Split World

Level design and character development
for an adventure game

Master thesis (part 2 of 2)
Interactive Media Systems
with focus on game development
at the faculty of design
Augsburg University of Applied Sciences

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submitted by

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Augsburg, January 29, 2020

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Foreword

The idea for this project was developed in 2015, at the end of my second semester. Now a new story has been created with a student named Iris, who goes through her normal everyday life until she suddenly gets dragged into another dimension. But instead of getting lost in the parallel world she should be learning for the upcoming exams. In a certain way, the game shows the desire of escaping to other worlds in stressful situations and forgetting everyday life. But at some point there is no more time for procrastination! This results in a guilty conscience. An unfinished task will haunt you sooner or later. In this project we join Iris on her adventure to a different reality. We enjoy the experience and once it is time for Iris to return to her own world we follow her example and face everyday life again.

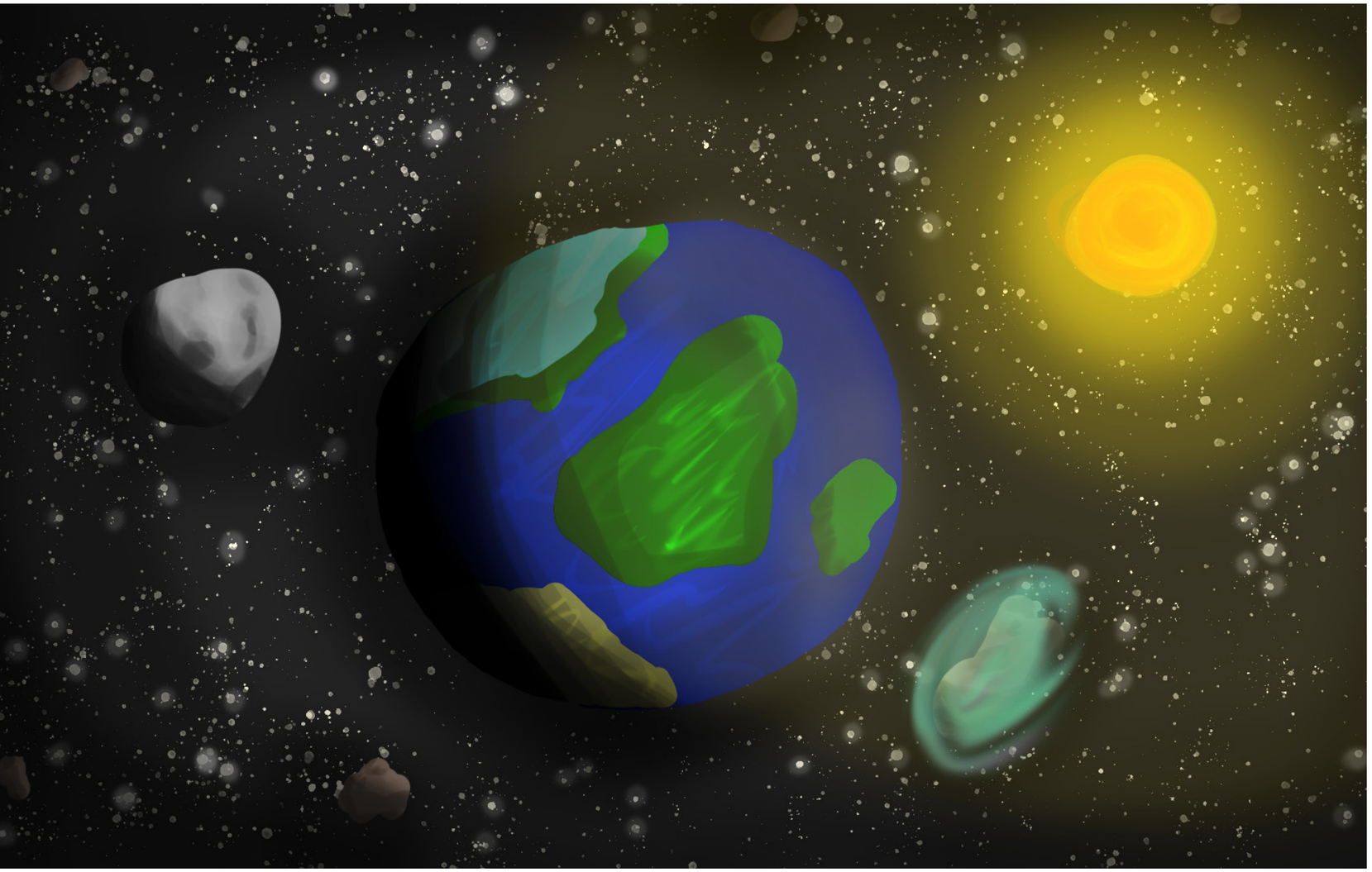
Procrastinate if you feel like it, but don't forget to stop early enough to remain successful. New, abstract, mystical or futuristic universes will take you out of your monotonous, boring or stressful everyday life.

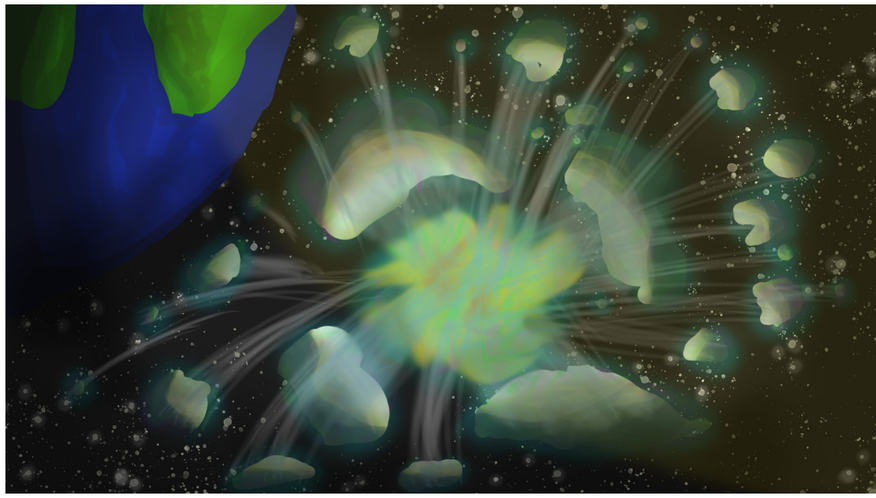
Story of Split World

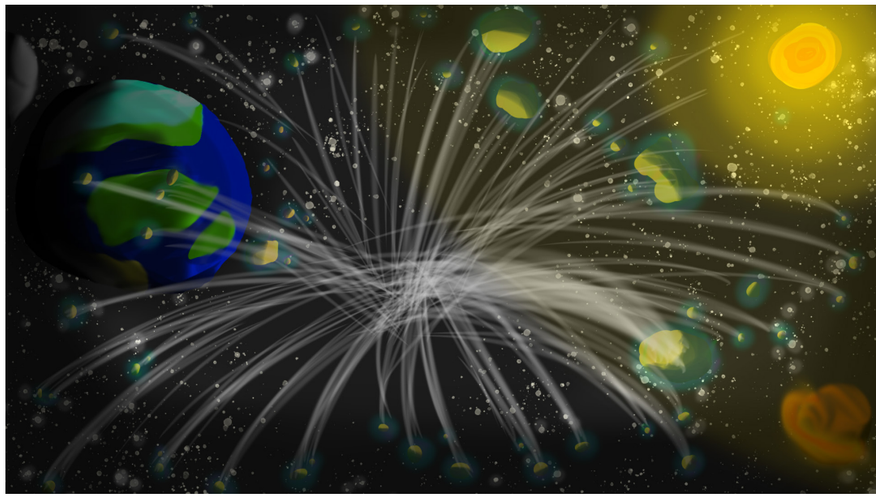
The fictitious world Narv is an earth-like planet, which consists of four large continents. In the north there is the continent Izzen, the southwestern one is called the Eternal Widths, the small one in the southeast was named Green Island and the largest continent in the center of the planet is known as the Highlands. In Split World the story of the protagonist Iris takes place in the Highlands. She moves from a relatively small village called Underwood to the university town Moonlight Tree. She lives in a modest apartment in the nearby self-contained student district and studies archaeology at Moonlight University. Everything on planet Narv revolves around the mystery of a "Split World". But the mysterious thing is that only few people know about the existence of this world. A few years ago, a meteor exploded close to Narv. The reason for the explosion is still unknown and nobody noticed the presence of the meteor in Narv's orbit before. By splitting the meteor into meteorites, the inhabitants of the planet had a beautiful view of a unique starshower. But things didn't go well for the people in the southeast. A large chunk of the meteor hit Green Island, destroying it and wiping out most of its inhabitants. Because of this disturbing event, the island was evacuated and the government ordered the army and scientists to the site of the impact.

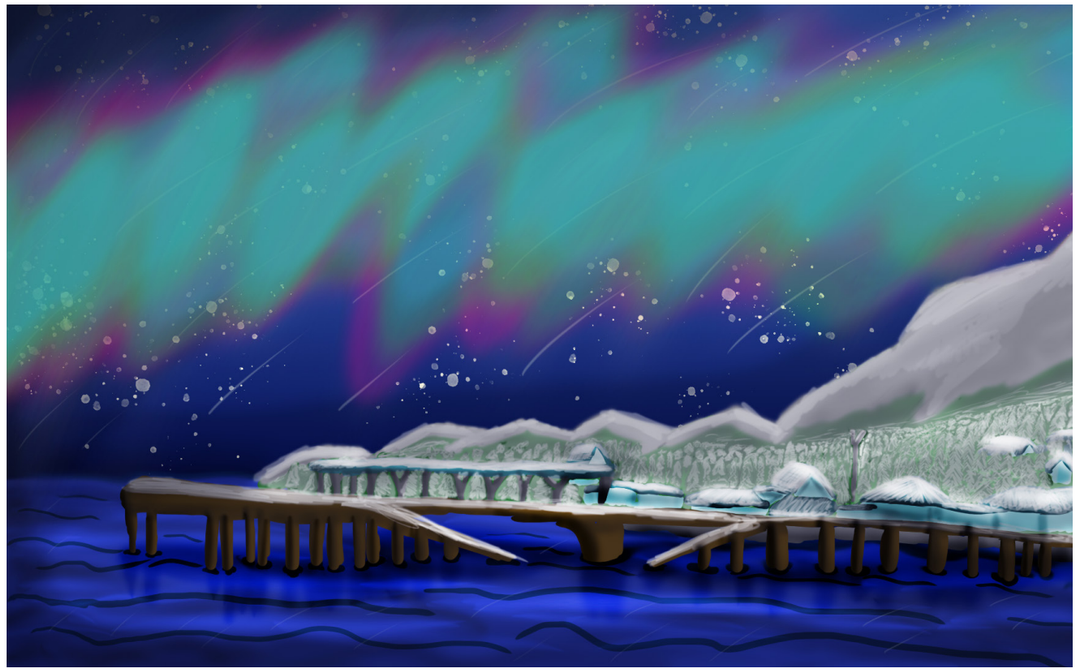
Unfortunately, the scientists discovered a dangerous anomaly in the impact crater. A giant portal started to form in the research area. Many geologists that wanted to collect and examine the fragments of the meteorites disappeared in the crater without leaving a single trace. As a result of the strange disappearances the entire area was sealed off. But Green Island is not the only place where the mysterious fragments landed after the explosion. Some fragments landed in other areas of the planet – the only difference being that those outside of Green Island looked like regular rocks. These mysterious stones connect the split world with the real one. Since the shards that rained down to the ground are very weak, they can only solidify into portals in places where a high amount of energy or emotions can be found. At those places portals formed. The shards were able to feed off Moonlight Tree's ruins' eventful history and created a new world. The chosen ones who found the stones feel a connection to them and can travel through the mysterious portals. Thanks to their special connection nothing serious can happen to them in the magical world. Since Iris has grown to be a very suspicious young woman the events that she was about to face were an enormous challenge for her. The first shard shadow was created from negative energy of a deceased ruler. This shadow wants to keep the split world unstable in order to cross over to the real world.

