# The Art of Midnight Moon Games

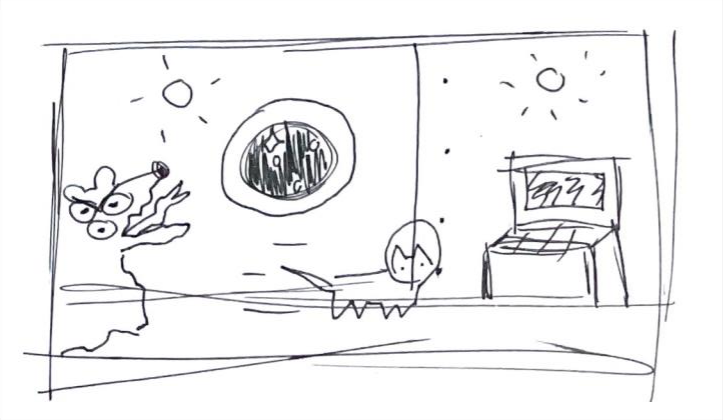

Volume 1

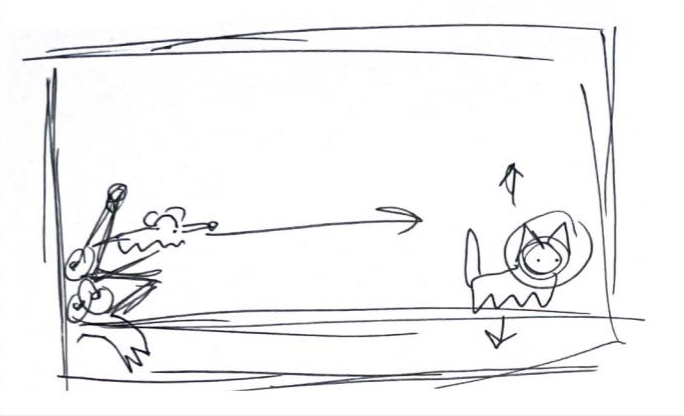
# Catastrophe

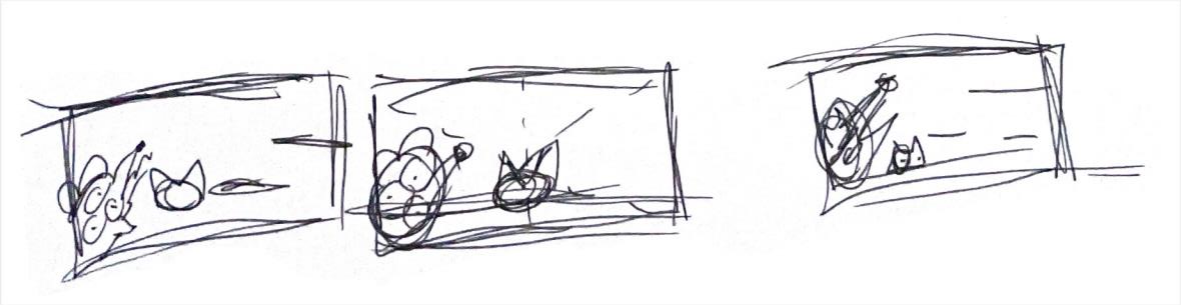
Catastrophe was the first game we created with the game design club at the beginning of the fall semester in 2022. We had from August 26th to September 30th to make a platformer of our choice. In Catastrophe, you play as a space cat who has accidentally caused the ship to self-destruct. You must navigate procedurally generated platforms and avoid fire to survive. Batteries will appear in your path as you play. If you collect enough, you just might be able to escape.

While we started off excited, the development process was stressful (unsurprising). The team of 10 we started with quickly dissolved down to 3 or 4 people who were willing to work. Oliver programmed the game by himself, and Lily handled most of the game's visual design. Brandon helped us with design and debugging, Lucy and Starr did additional art, and Trevor did the sound design.

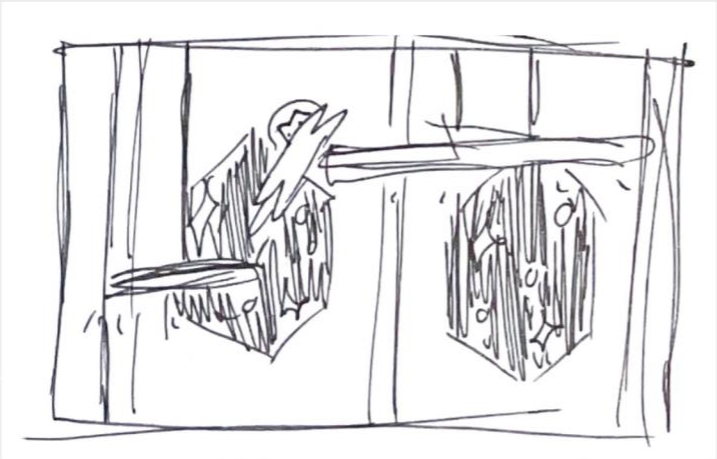
While this project was chaotic, we made it through with a (mostly) functional game.

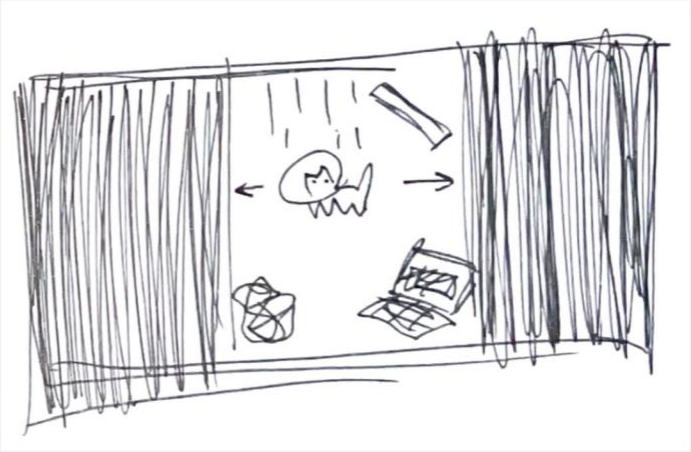






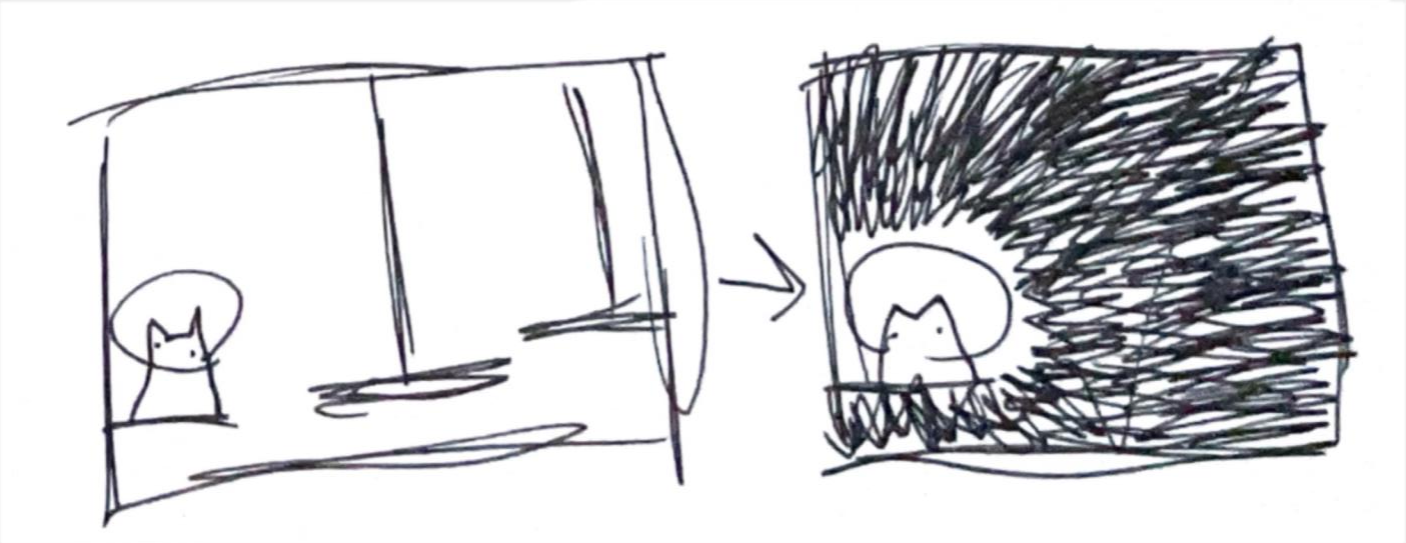
During the first meeting, our team brainstormed the idea of having a large mutant rat that chased you from the left side of the screen as you played. It would throw small rat projectiles that the player would have to dodge. The idea was scrapped exceedingly early in the development process due to time constraints.

