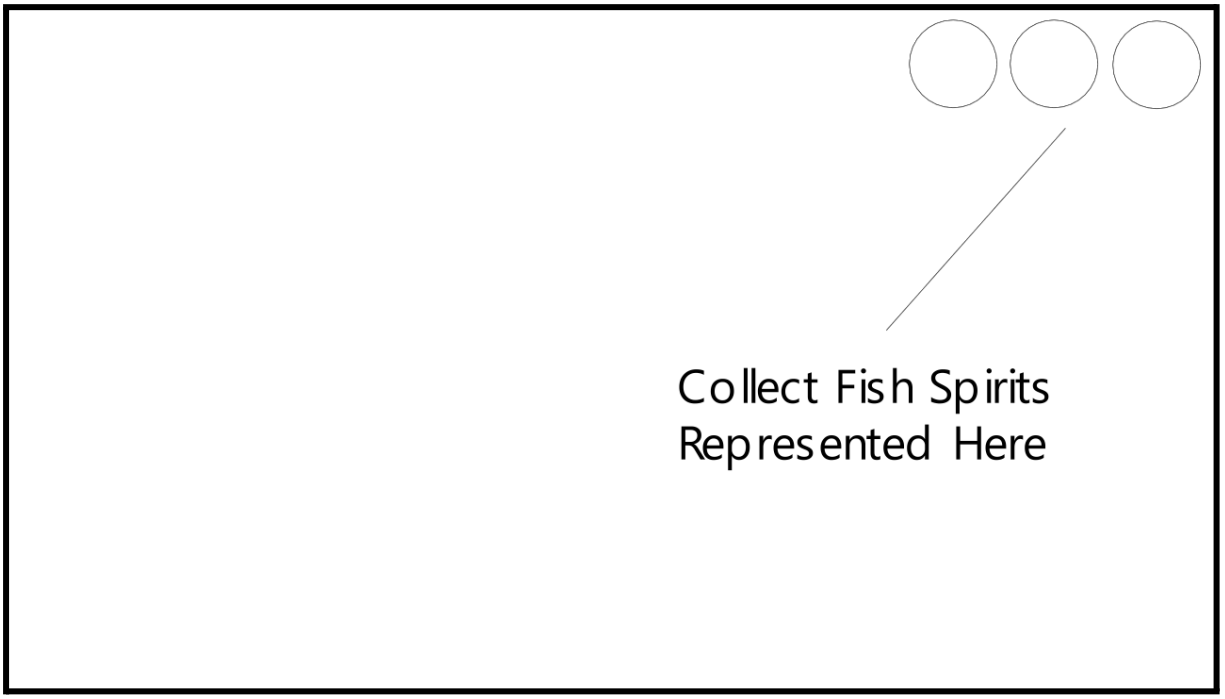
The Editors Haven
ROYALTY FREE SFX | Hardback Book Close

HELP SYSTEM

Help text will appear on the top of the screen, the first time for:

- Spirit
- Journal

HUD LAYOUT



ARTIFICIAL INTELLIGENCE

ENEMY AI

- **Angler Fish**
- **Jellyfish**
- **Mining Bots (can't enter crouch areas, to be implemented)**
- **Submarine W/ Spotlight (To be implemented)**
- **Underwater Volcanoes**

FRIENDLY AI

- **Danio**
- **Shark**
- **Spirit (to be implemented)**
- **Tetra**

TECHNICAL

TARGET HARDWARE

Steam (Most Popular)

- PC Windows
- Windows 10 64 bit
- 16 GB System RAM
- Intel Core i5-10400F 10th Gen Processor OR AMD Ryzen 3 4100
- NVIDIA GeForce RTX 3060
- 8 GB VRAM
- 1920 x 1080 (Screen Resolution)

Windows, Mac and Linux — Use the dropdown to filter by platform or view combined stats.

December 2023 (click line item to see more detail)

ITEM	MOST POPULAR	PERCENTAGE	CHANGE
OS Version	Windows 10 64 bit	53.45%	-0.08%
System RAM	16 GB	48.53%	-1.35%
Intel CPU Speeds	2.3 Ghz to 2.69 Ghz	21.02%	-0.13%
Physical CPUs	6 cpus	32.11%	+0.23%
Video Card Description	NVIDIA GeForce RTX 3060	5.13%	+0.24%
VRAM	8 GB	31.67%	+0.44%
Primary Display Resolution	1920 x 1080	59.58%	-0.51%
Multi-Monitor Desktop Resolution	3840 x 1080	59.02%	-1.00%
Language	English	36.92%	+0.90%
Free Hard Drive Space	100 GB to 249 GB	22.76%	-0.70%
Total Hard Drive Space	Above 1 TB	52.75%	+0.76%
VR Headsets	Oculus Quest 2	37.87%	-2.58%
Other Settings	LAHF / SAHF	100.00%	0.00%

University Computer (Room M310)

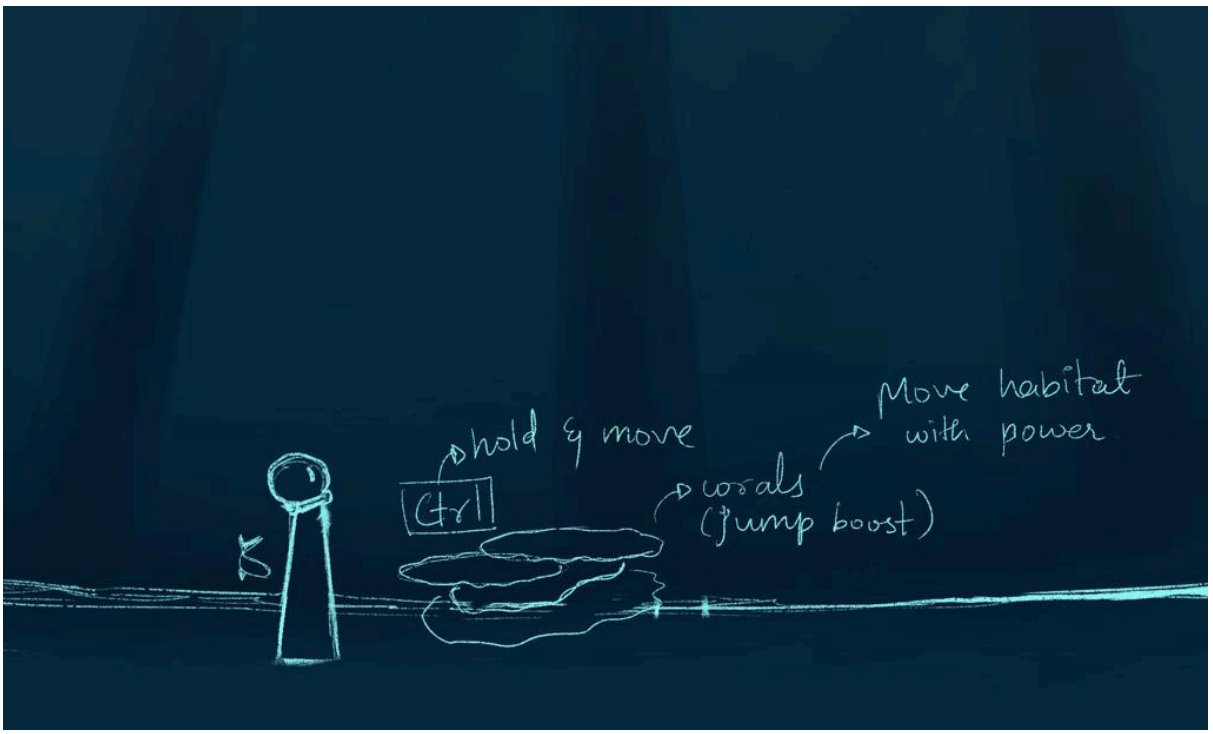
- PC Windows
- Windows 11 Enterprise 64-Bit
- 16 GB System RAM
- Intel Core i7-11700 11th Gen Processor
- NVIDIA GeForce RTX 3070
- 8 GB VRAM