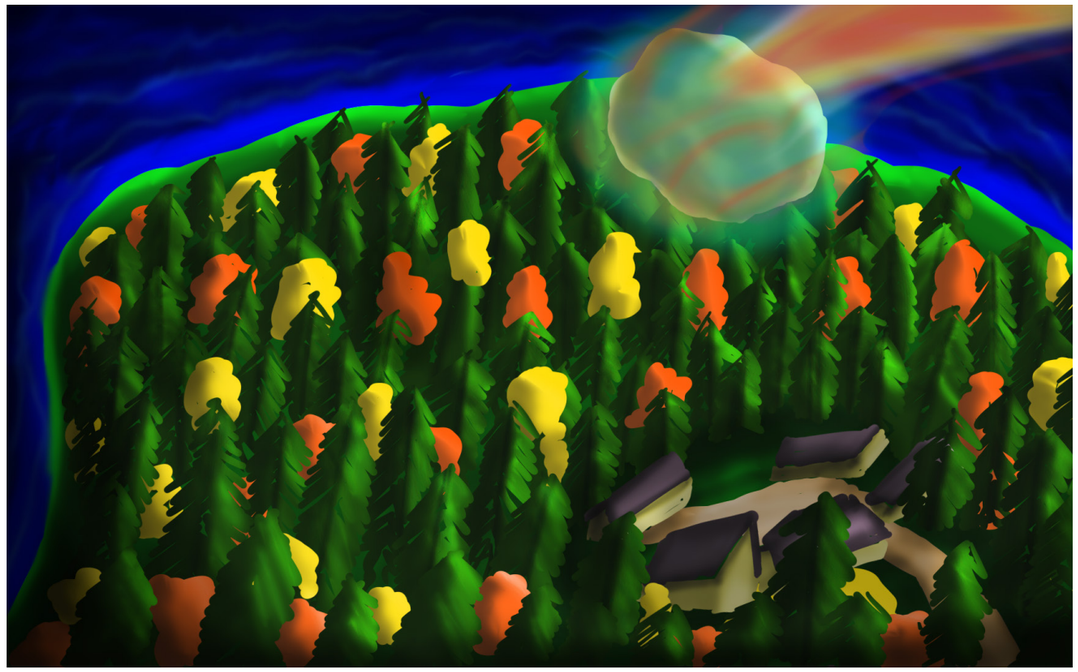
Prologue

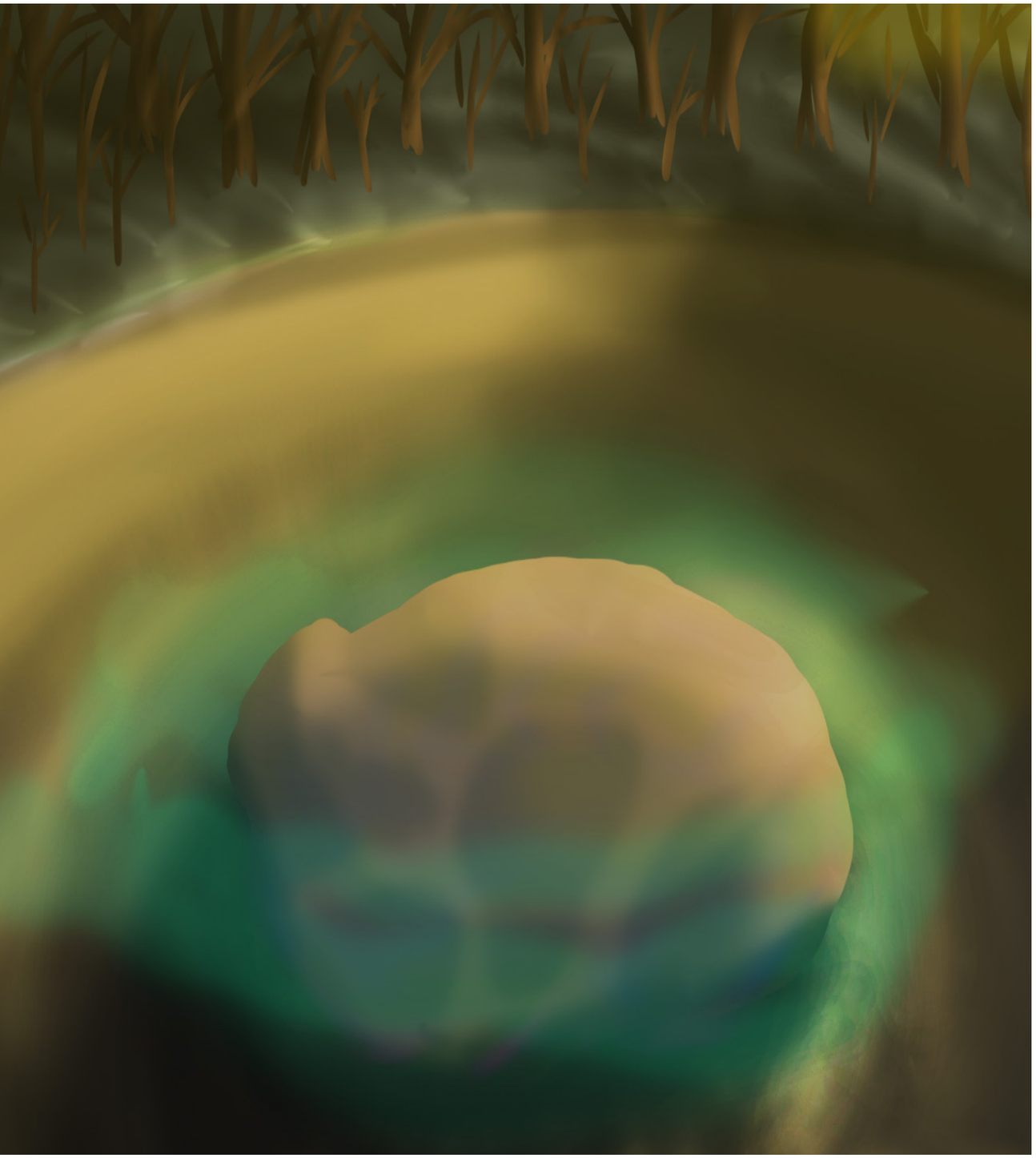


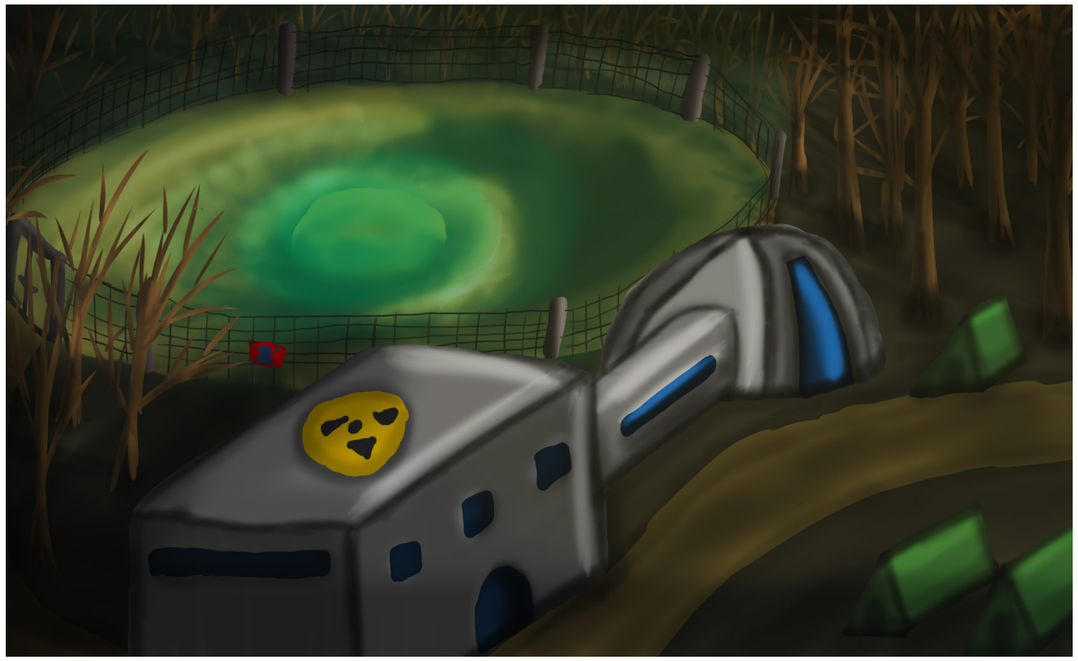


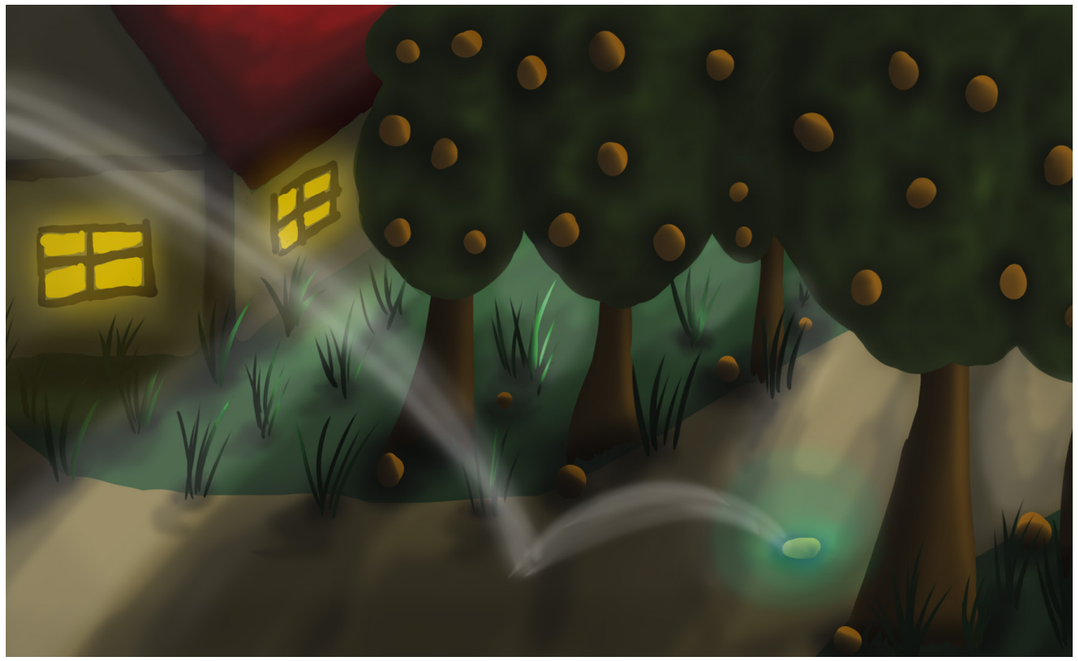




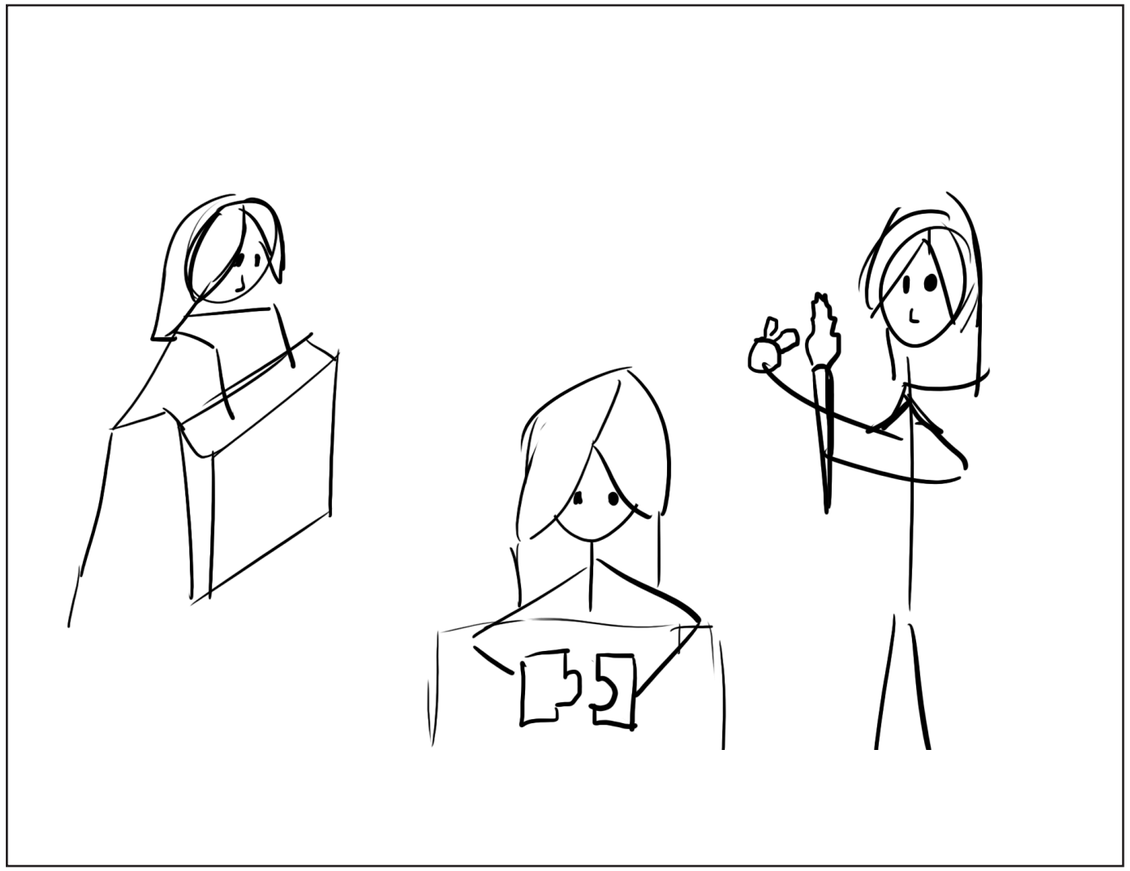


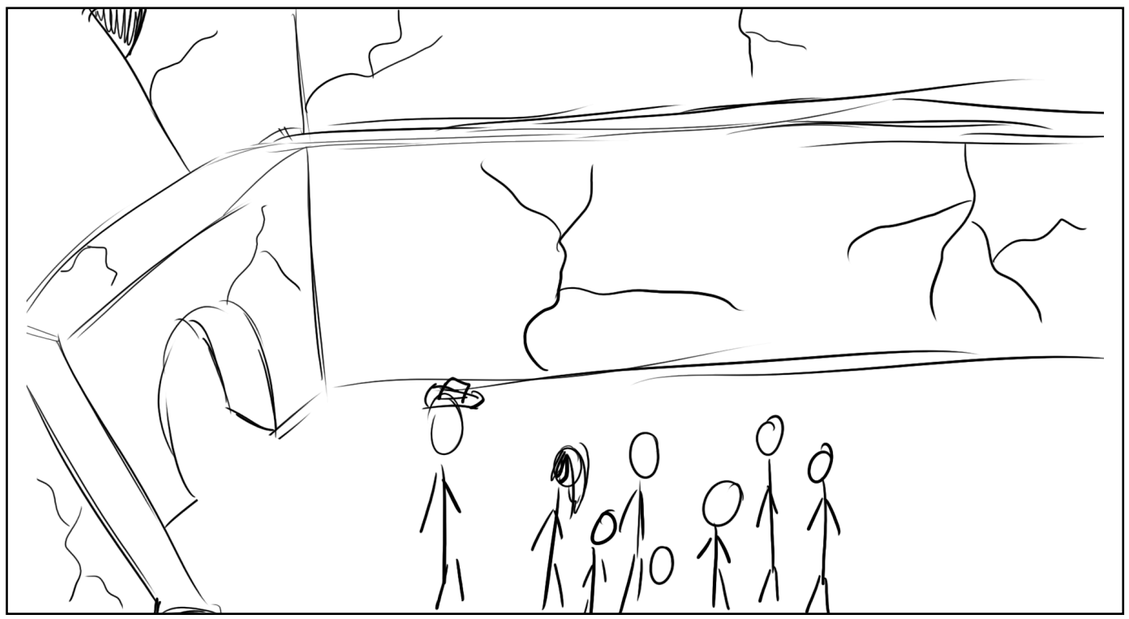


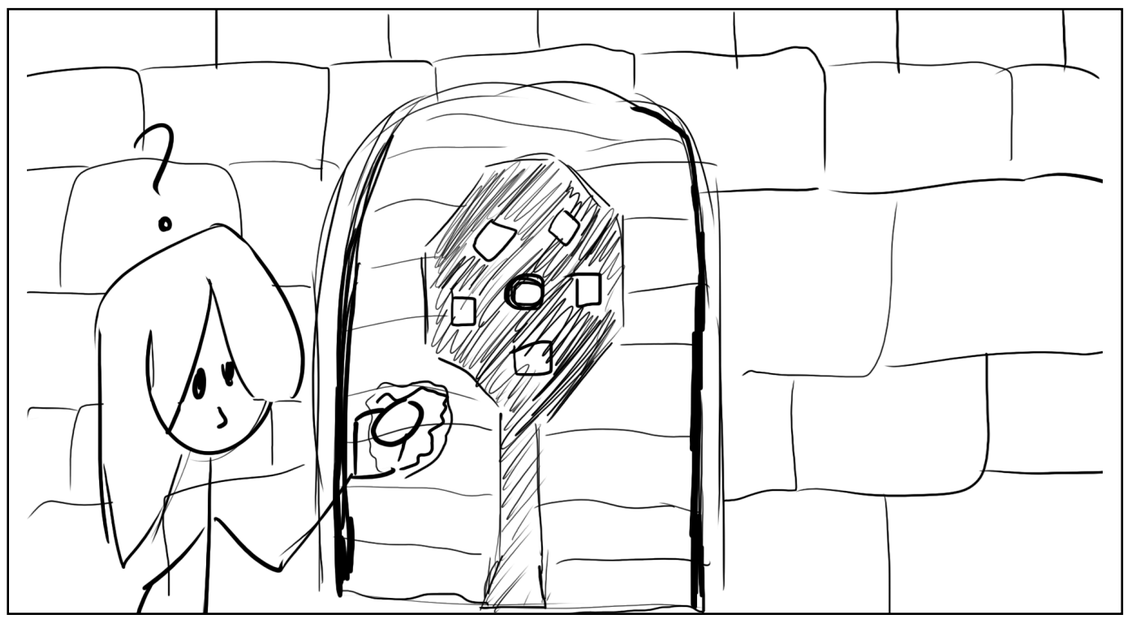


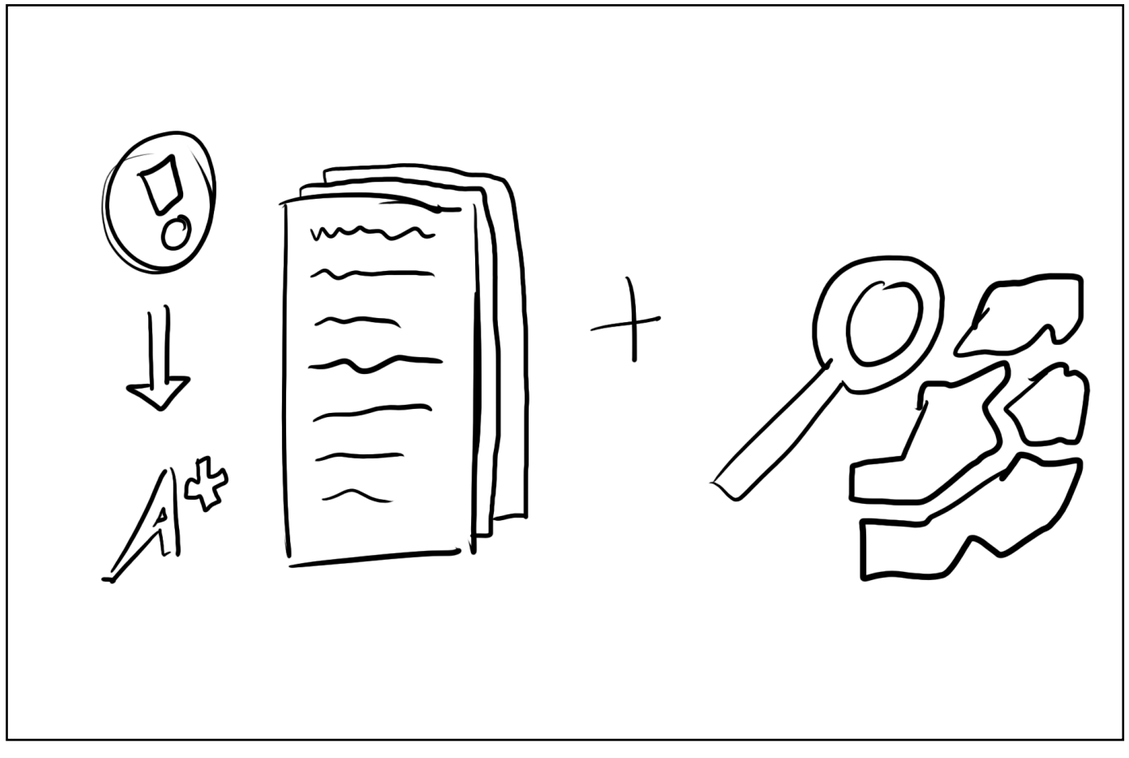