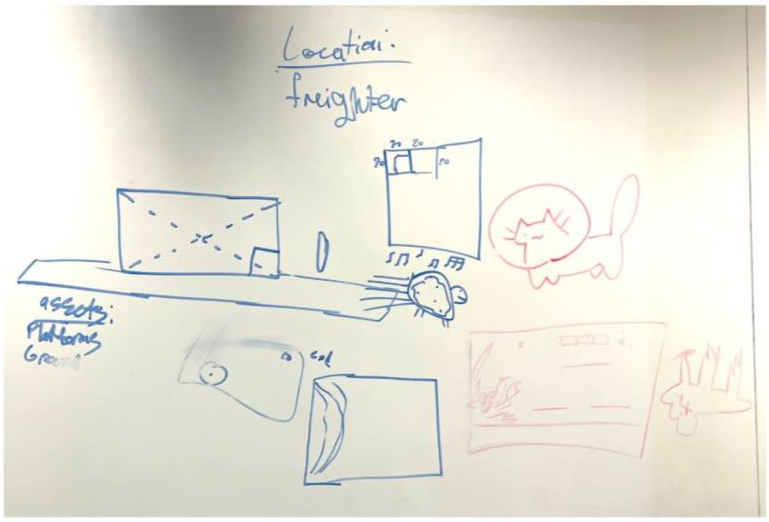




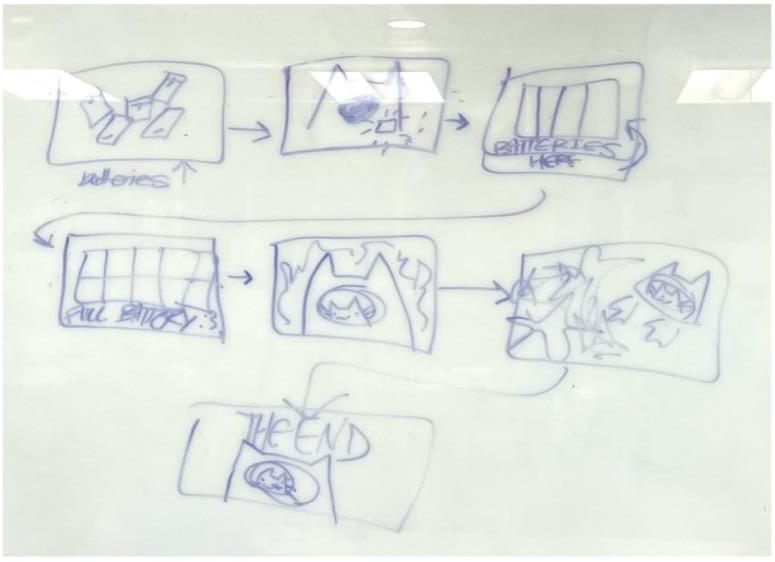
These are other level concept ideas Lily doodled during the preliminary stages of development. The drawing on the left was an idea for a portion of the level that could take place above where the player normally runs. You would have to platform between hanging lights. The drawing on the right came from the idea that the player would have to jump through a trash chute while running. You would use the directional keys to avoid clumps of garbage.

More early doodles from Lily’s sketchbook. She was extremely excited about having a cat for the main character. The picture on the right is a sketch of what windows in the background of the level could look like. The bottom photo is another level concept that was discussed early on. The power would go out and the player would have to platform in the dark until the lights came back on. Most of the concepts were ambitious from a programming standpoint and would not end up in the final version of the game, but it was still good to have options to build off.