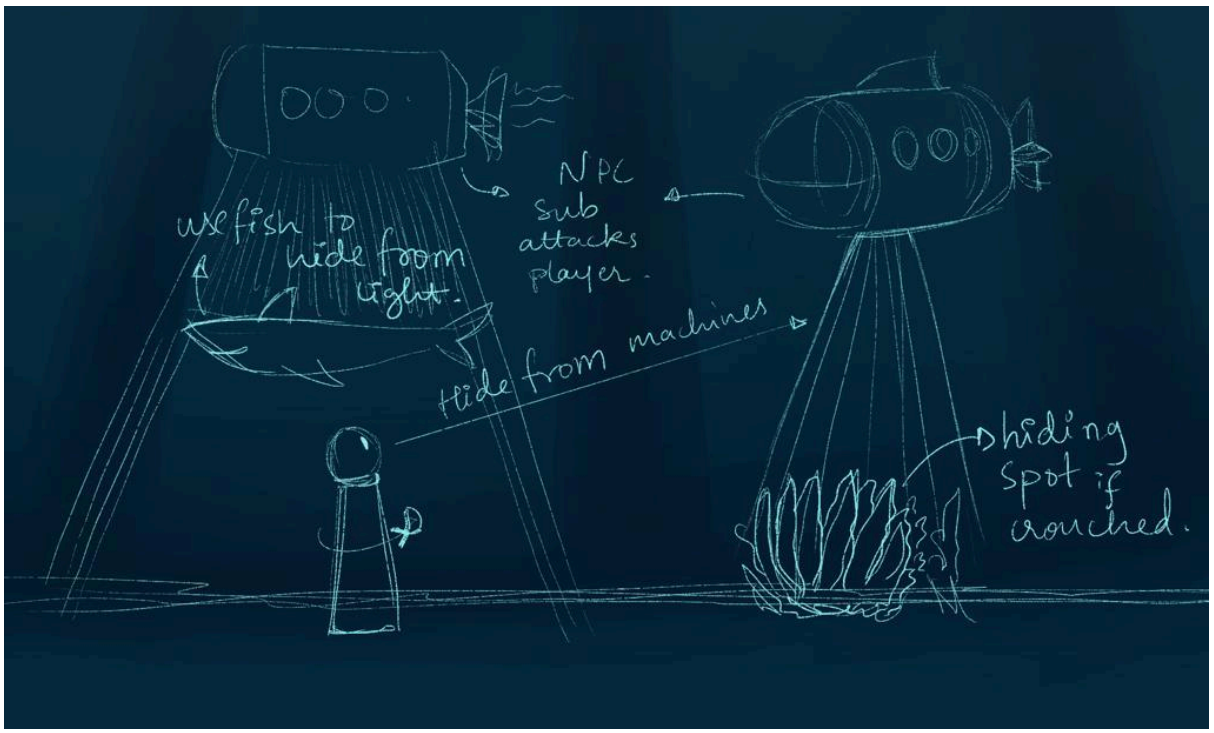
DEVELOPMENT HARDWARE & SOFTWARE

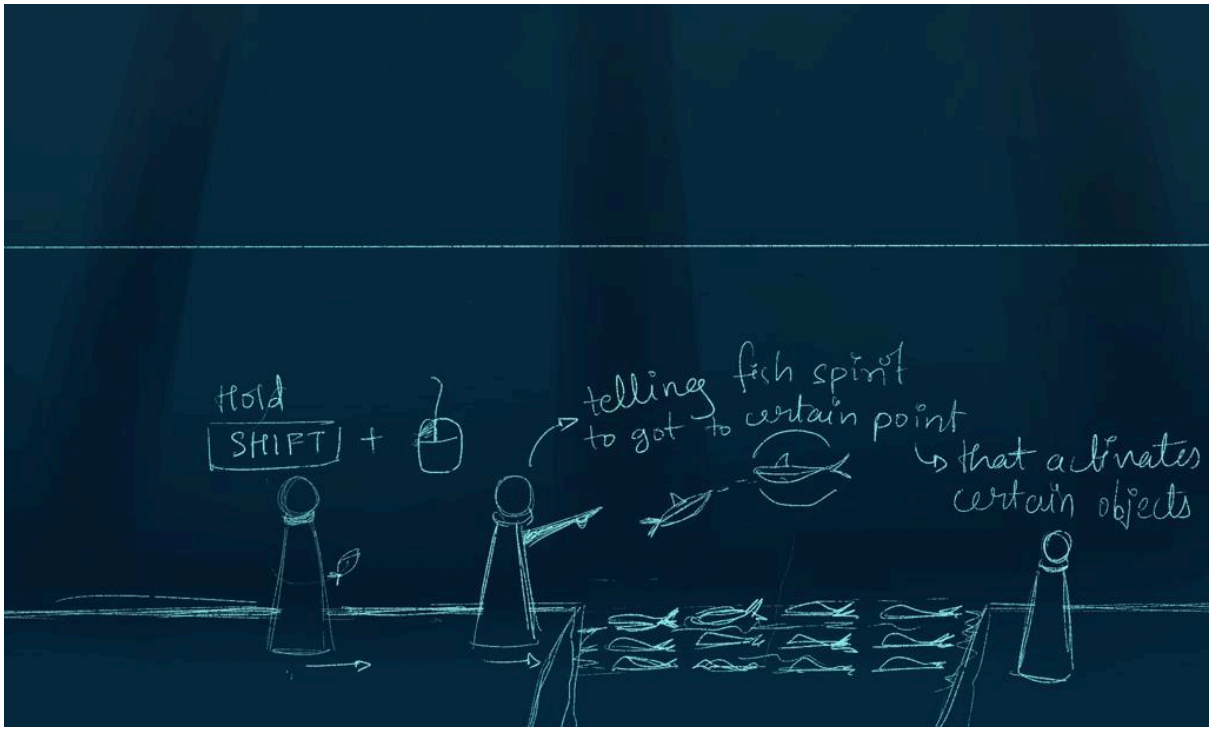
- Unity 2022.2.9f1 (Game Engine)
- Jira (Agile Game Development)
- Miro (Asset Organisation)
- NVIDIA GeForce Experience (Video Recording)
- Adobe Premiere Pro CC 2024 (Video Editing)
- DaVinci Resolve 18 (Video Editing)
- Maya
- Adobe Effects
- Blender
- Adobe Animate
- Adobe Photoshop
- Krita