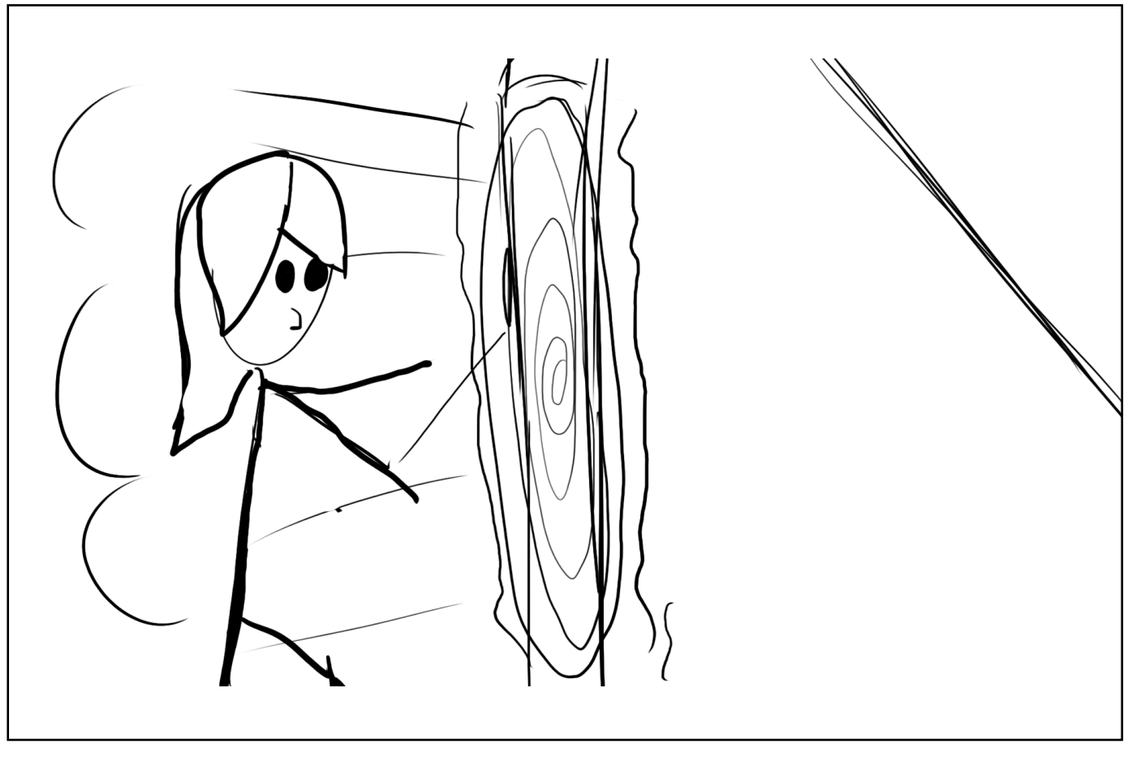
Storyboard

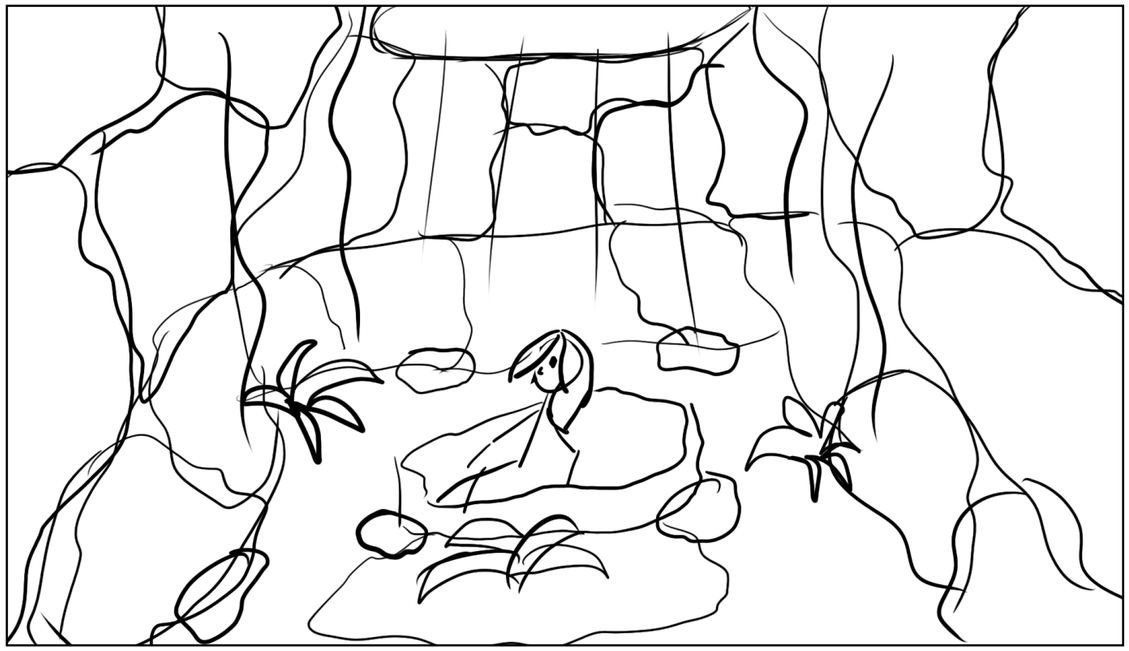


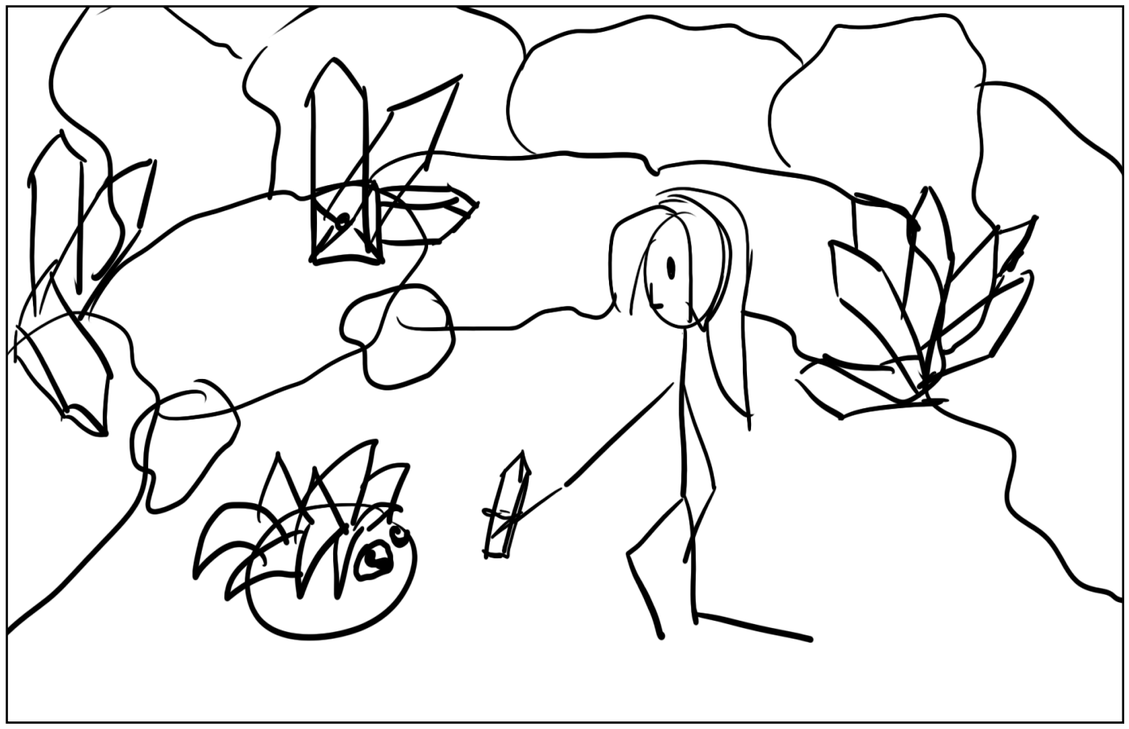


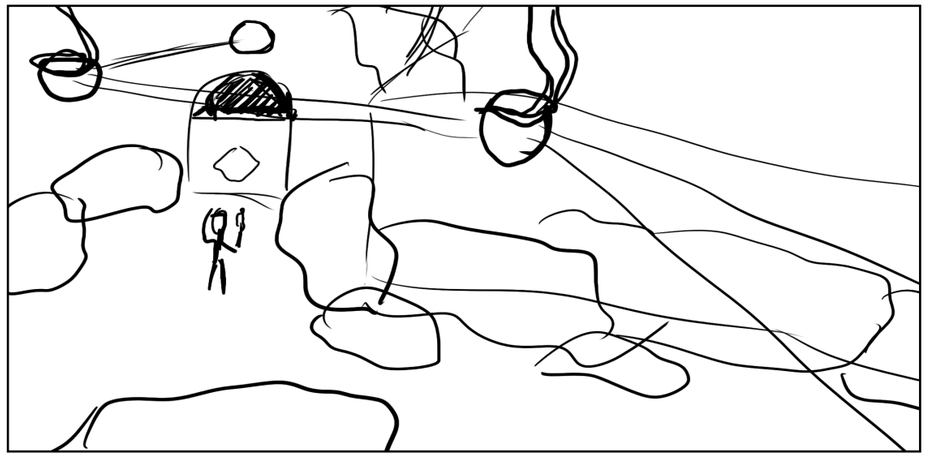


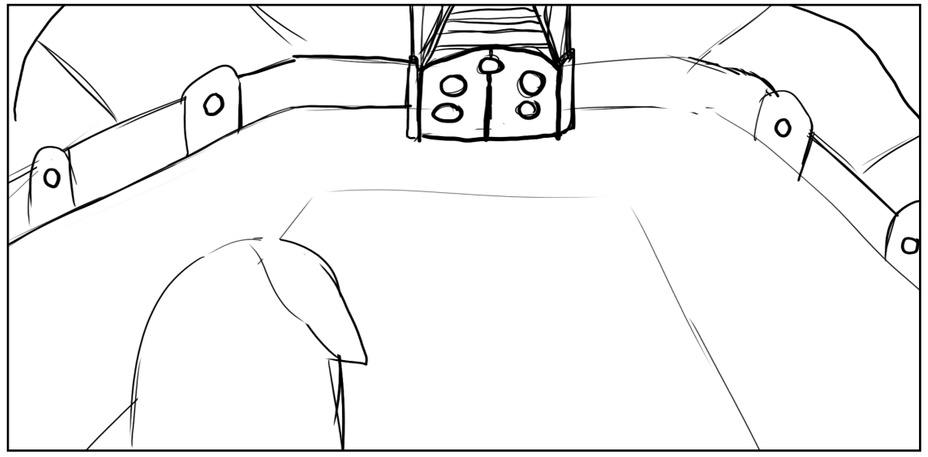


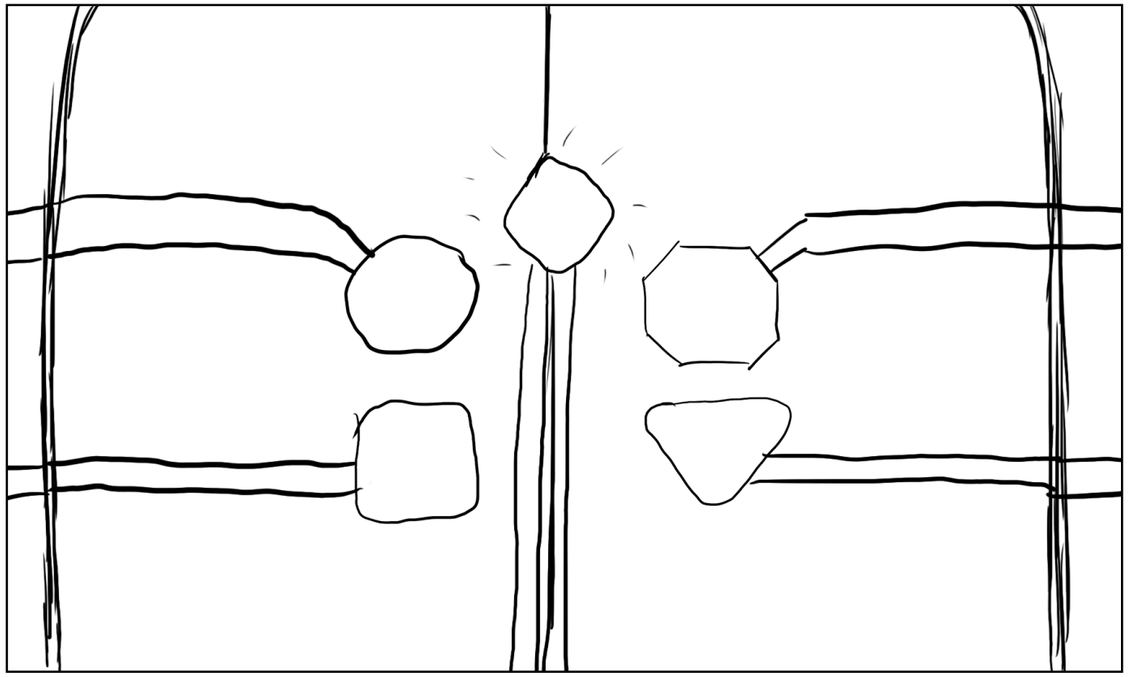


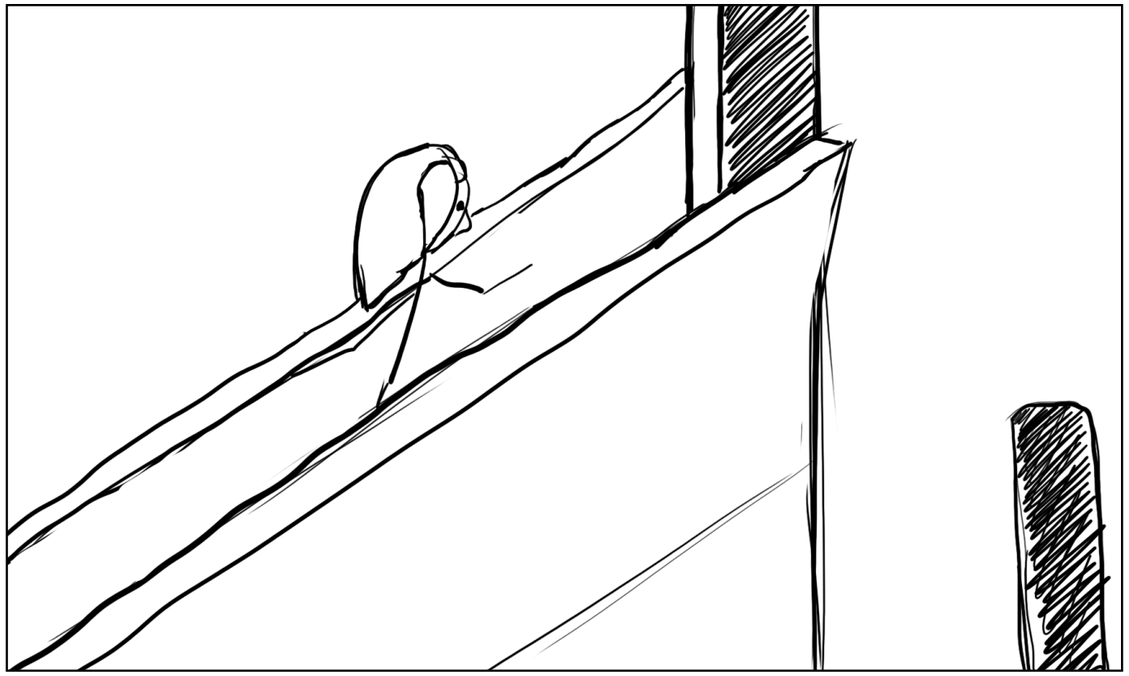