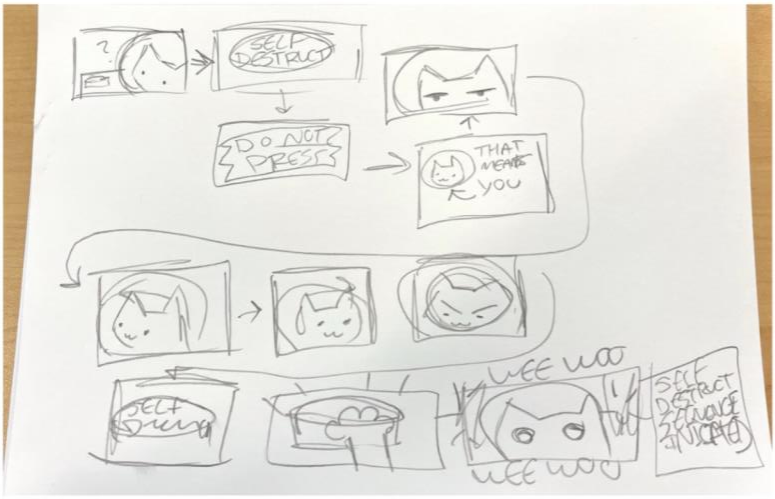




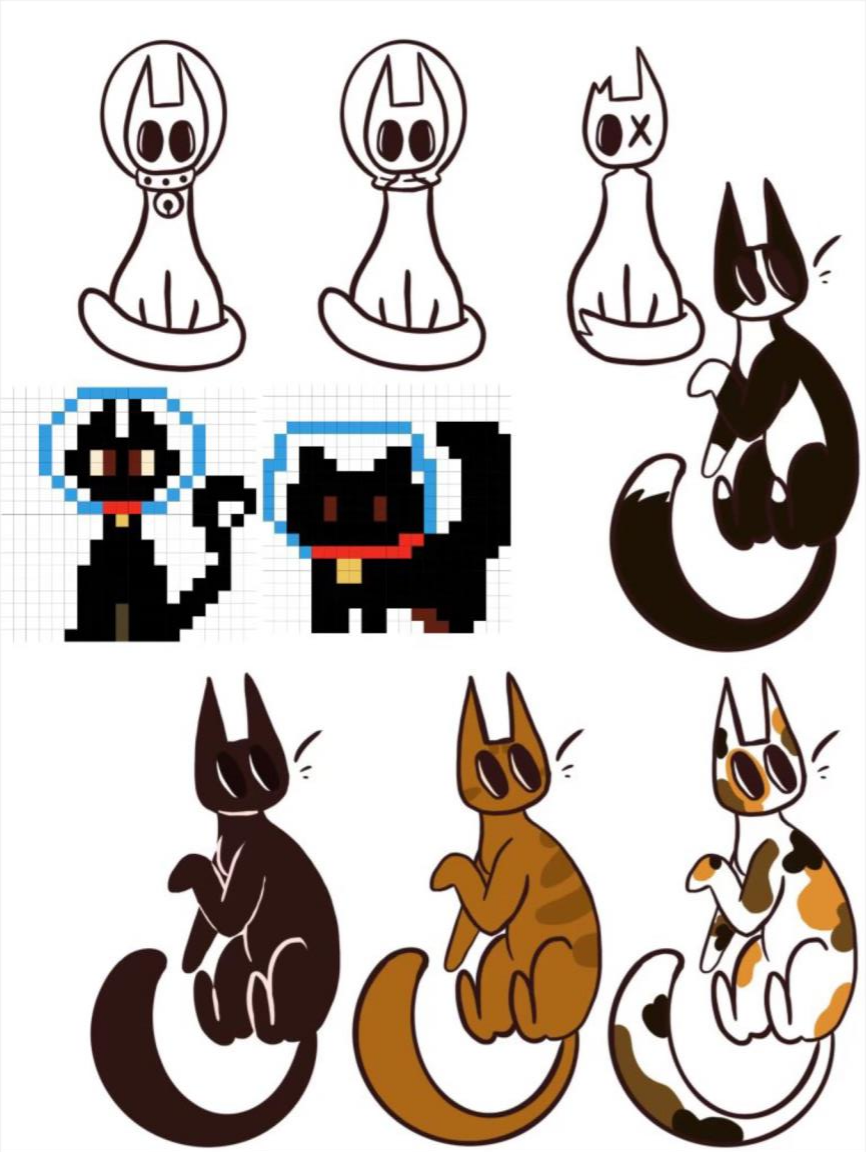

This whiteboard picture is from the first development meeting. Oliver drew in blue, and Lily drew in red. These sketches were initial environment and power concepts. There was an idea for a Nyan Cat power up which would make it into the final version of the game.




This whiteboard picture is from much later in the development process. Dev meetings were held in library study rooms. This was a story board Lily did for the end cutscene that Lucy later illustrated.

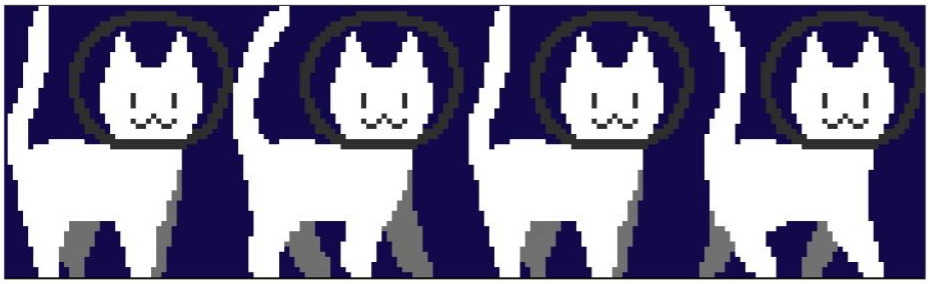


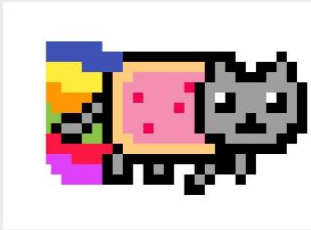

Lily drew the story board for the opening cutscene. The final version of the opening cutscene was also illustrated by Lucy.



Early concepts Lucy made of the player character sprite. Some of us really liked the colors of the calico cat, but others thought it would be hard to see while playing. The final version of the sprite was completely white.

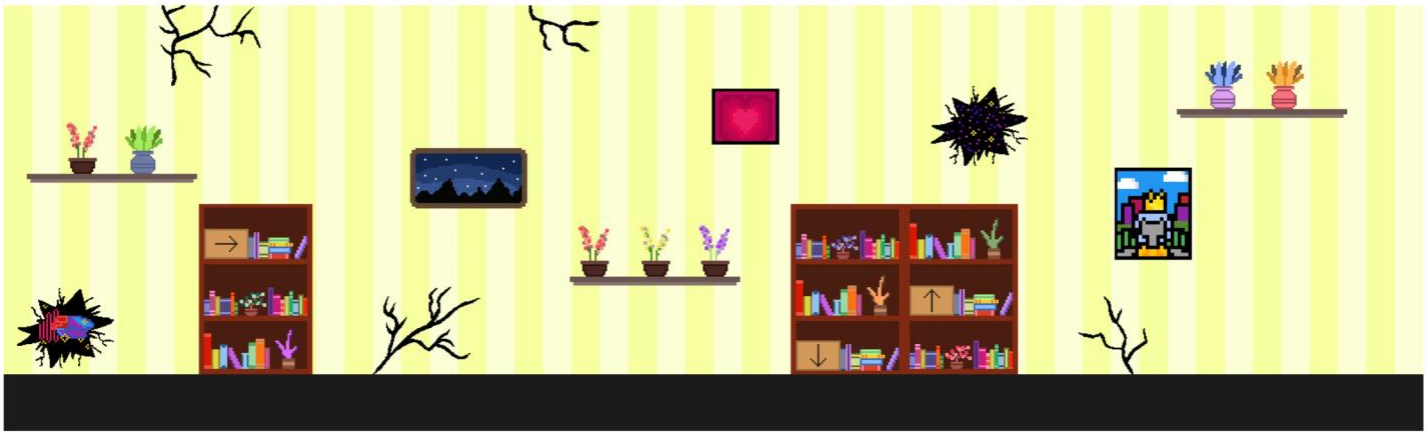
This was the final version of the game’s menu. The cat at the top was drawn by Starr.

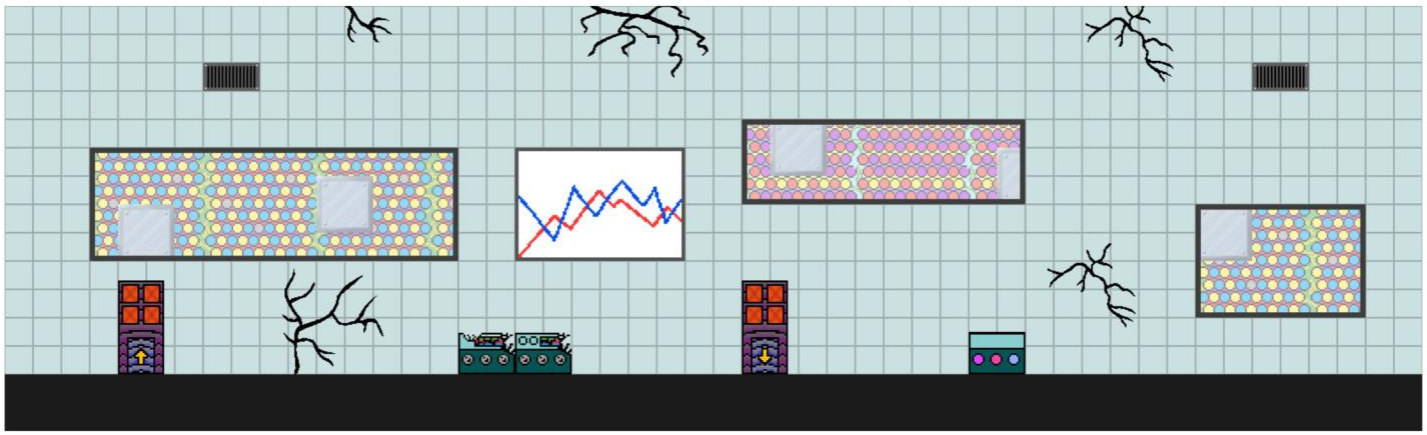




These were the final versions of the player sprite Lily created. The top is the default sprite and the one below it was for the gravity boots power up. The Nyan Cat in the top right was done by Oliver and was used for the Nyan Cat power-up. The cat below Oliver also drew.