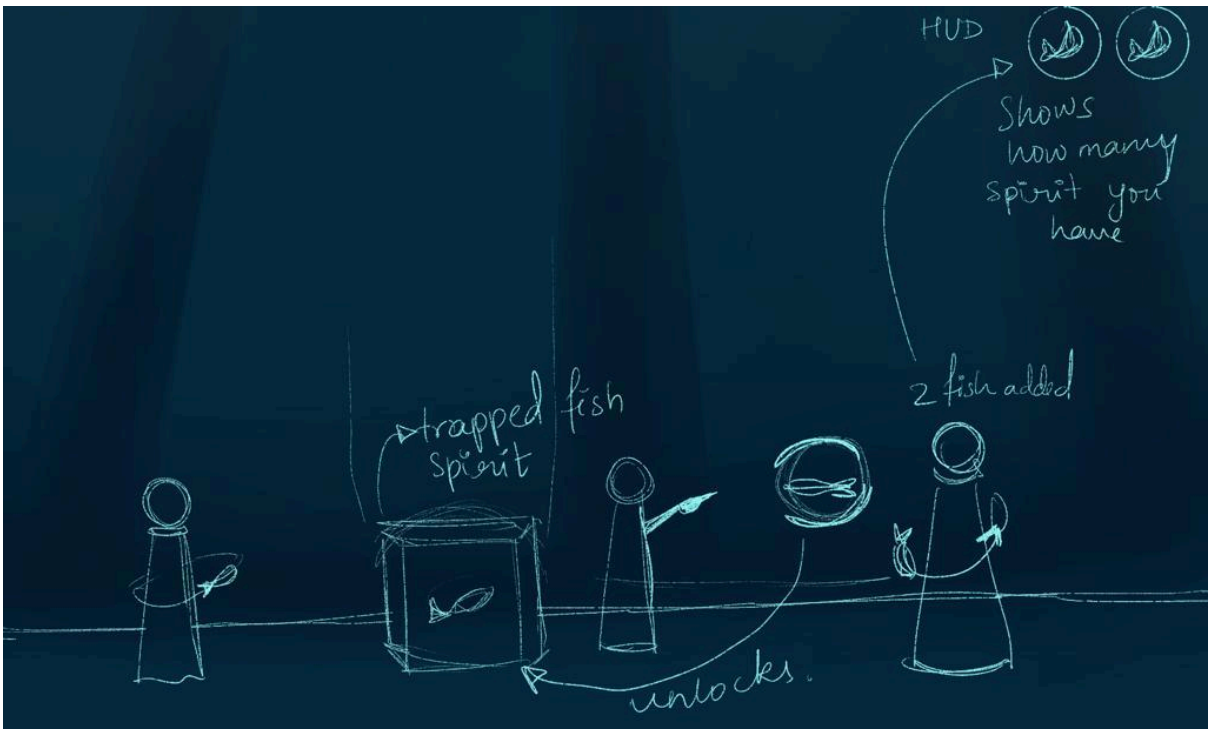
GAME ART

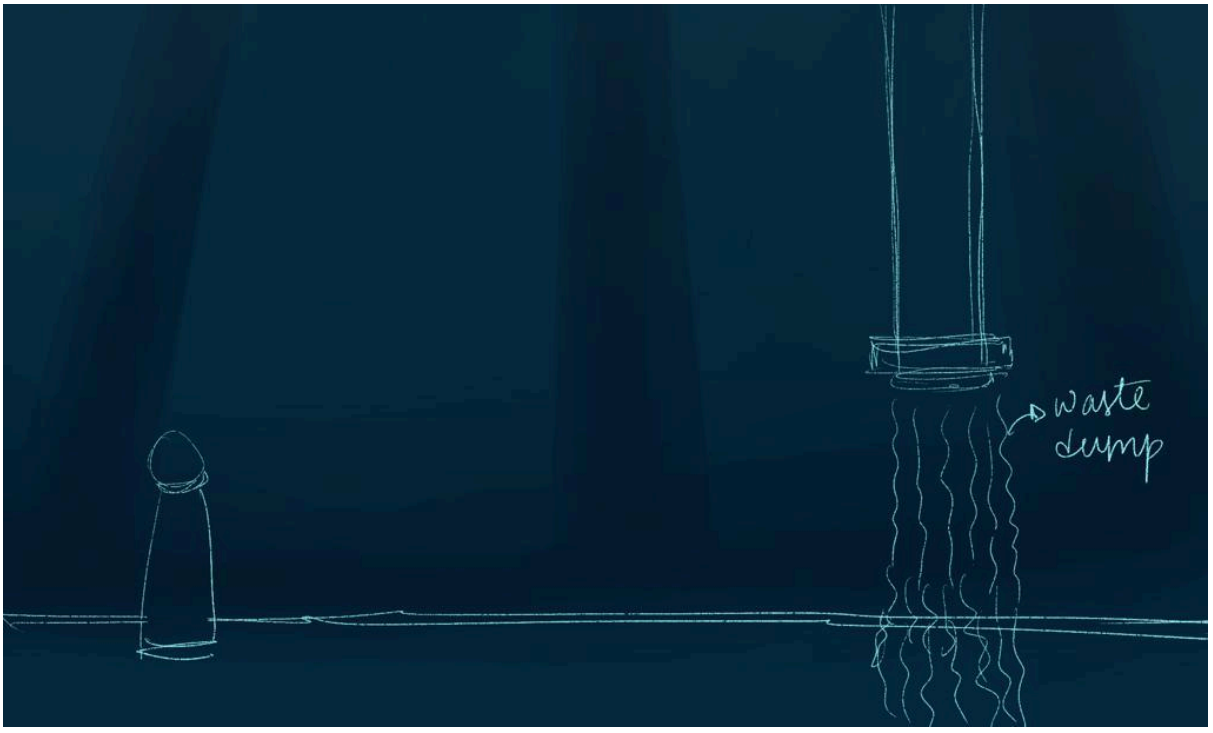
CONCEPT ART

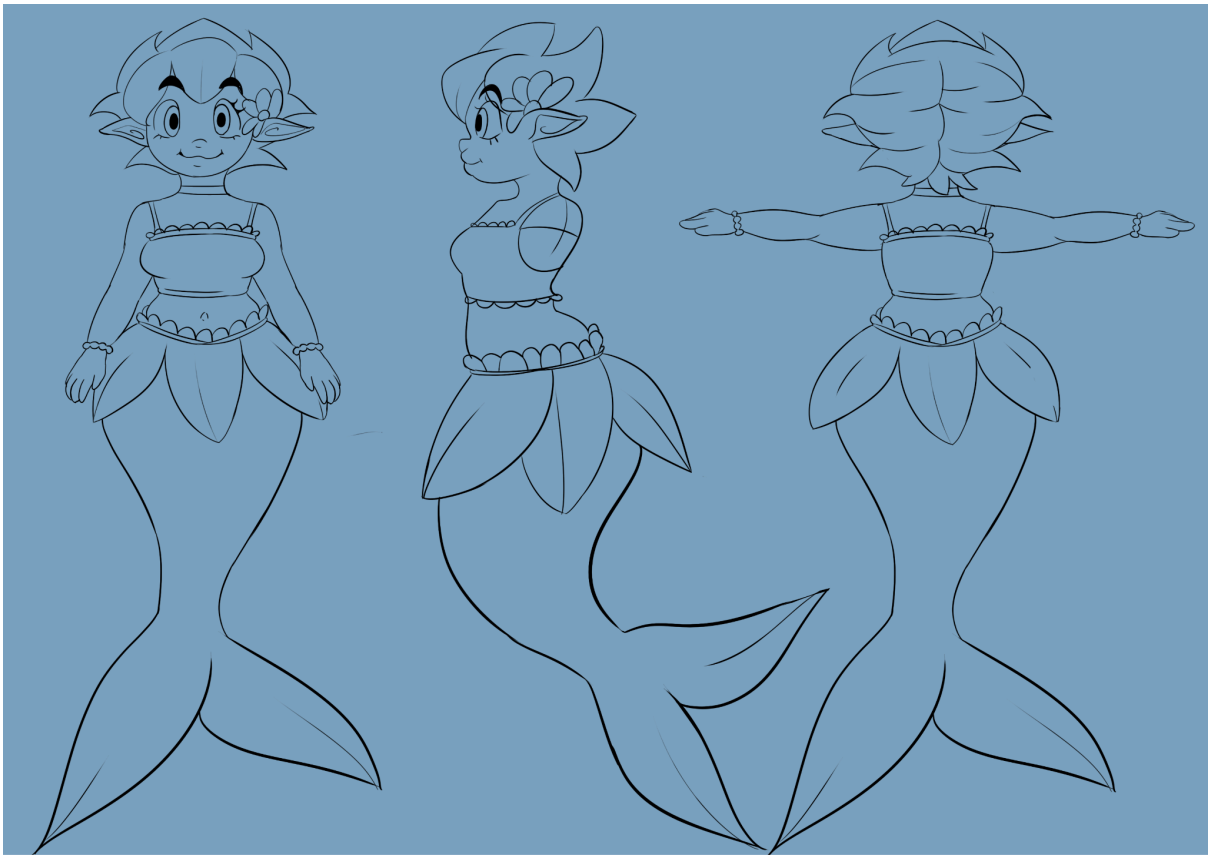


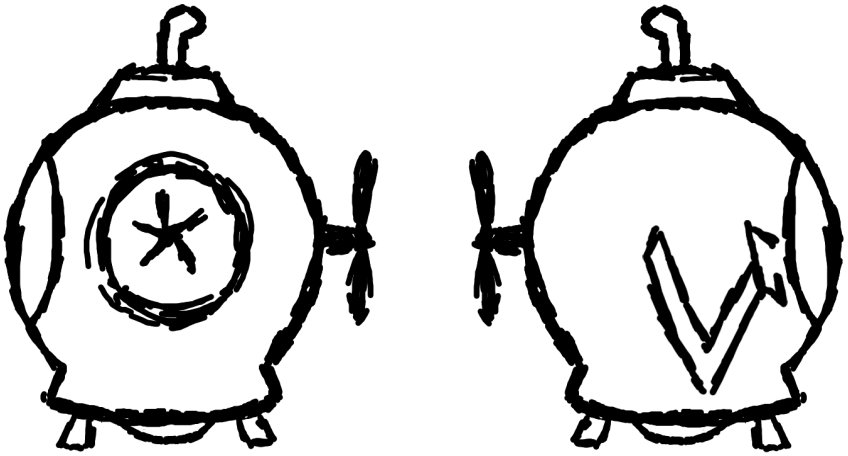

use fish to hide from light.
NPC sub attacks player.
hide from machines
hiding spot if crouched.