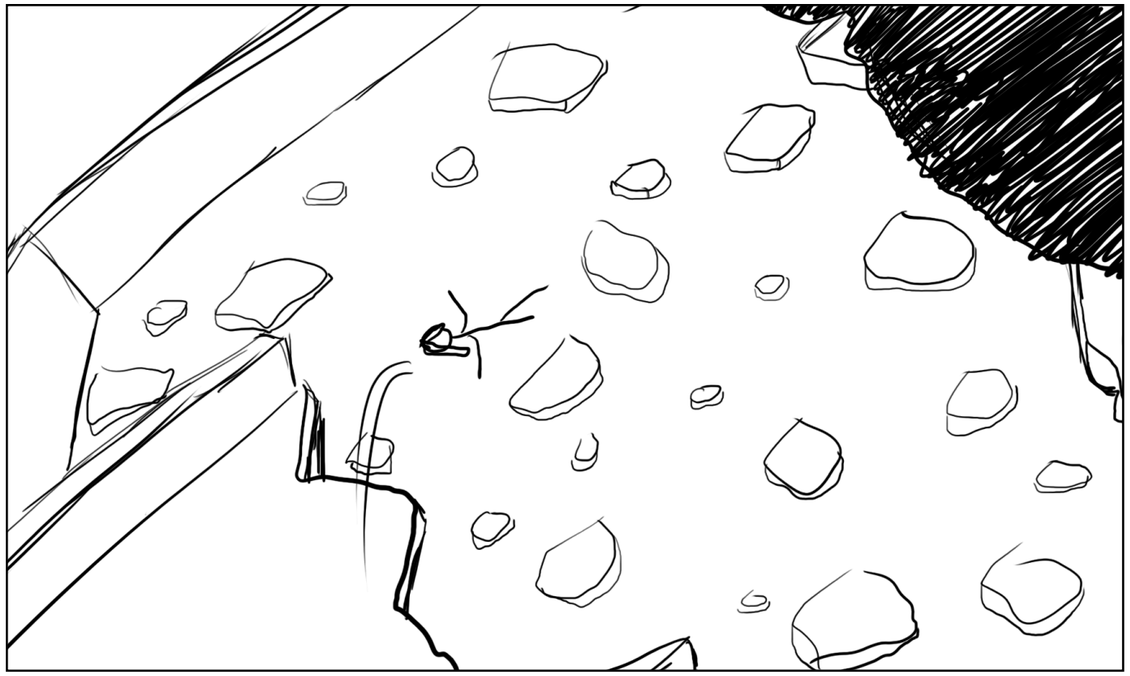


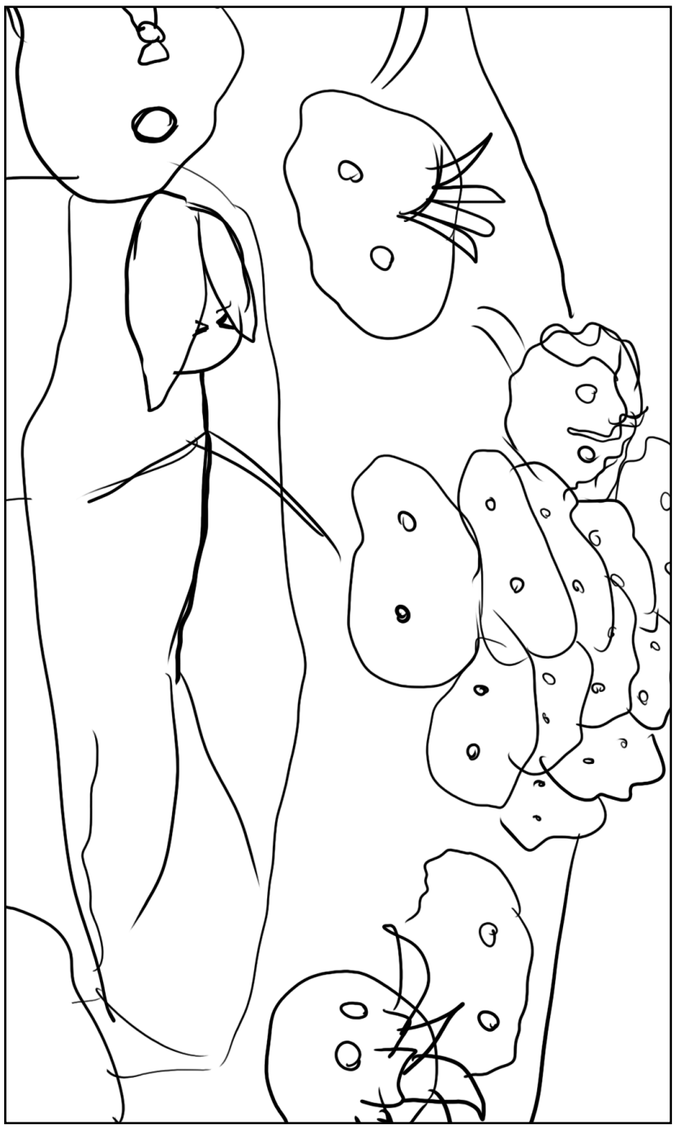


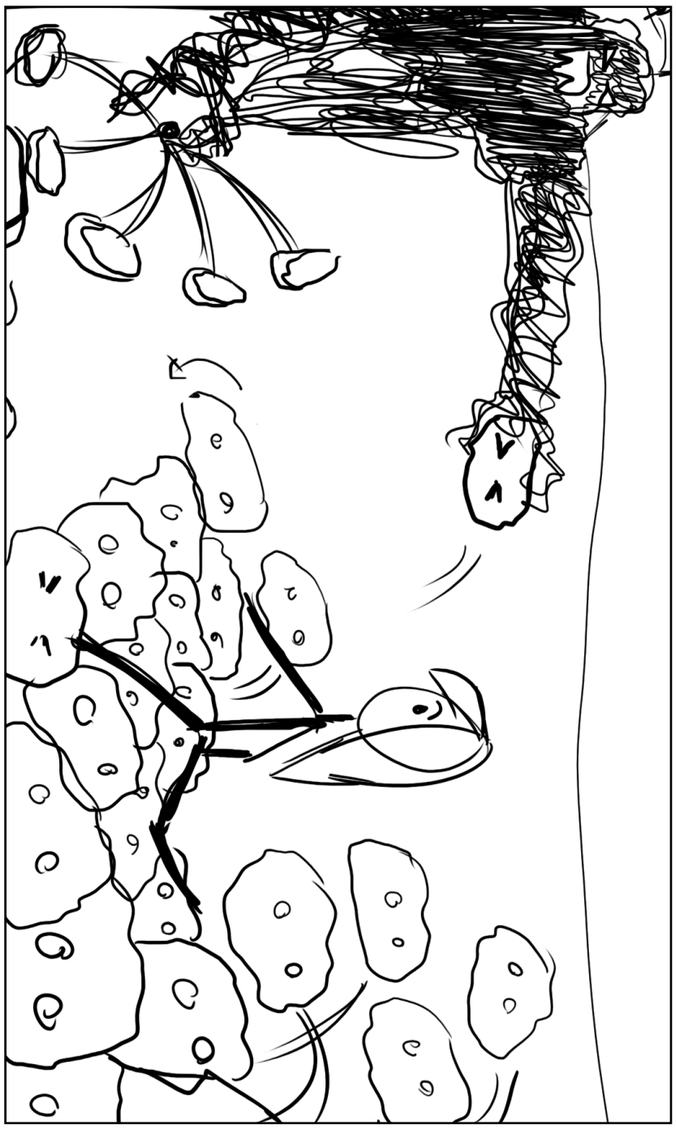


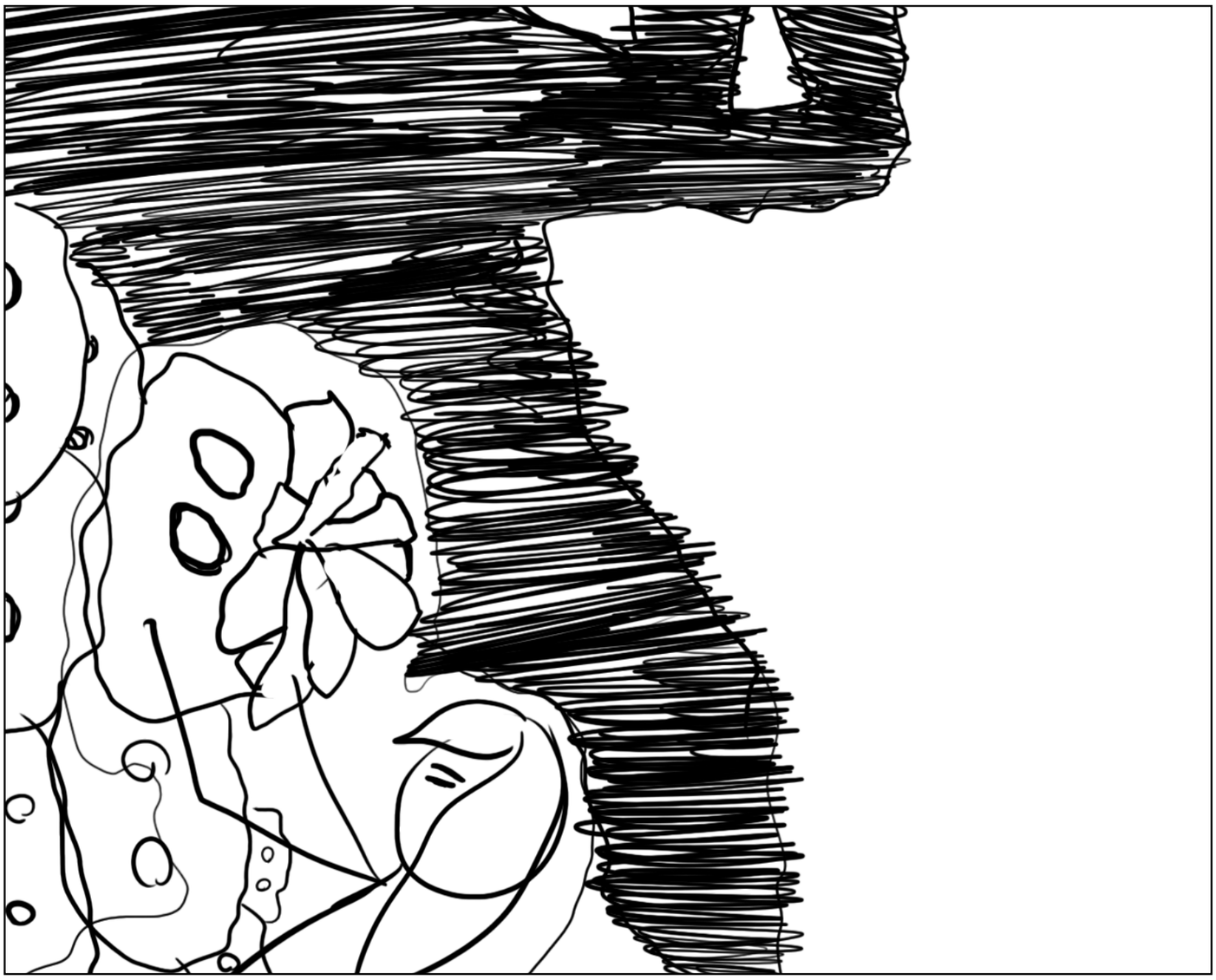


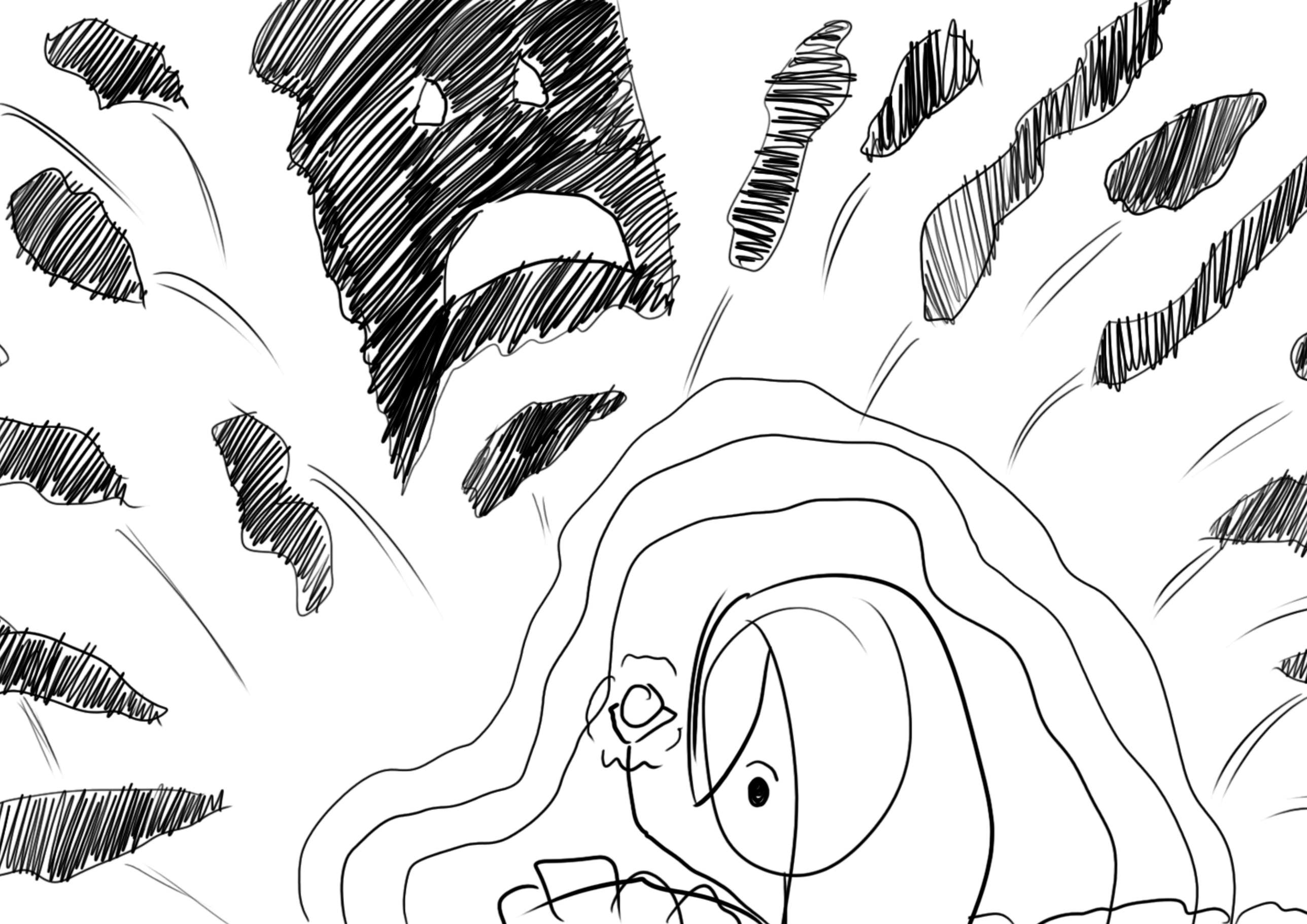


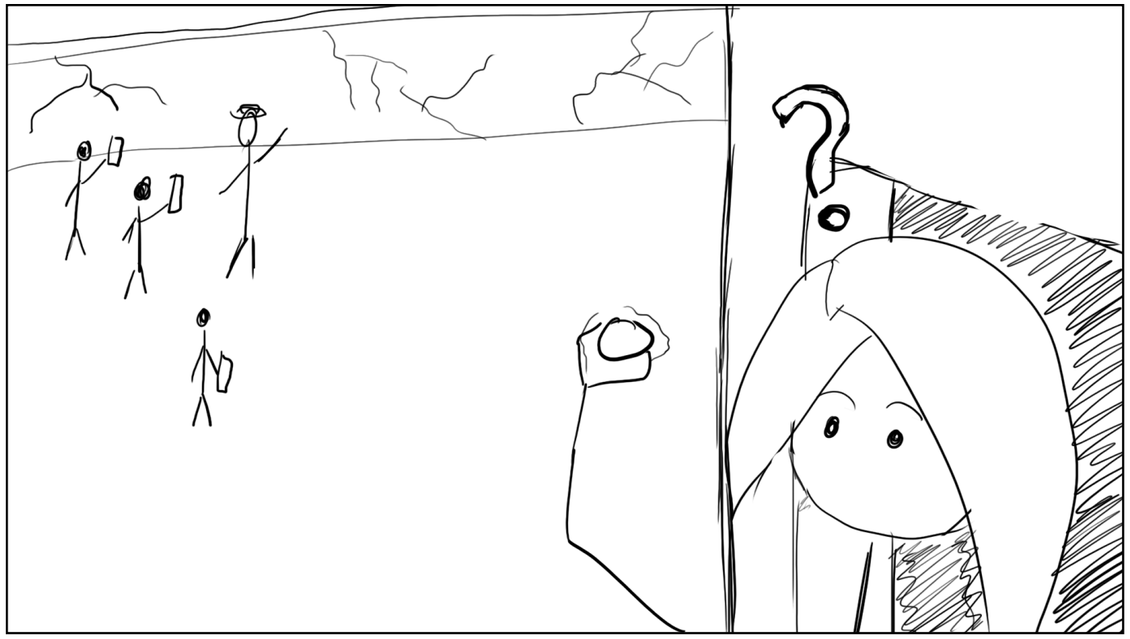












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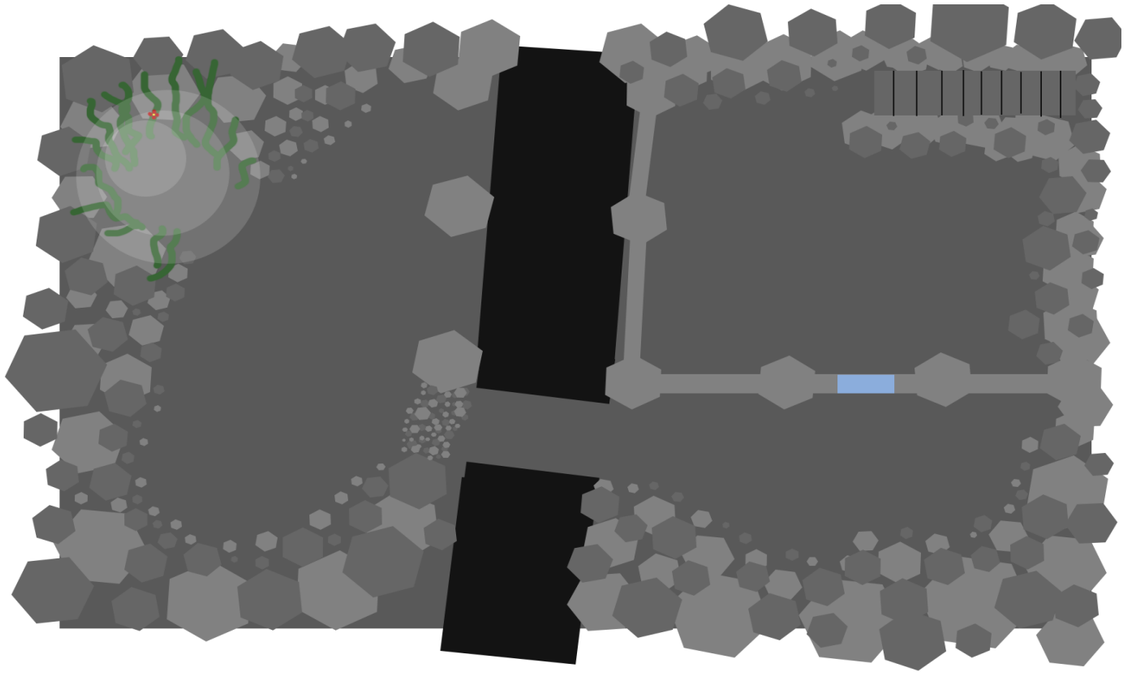