Sketches Lily did of different background variations. They would change as you played. The finalized versions look almost identical to the concepts.



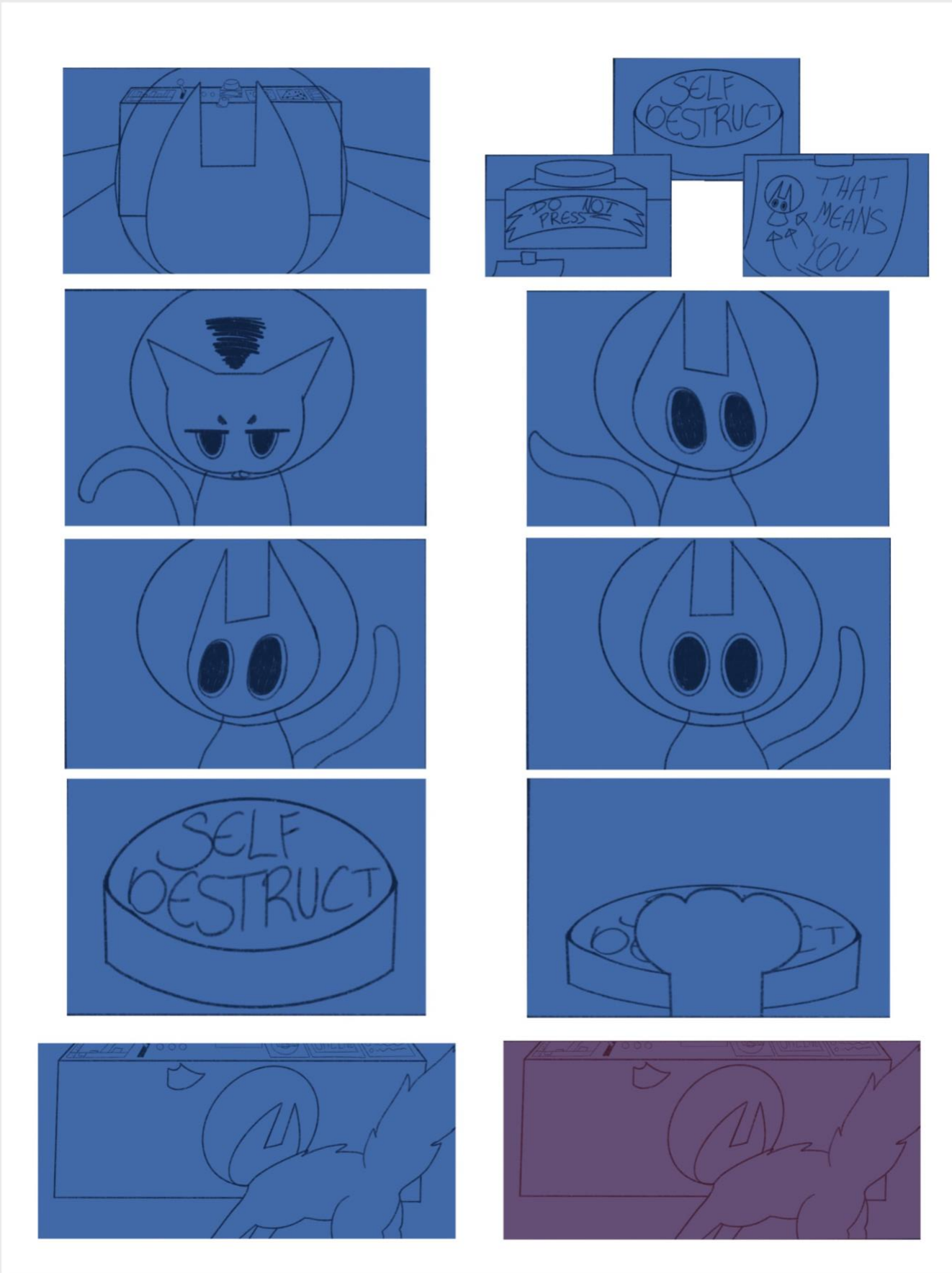


A few of the finalized backgrounds that were used in the game. Each background style had 3-4 variations each.

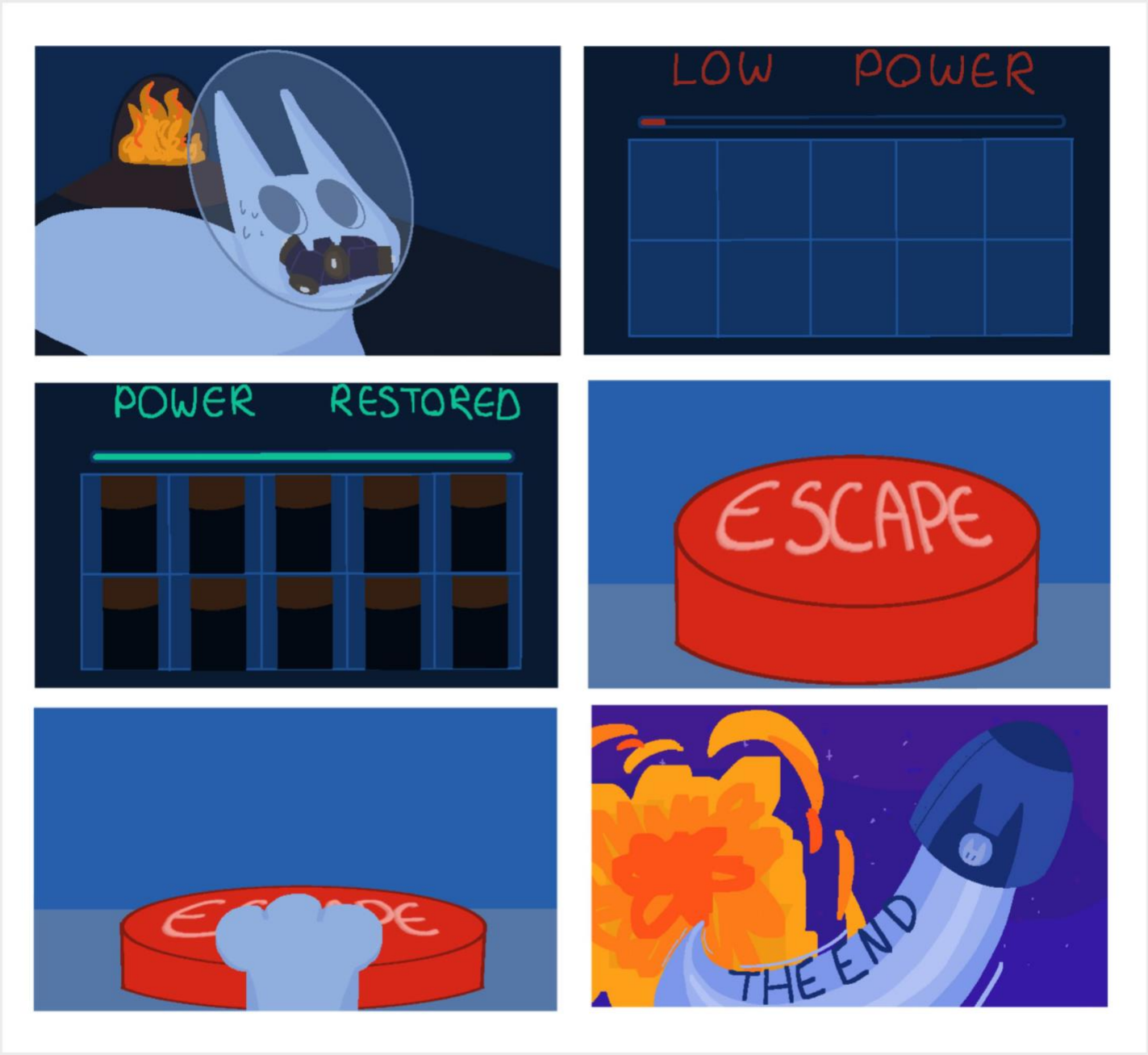


The top photo is of the game’s logo. The bottom photo is an unused win screen Lily made. It was uncertain if the end cutscene would be finished in time, so it was made just in case.