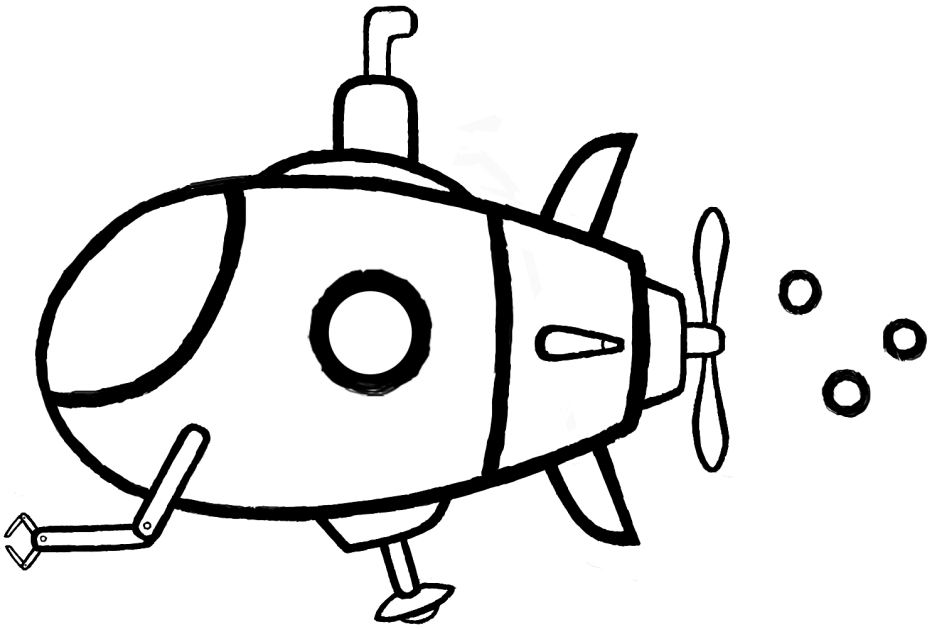

Hold
SHIFT
+
telling fish spirit to go to certain point
that activates certain objects

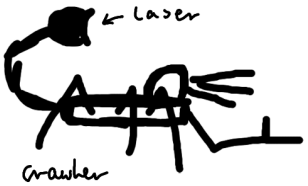

HUD
Shows how many spirit you have
trapped fish spirit
2 fish added
unlocks.