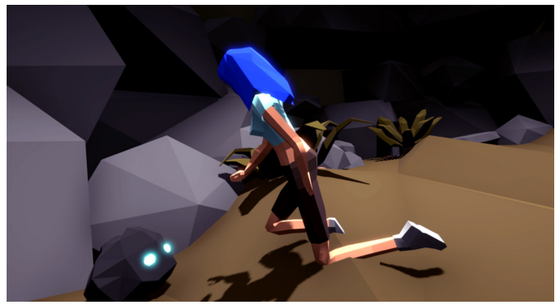
Level Design

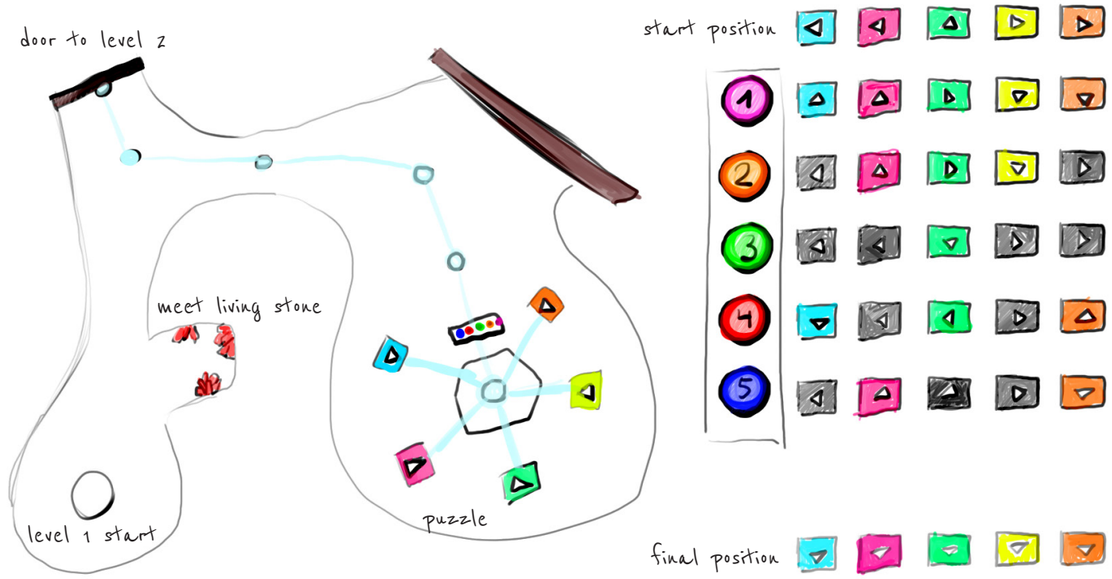
For my master thesis I planned a couple of levels. A concrete level already existed before, but it was completely redesigned during the semester. The development of the assets and the composition for the individual levels is important. The basis for the design is determined by the corresponding gameplay. Primarily Split World tells a story, but the player is guided through the game by puzzles of varying complexity. One of these puzzles is solved in each level section. The following pages give an insight into the final result of my level design.