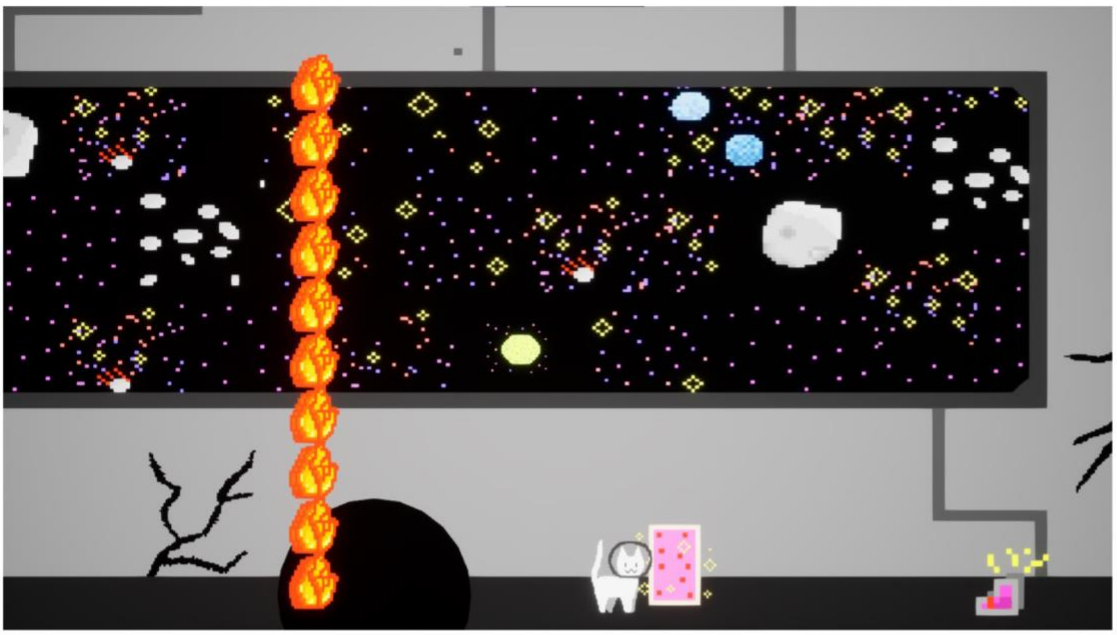
The game’s opening cutscene illustrated by Lucy.

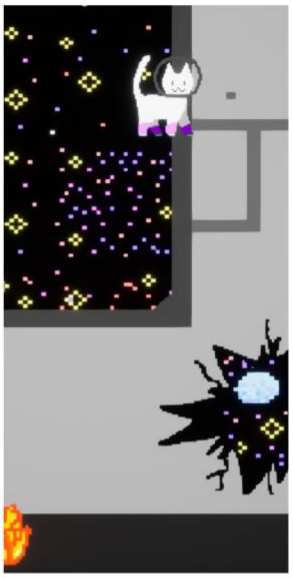


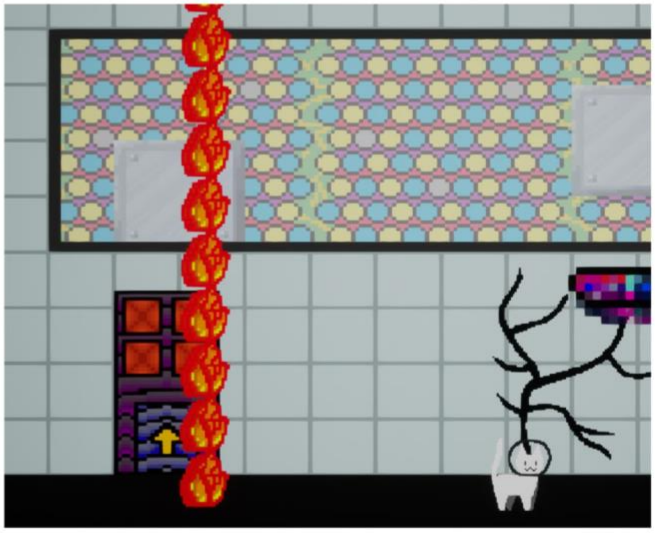
The game’s end cutscene also illustrated by Lucy.

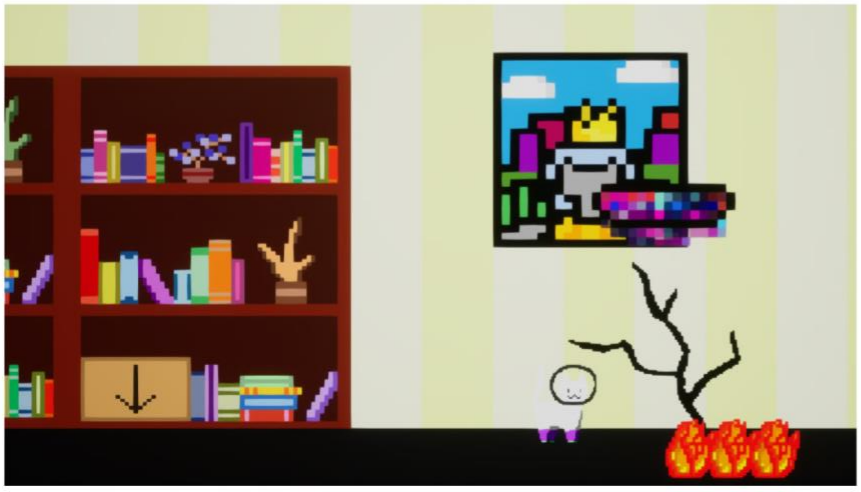


Screenshots from the final version of Catastrophe.