waste dump









scorpion version

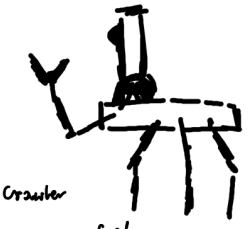
small jets

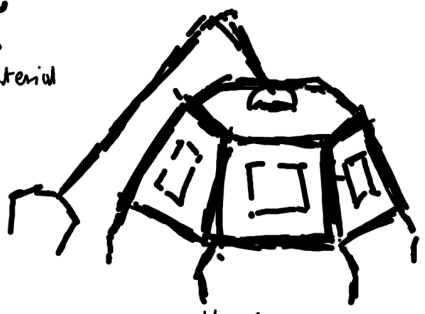
on the lookout

bursts up, turns 360, scans, falls down

working on walls

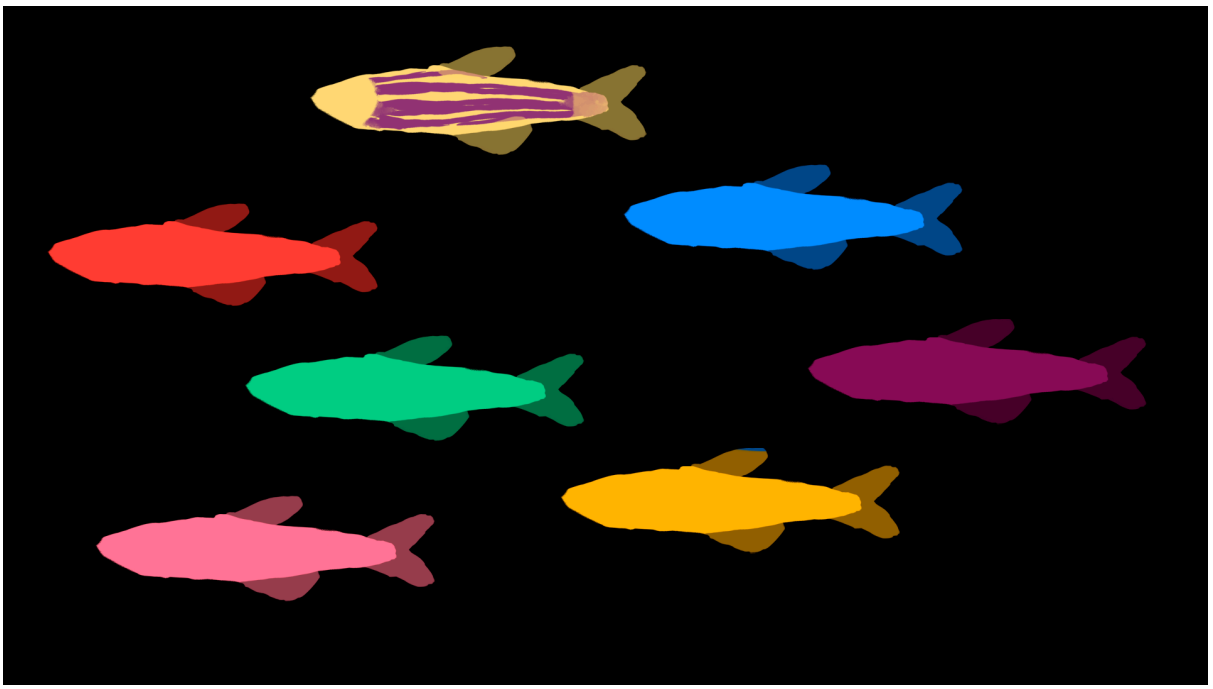
crushing the material

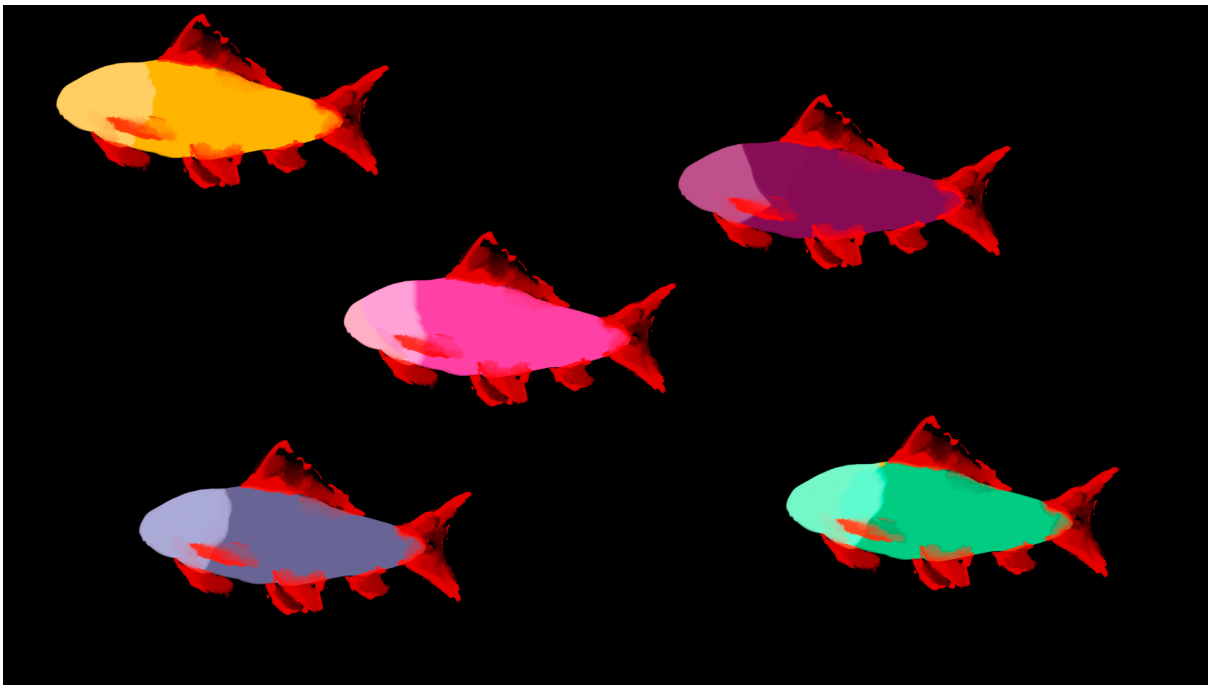


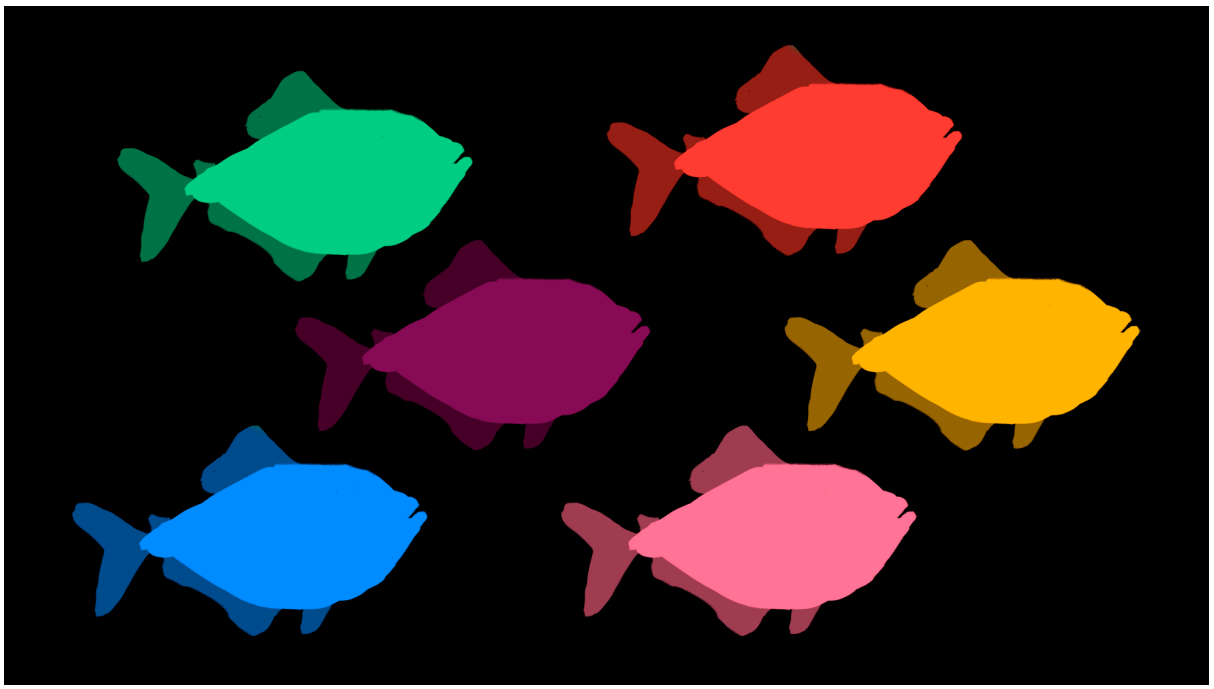


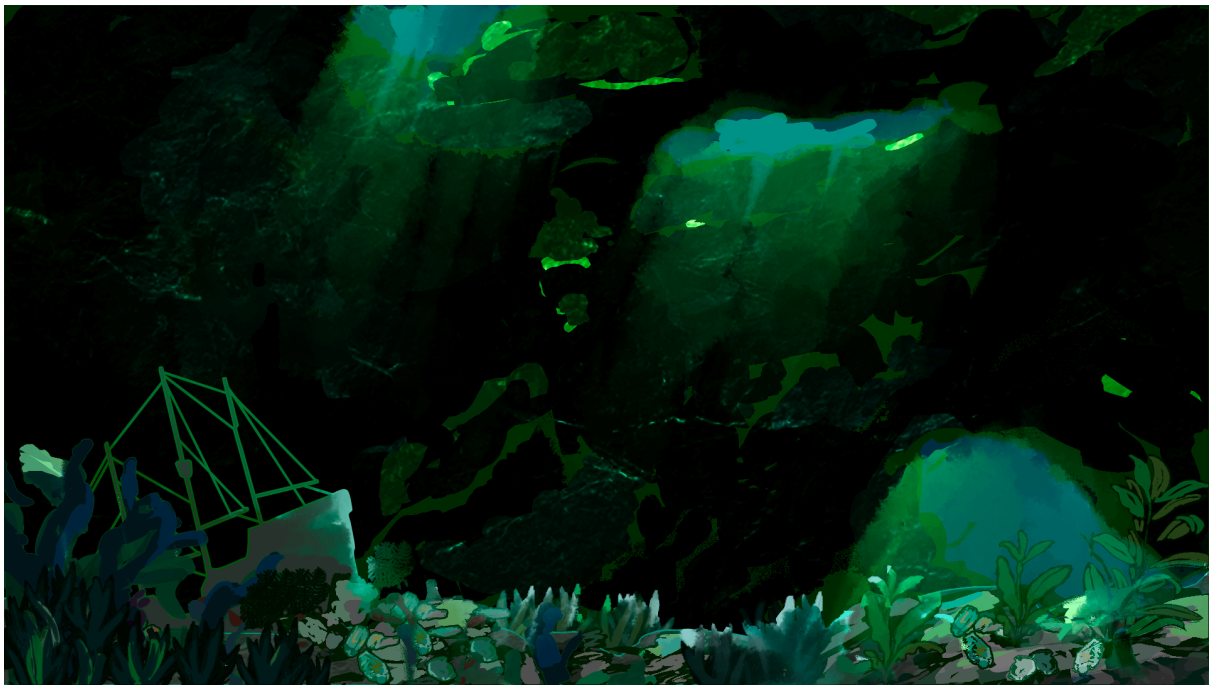
collector