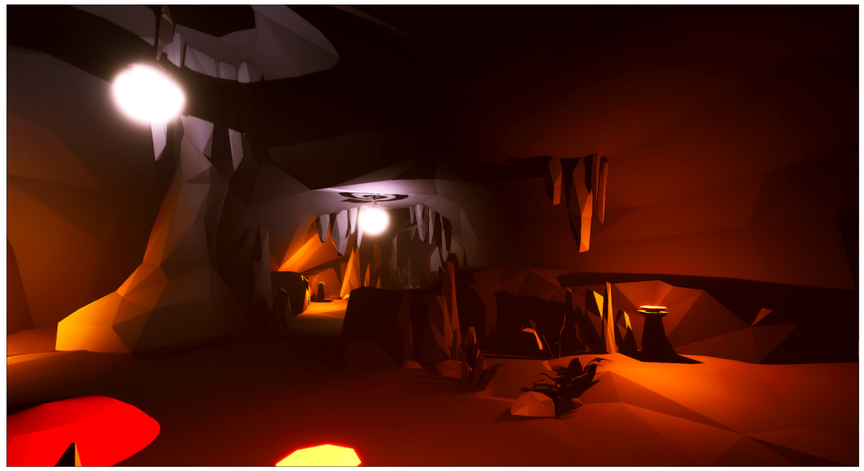


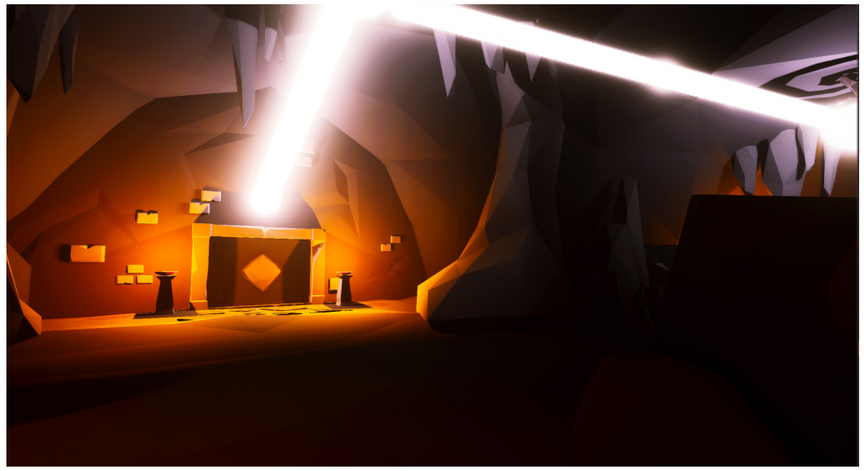
- Bachelor -
Level Design

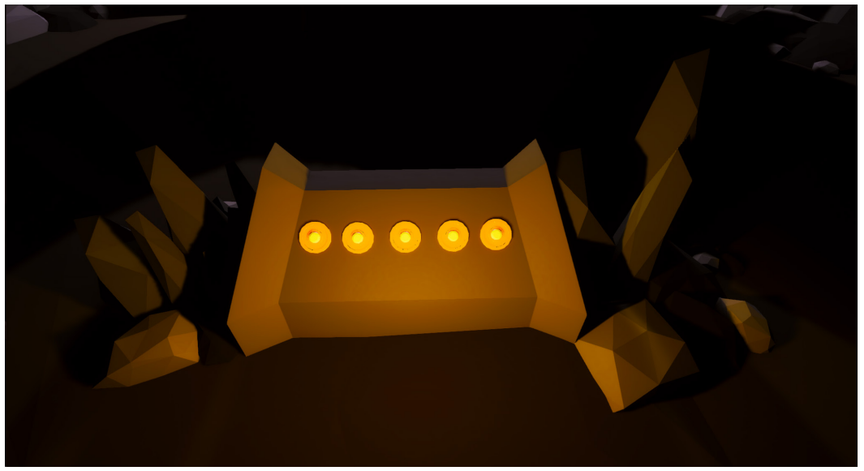


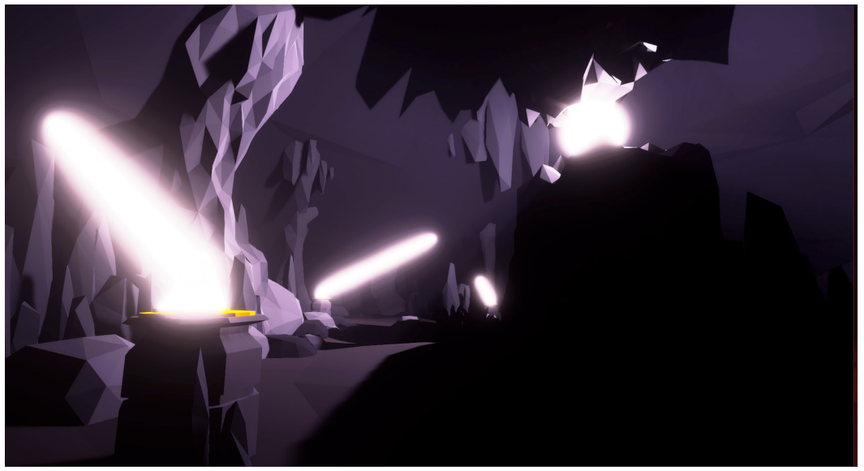
- Master -
Level Redesign



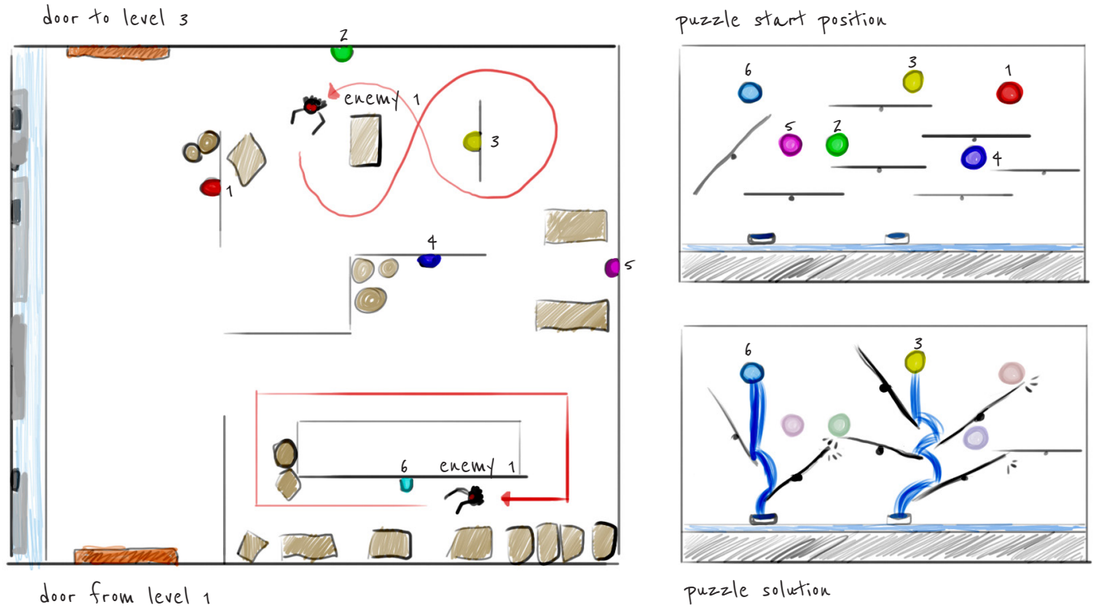


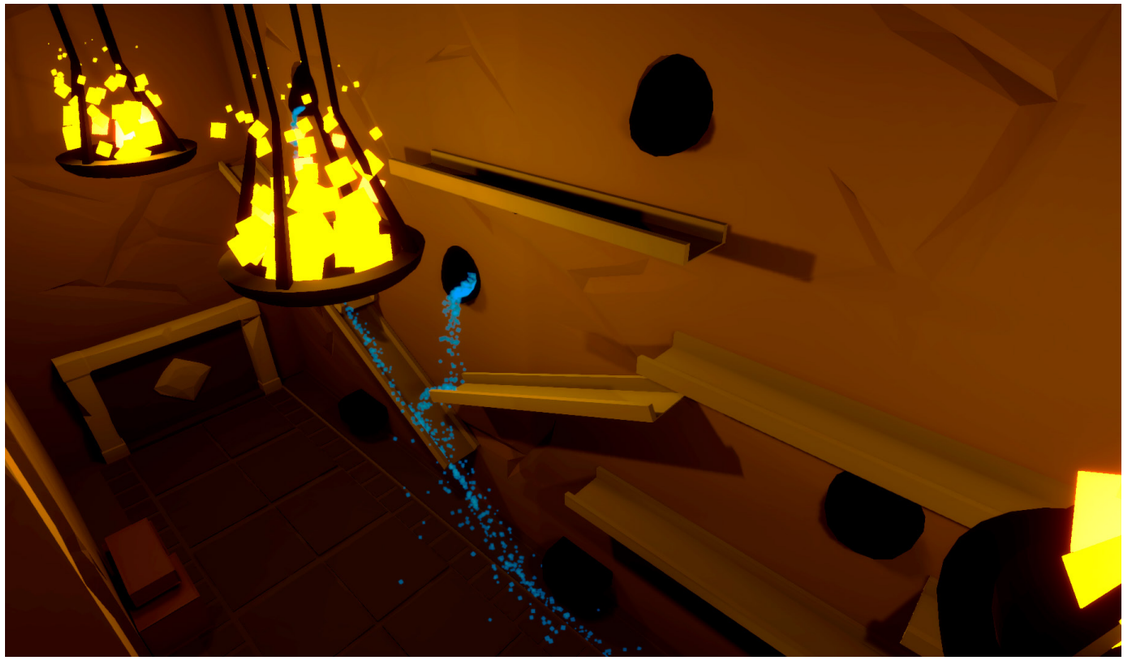


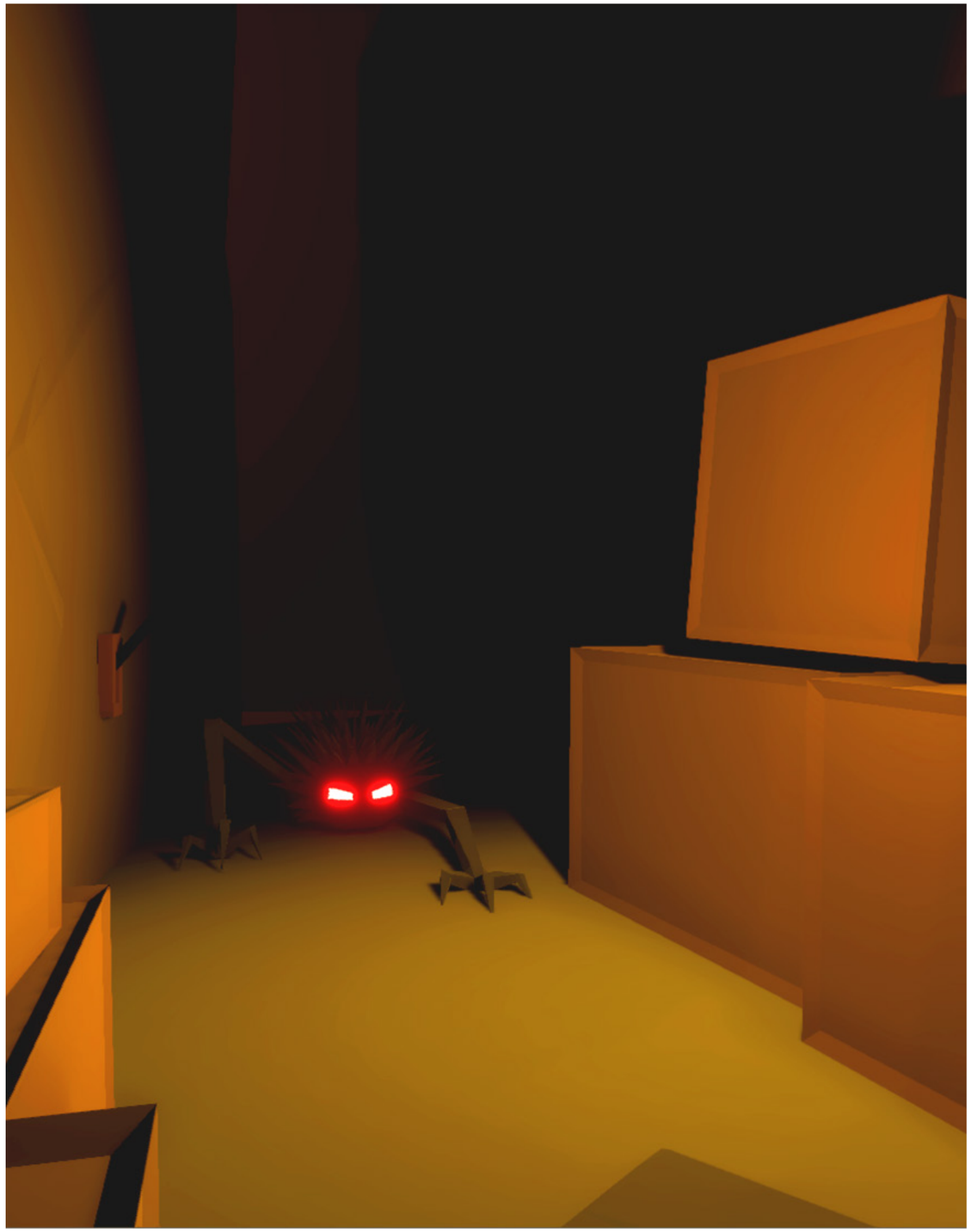




Water Puzzle







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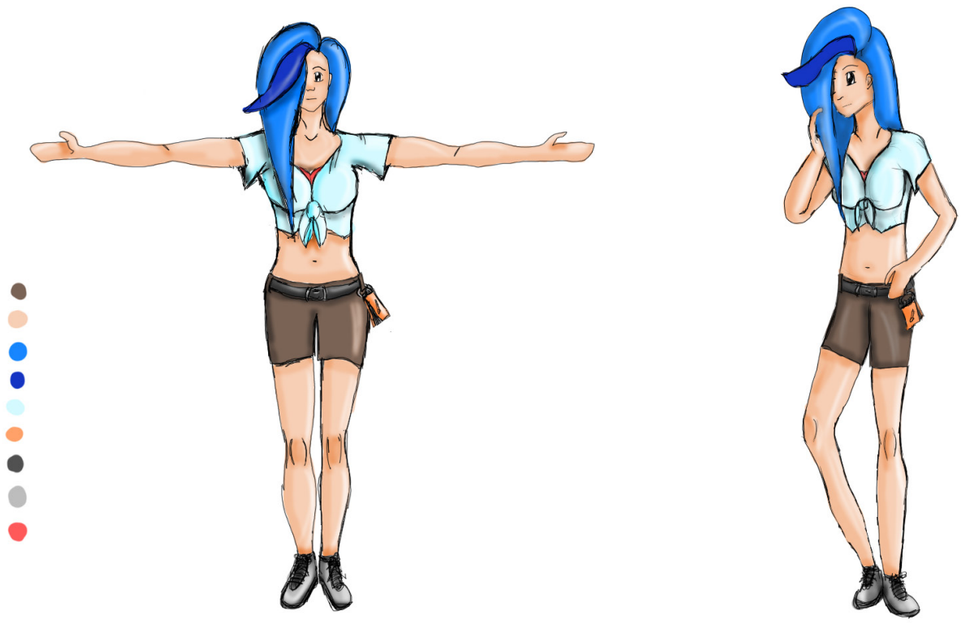
Character Design

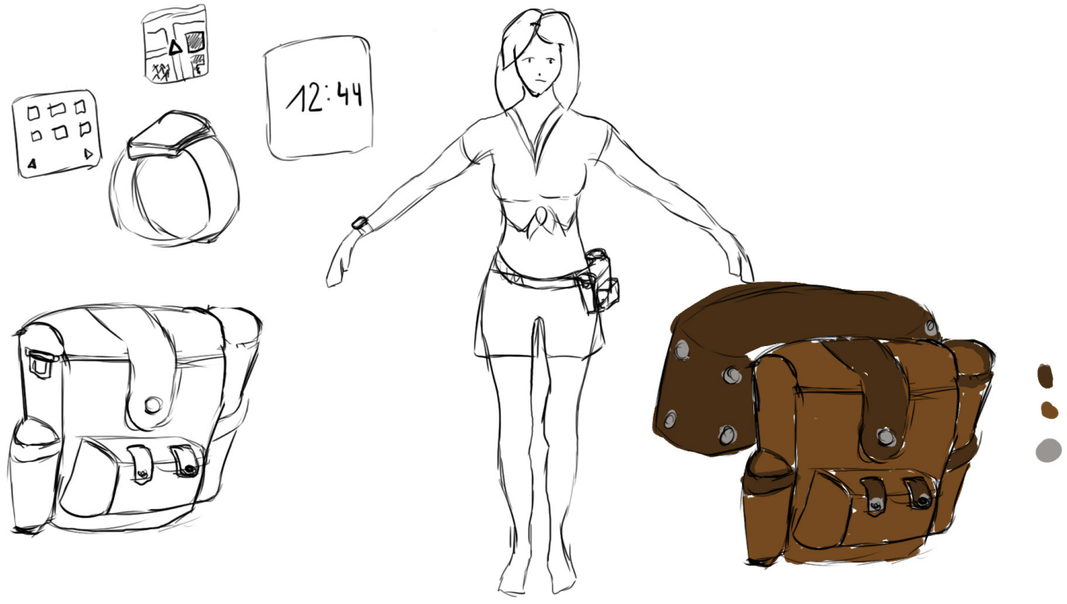
Split World has several characters, including the main protagonist Iris, her friend Volcan, her rival Rose, professor Mill and various monsters like the Spikers and the Living Stones. In the master thesis I