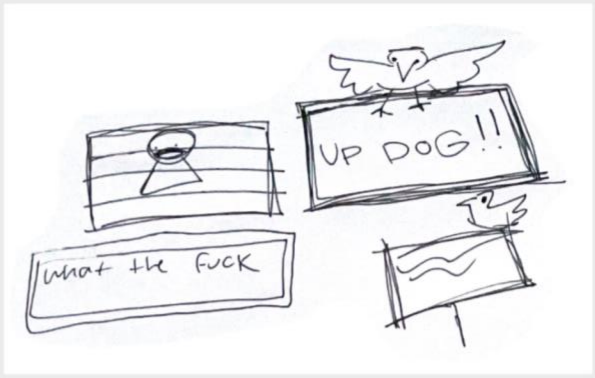


# Drifting Away

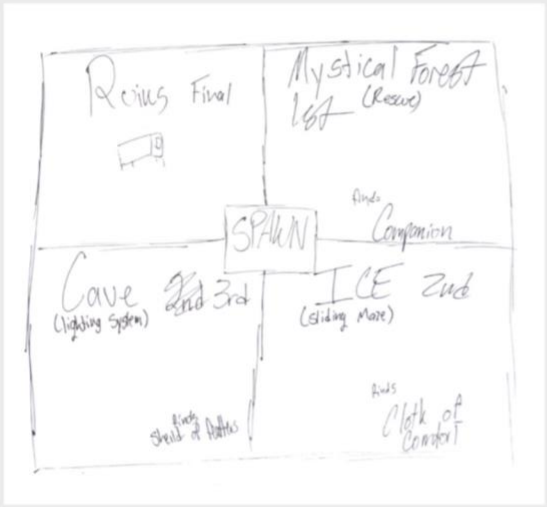
Drifting Away was the game Oliver and Lily made for the fall 2022 49-hour game jam. Participants had 49 hours to make a game from scratch with the randomly chosen theme “drifting.” You start on a raft in the middle of the ocean. There are two levels that each contain an item you must collect. If you survive the dark cave and the slippery ice, you can make your way to a secluded house on an island to see how the game ends.

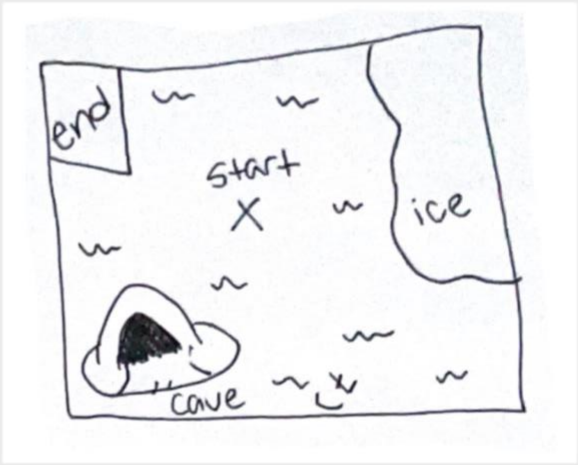
The game’s development took place in the computer science building on UNC Charlotte’s campus. Much like Catastrophe, Oliver did all the game’s programming, and Lily created the assets. Our friend Connor created an awesome soundtrack for the game and helped make additional assets.

It was a very stressful yet incredibly fun weekend. Making a game within such a small amount of time was a great experience.

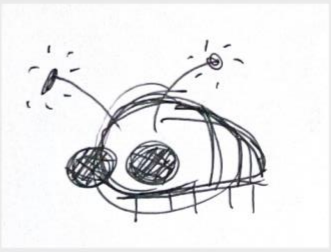




The left sketch is a concept for a title screen. The right sketch was a concept for instructional signs. The idea was to have birds that held the signs in the air above the water. We ended up scrapping the idea of signs all together.

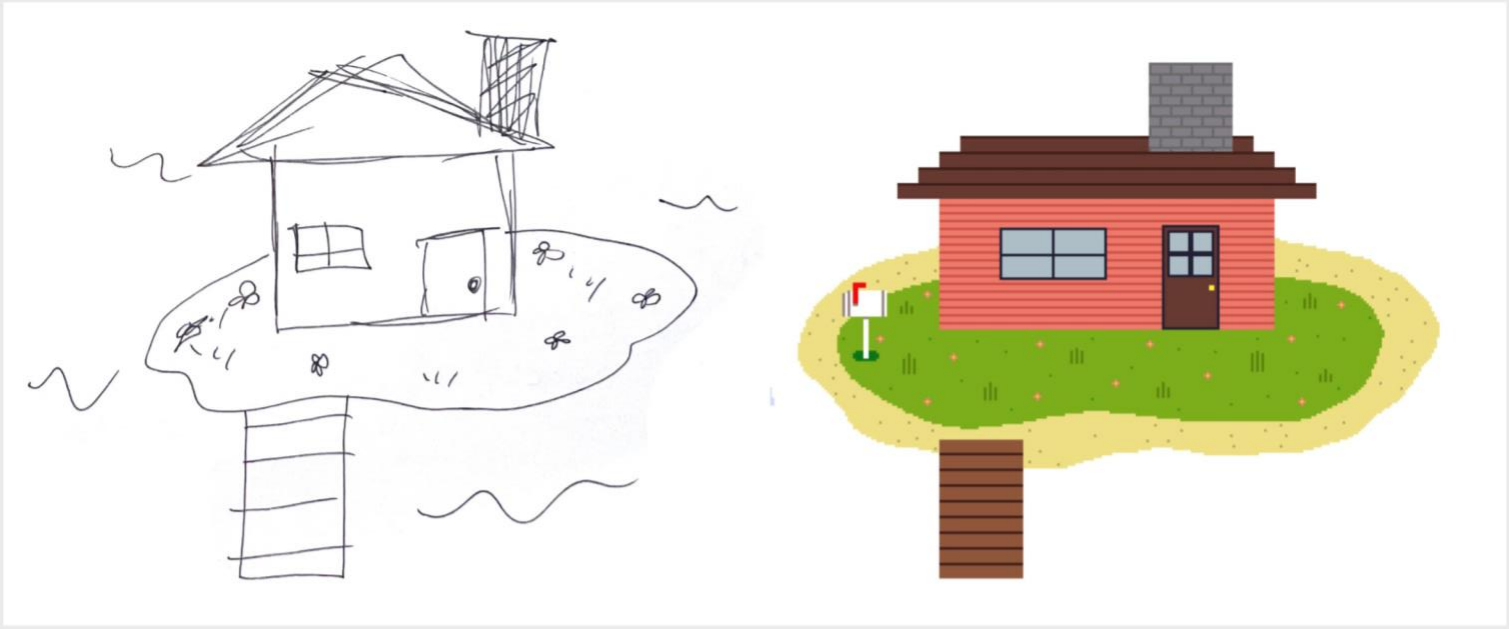


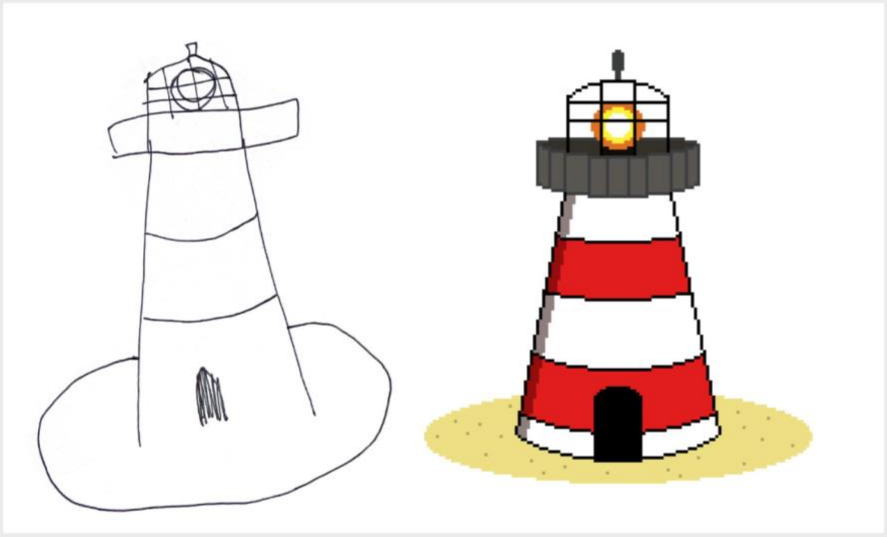




Oliver made the sketch on the left. It was the first map layout idea. We quickly realized that we would not have time to design and program four separate areas. That led to the sketch Lily made on the right. The layout we used in the final version of the game was slightly different.