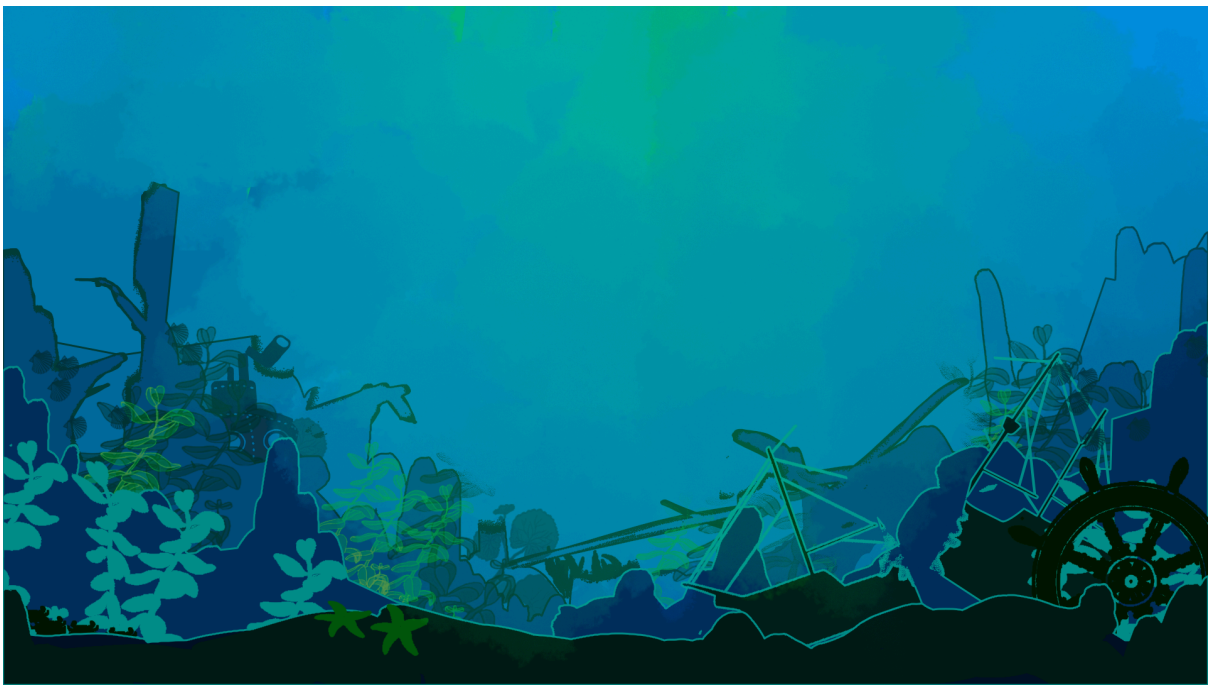
b.g and slow

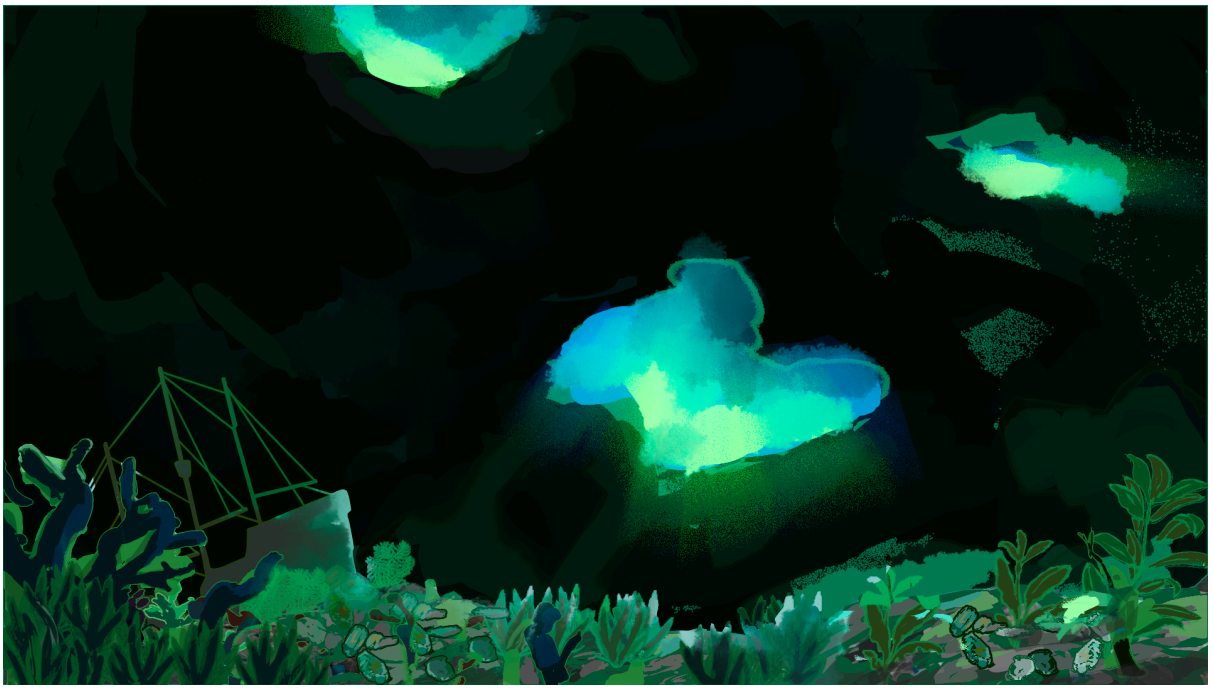


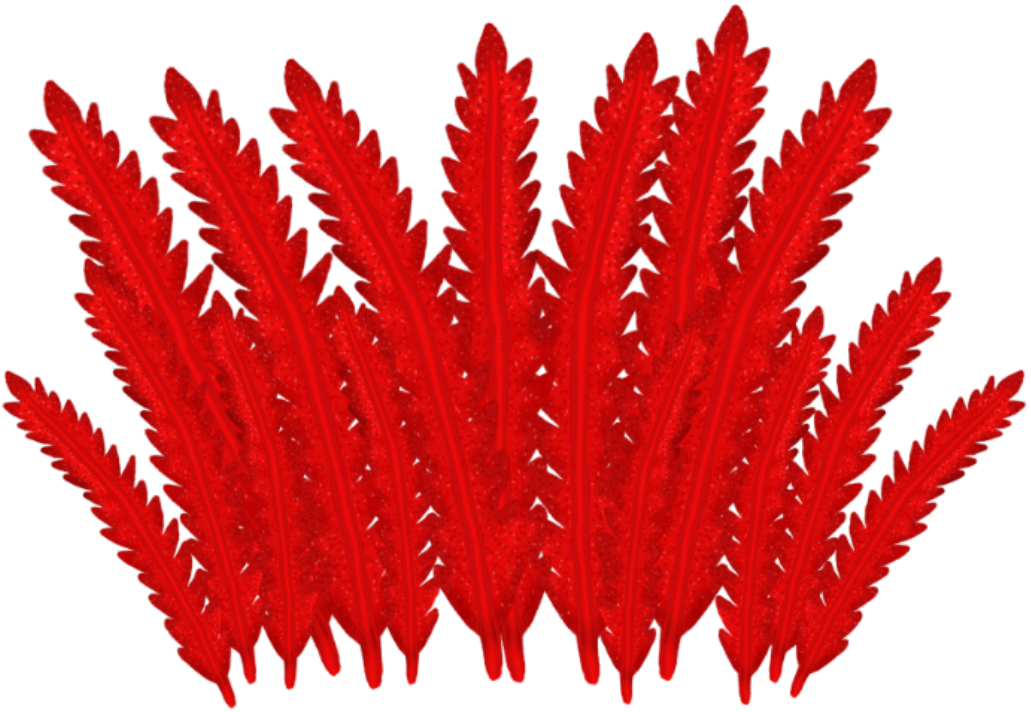


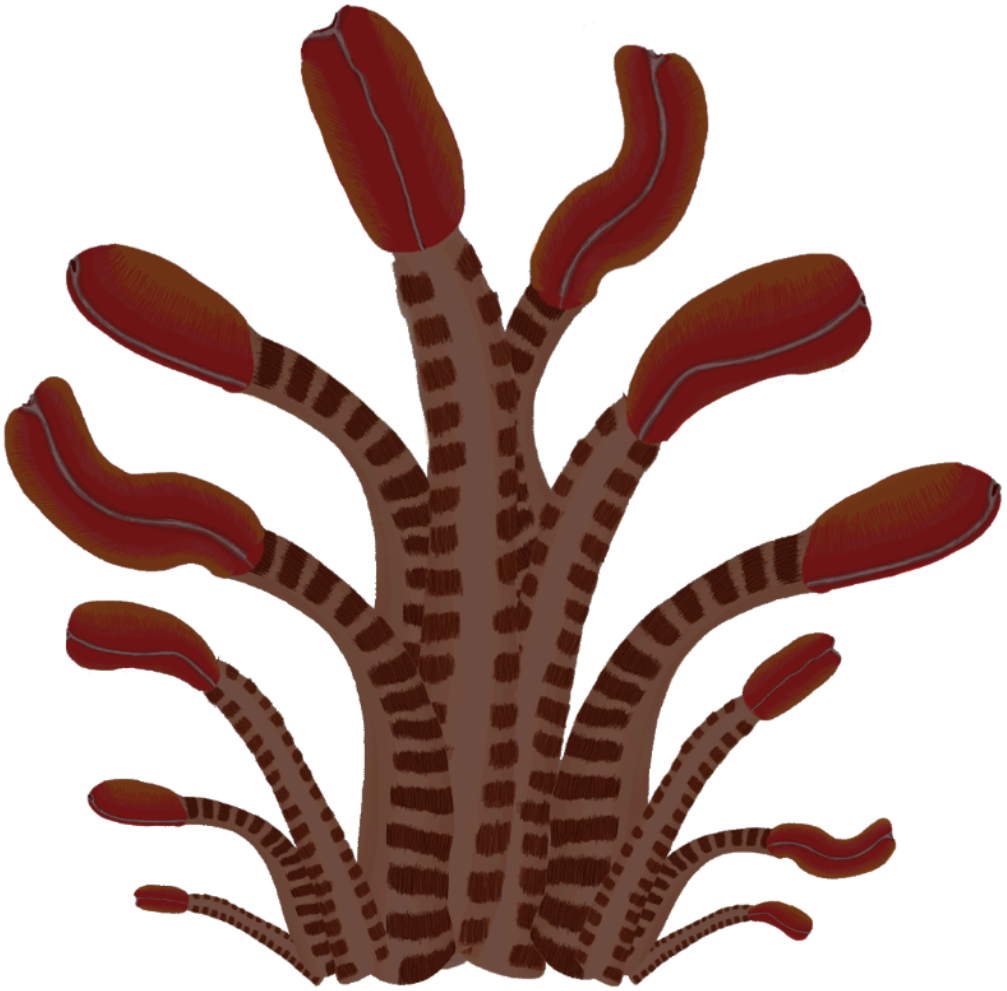


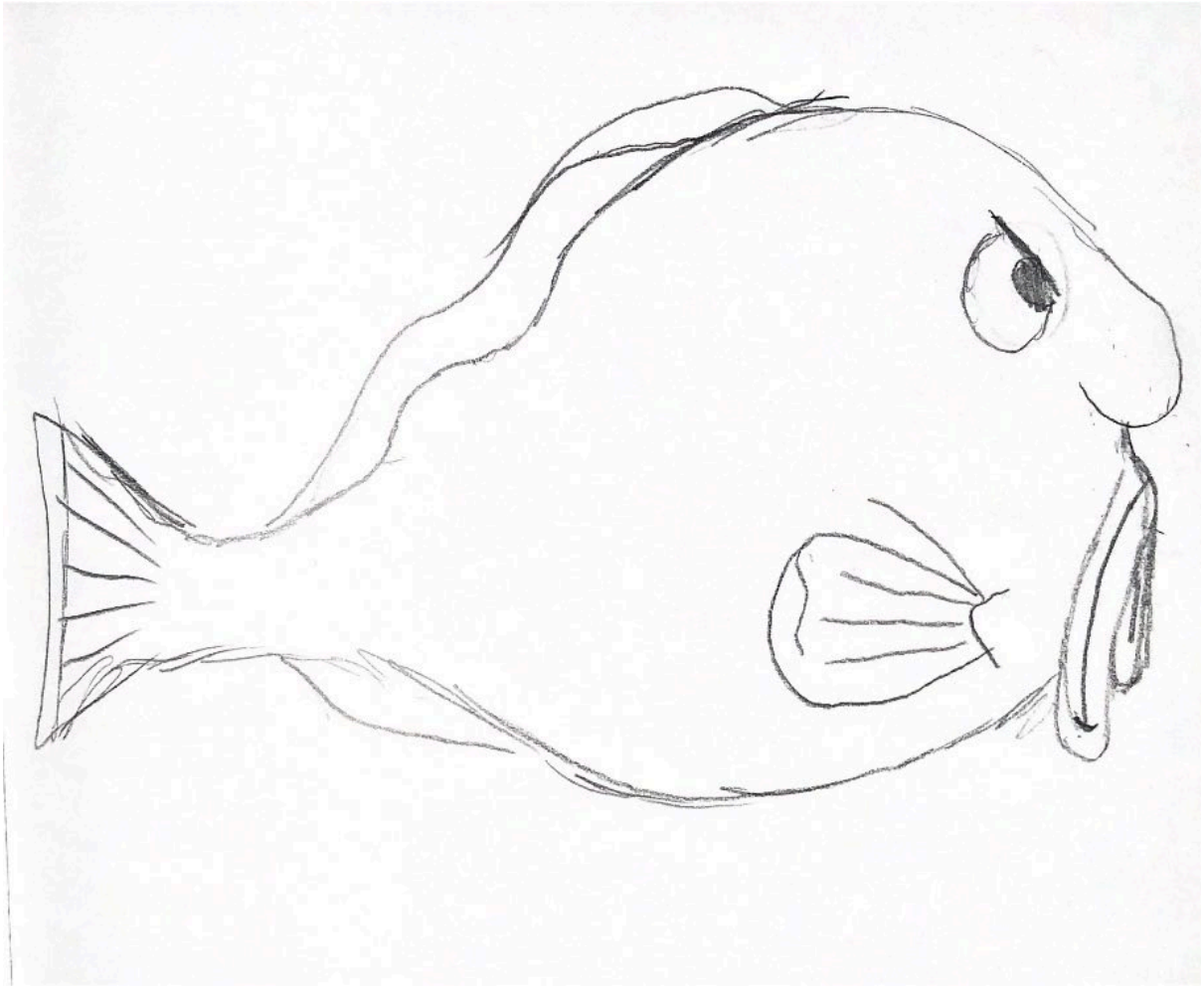


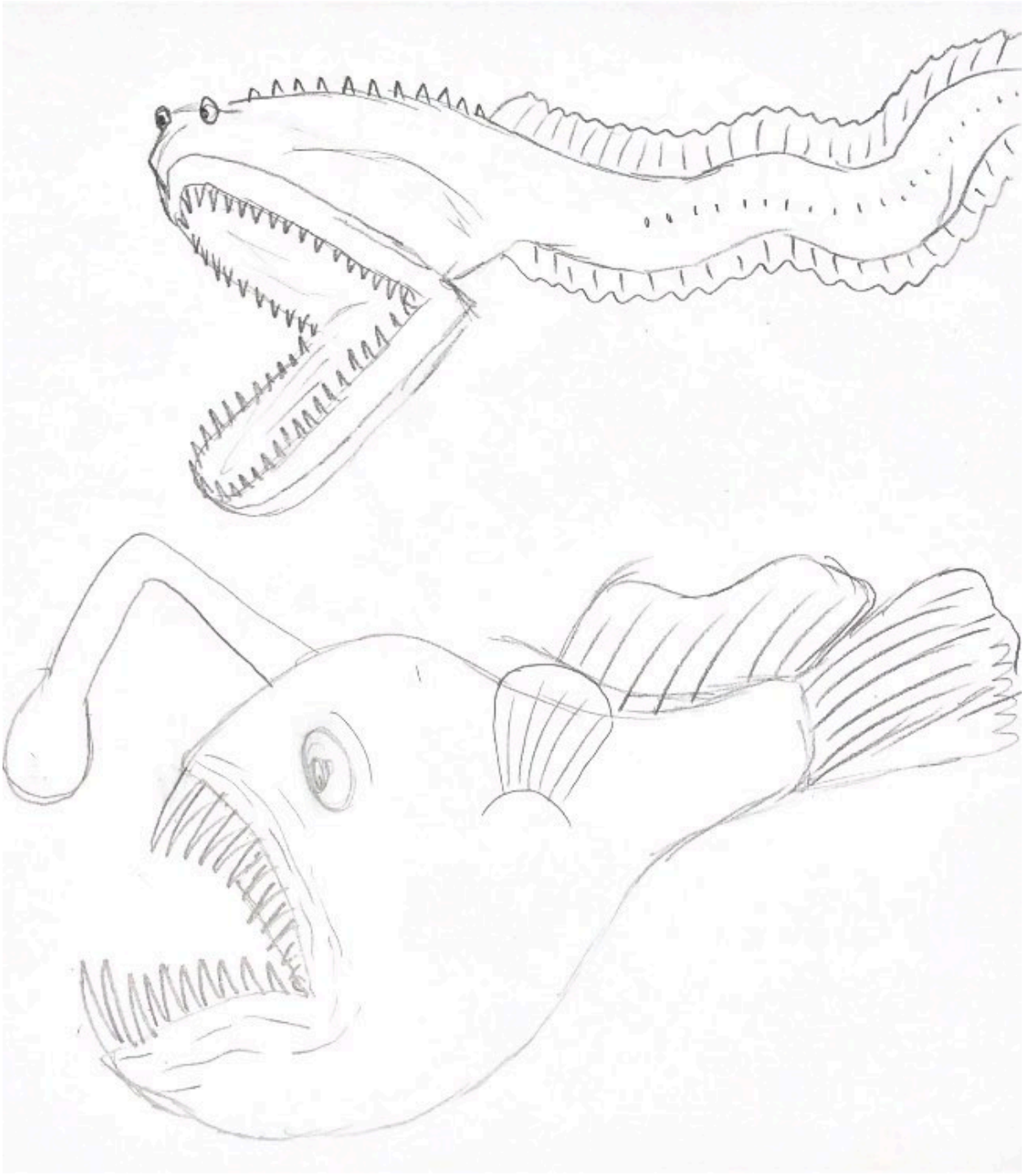


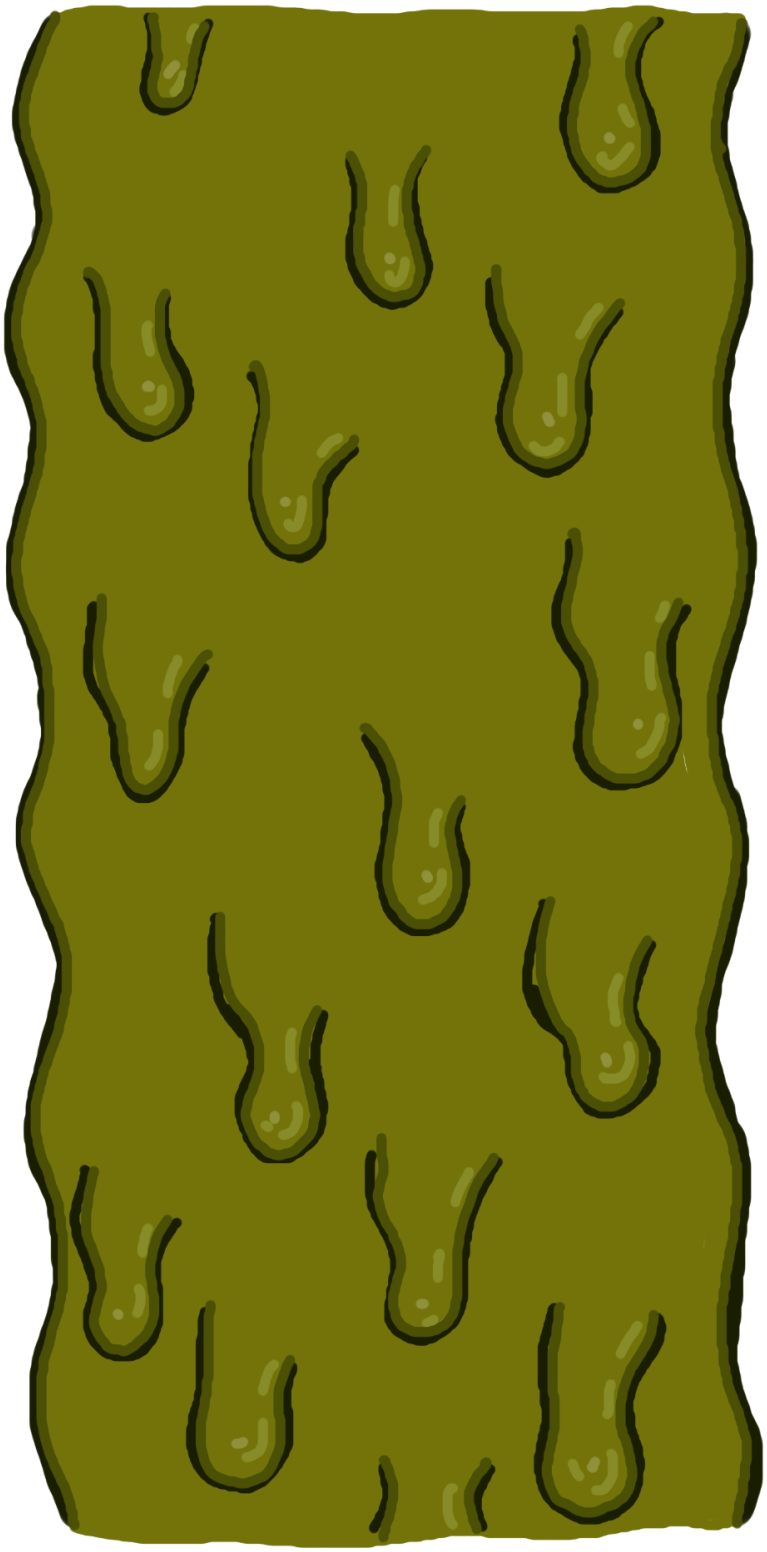












KEY ASSETS

- Coral (Hiding spot, to be implemented)
- Pipes (to be implemented)
- Waste Dump

ANIMATIONS

Player: (only one direction needed)

- Idle
- Swim
- Tail Whip (pickup)

Fauna:(only one direction needed)

- Rustling

Submarine (only one direction needed, to be implemented)

- Engine spin behind the submarine

Mining Bot (one direction needed, to be implemented)

- Ricochet from wall

VFX

- Bubble Particles
- Engine particles from back of the submarine
- Bubbles to represent player/sea life movement

TESTING & QUALITY ASSURANCE

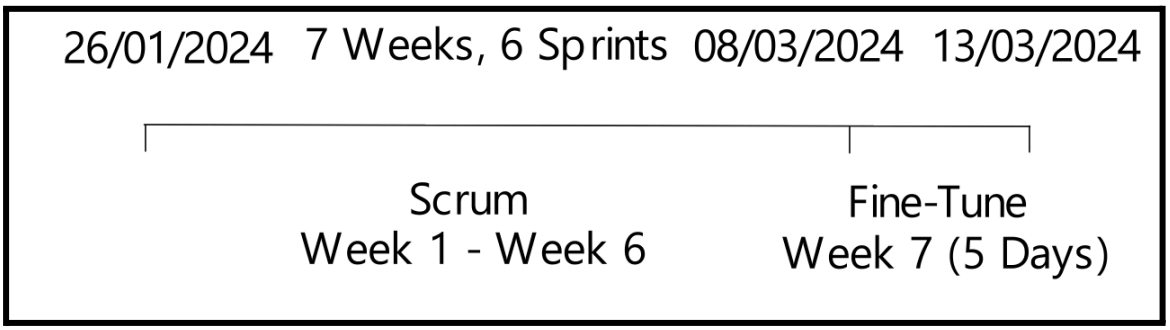
TESTING METHODS

Clear box testing (included in supporting documents below).

TEST BUILD & PACKAGE FREQUENCY

Every feature, otherwise every Wednesday.

PROJECT TIMELINE



SUPPORTING DOCUMENTS

Shantae: Half-Genie Hero (Mermaid Falls: All Item locations) - Mermaid Reference
Tales of the Abyss Clear Box Testing.docx

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