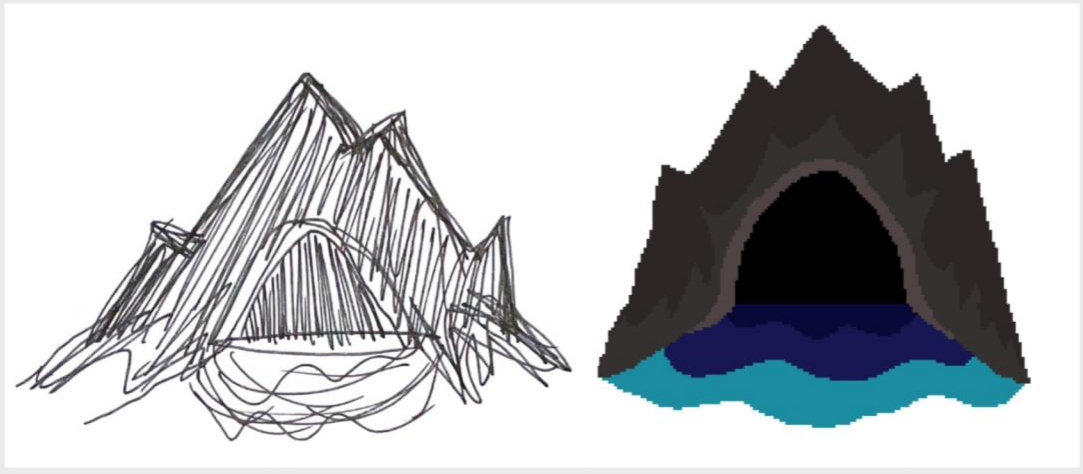


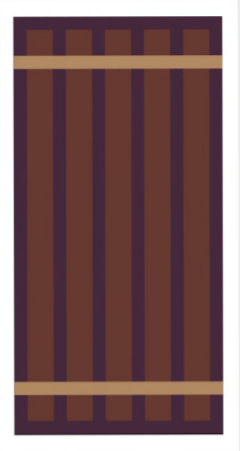
The first sketch Lily did of the player character is on the left. The picture on the right is a doodle of the bug enemy that would inhabit the cave level. Both final sprites look remarkably similar to their original design sketches.



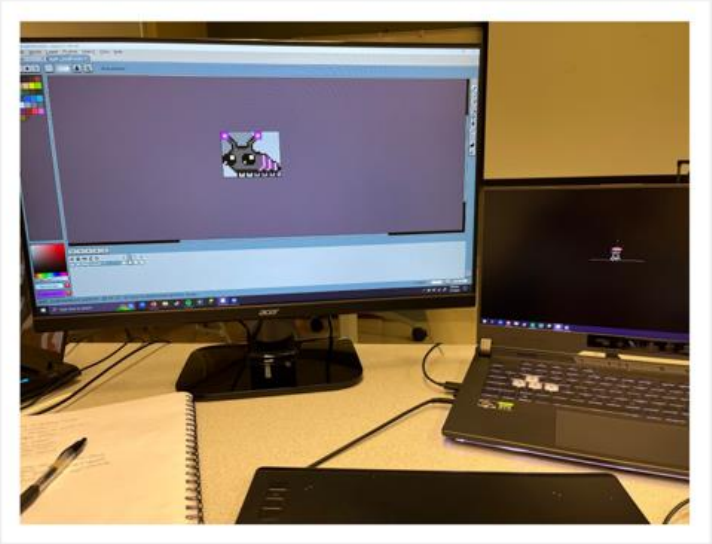


Environment sketches next to their finalized sprites. These were all placed around the main ocean area you start in. The top photo is the house you enter at the end of the game, the lighthouse to the left was a decoration we included, and the bottom photo is the entrance to the cave level.





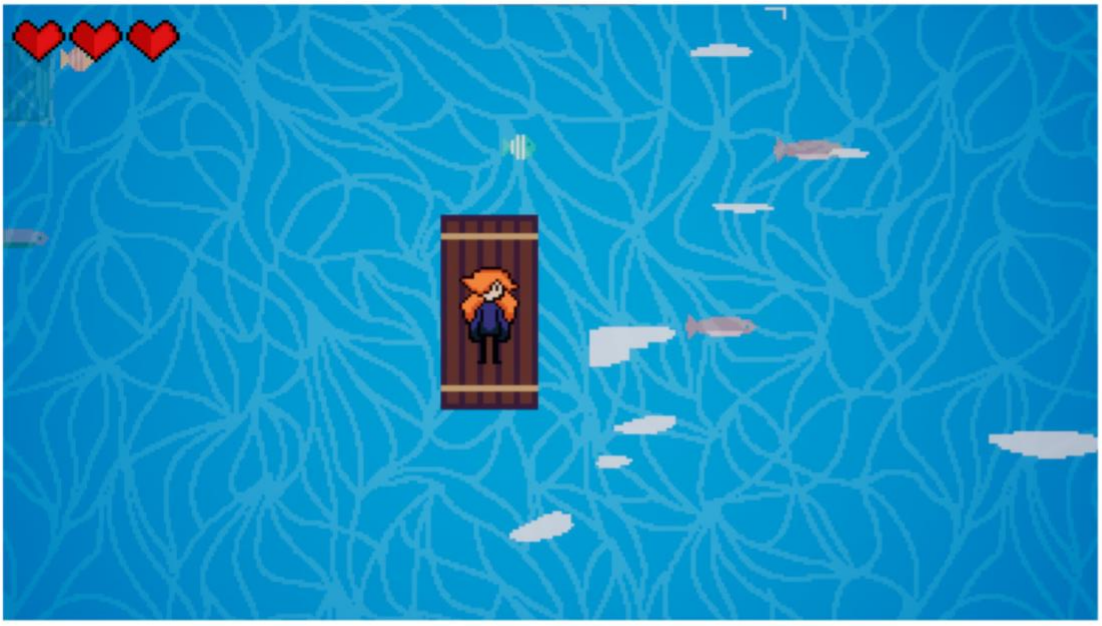
These are some of the finalized sprites that were used in the game. The top left is the player character. The image directly to the right of it was a set of unused sprites were going to be implemented in the game's final area but were cut because of time constraints. The top right is the raft you use while navigating the main ocean area. Directly to the left are the bug sprites and their different color variations. Oliver spent a lot of time implementing lighting effects in the cave level which made the environment and the bugs in it look super cool in the game's final version.



On the left are the wonderful sprites that Connor made for us. The crate sprites truly saved us in the end. The top right is a photo of Lily’s workspace.

The ending screen that Brandon created with various game sprites.

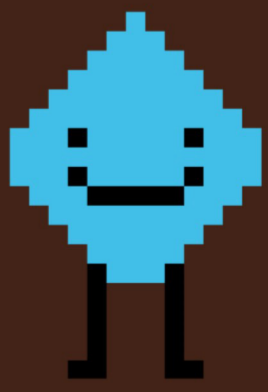
Screenshots from the final version of Drifting Away.

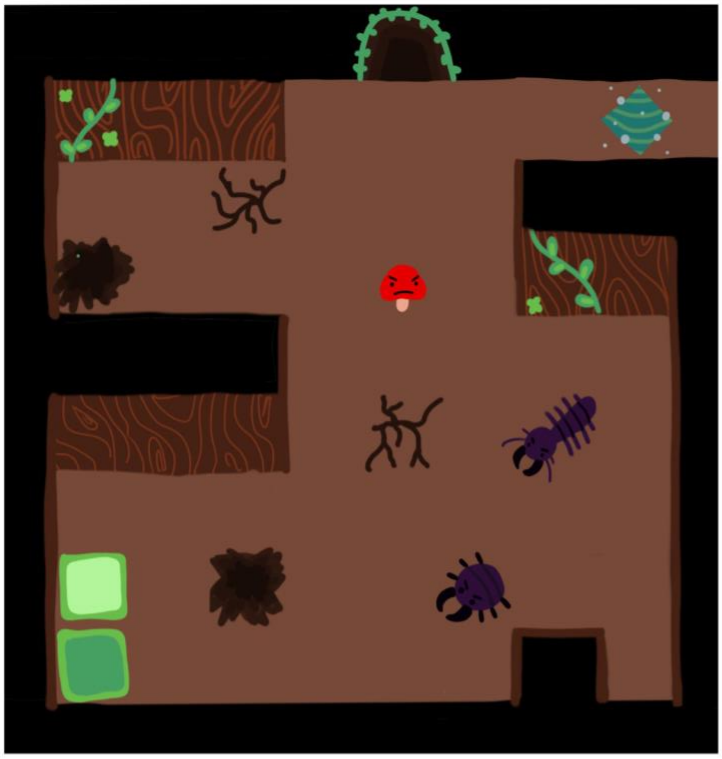


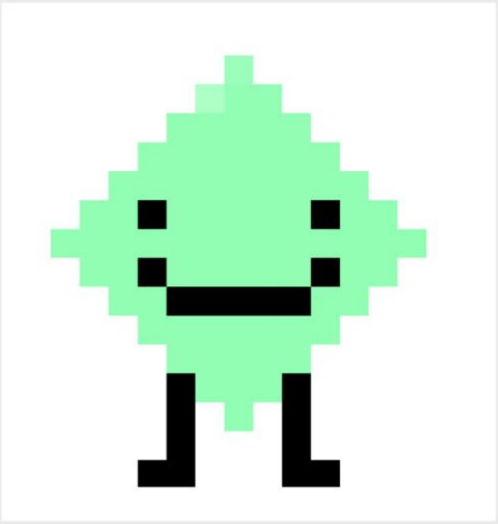
# Unrooted

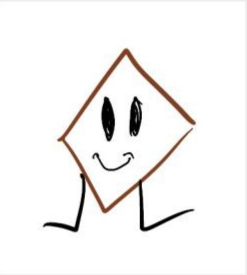
Unrooted was created during the spring 2023 global game jam. Like Drifting Away, participants were given 48 hours to make a game. Unrooted is a puzzle game where you play as a drop of water trying to make its way through the roots of a tree. With a limited move counter, you must find the most efficient path to take to the end of the level.

Programming was done by Oliver, assets for the game were made by Lily, additional sprites were created by Christian and Brandon, and the music was done by Connor.

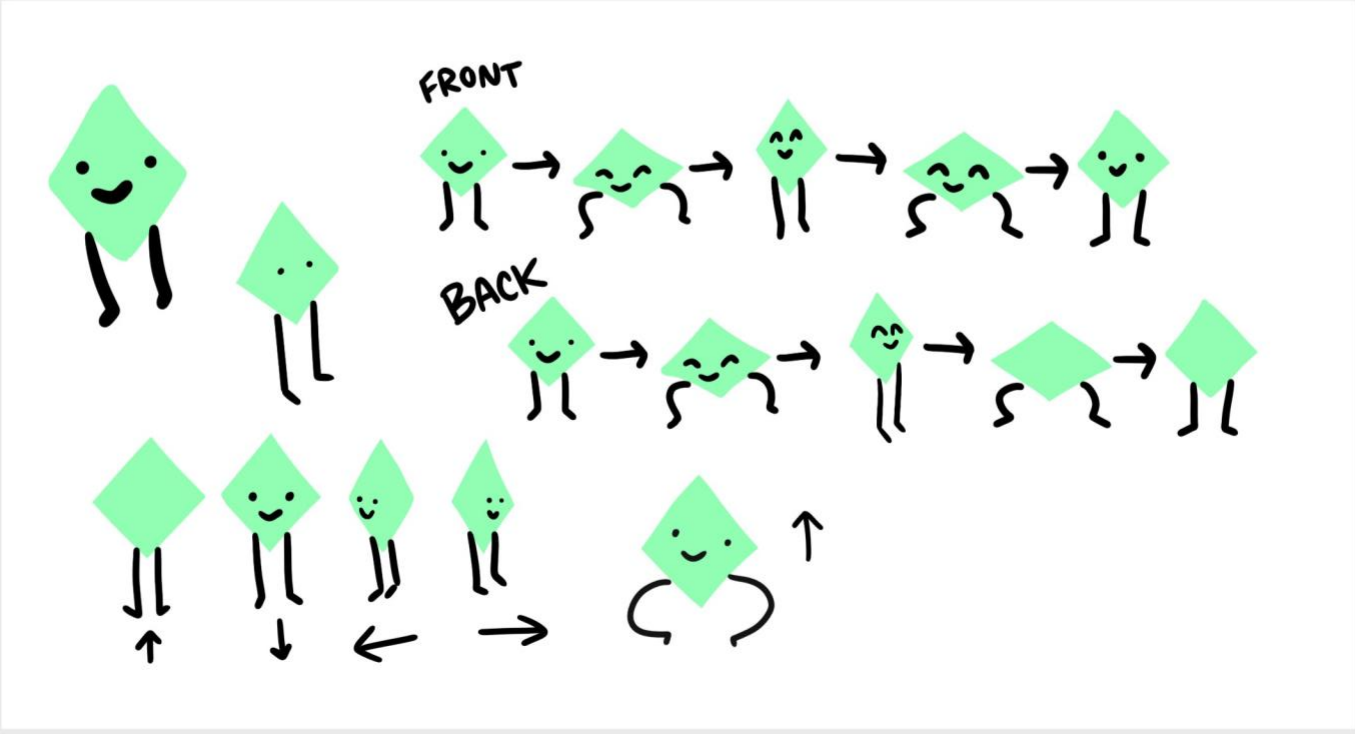


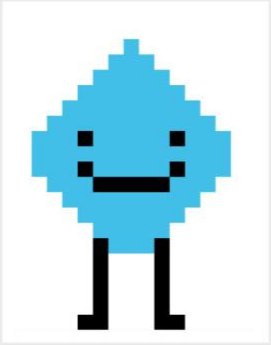


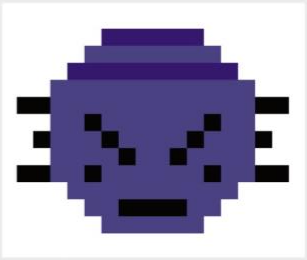




The image in the top left was a doodled concept of what Lily thought the game could look like. The finished version of the game ended up looking similar. The top right was a player character sprite concept. The image below it was the concept Oliver had made. The player character was originally a nutrient trying to make its way through the roots, but it was later changed it to a drop of water. Below are sprite and animation concepts.







After making sprites for the game, Lily made a fake level with them so she could see how they all looked together. The termite sprite in the top right was a concept for an enemy. Oliver wanted to include enemies in the levels but there was not enough time to implement it. Oliver focused more on the puzzle features instead.

The animation frames for the player character's jumping animation.

Additional sprites Christian made for the game.

The final logo for the game.


The game’s main menu screen.

Screenshots from the final version of Unrooted.