focused on further developing the main protagonist, the living stones' visual connection to characters like Volcan and the first enemy – the Spiky.

Iris was given new equipment, new clothes, more polygons and facial expressions. The stones now have individual appearances related to the characters from the real world. Finally, the Spikers' behavior was refined.

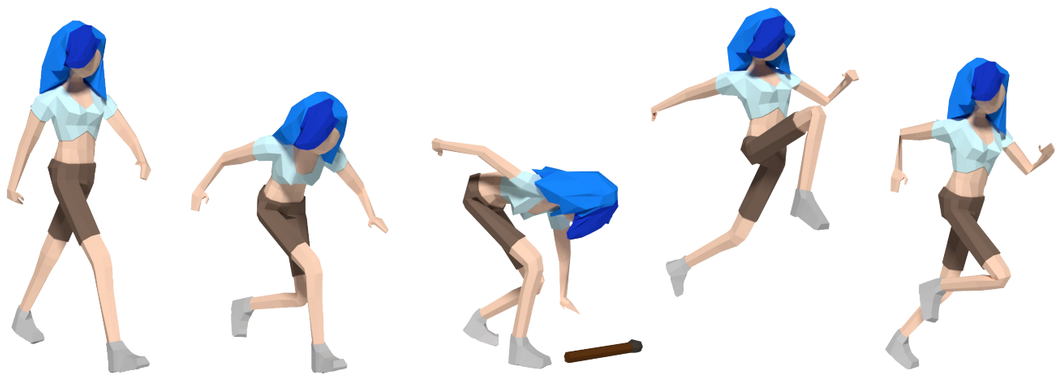
Iris



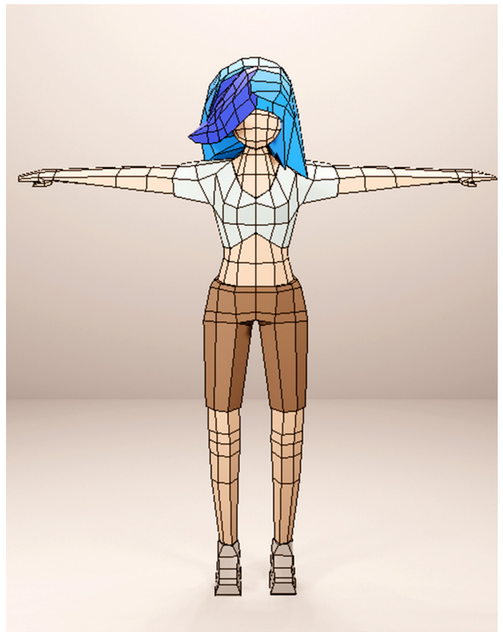
bachelor art concept



master tool concept

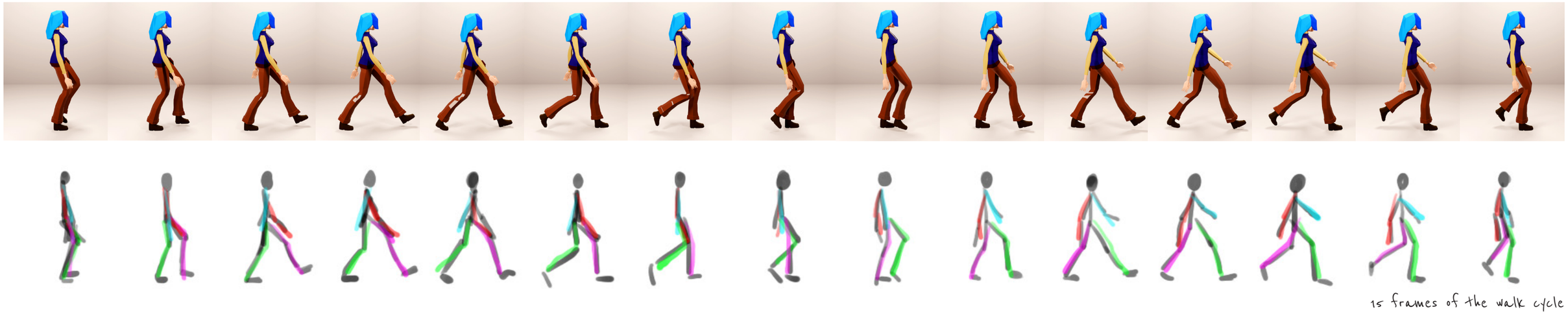


bachelor model with animations

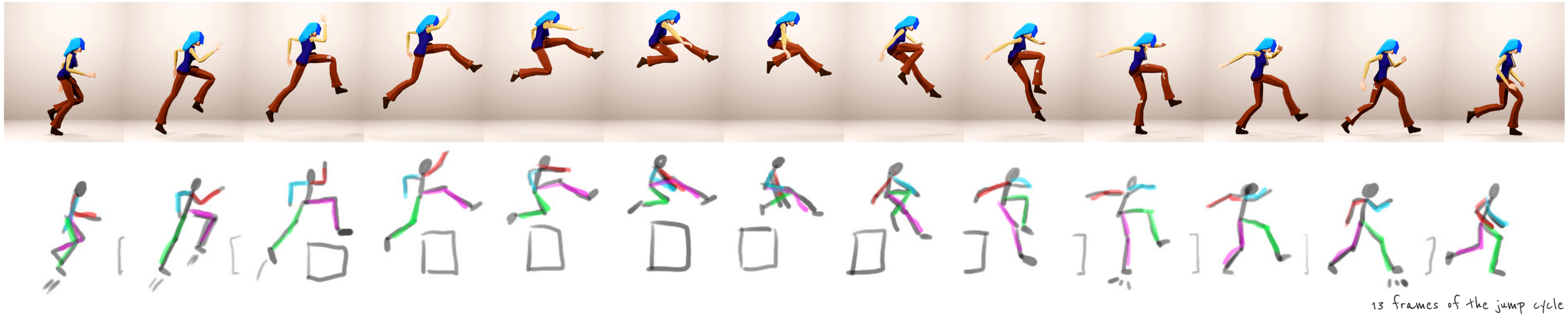


bachelor model with 645 polygons

master model with 1672 polygons



15 frames of the walk cycle



13 frames of the jump cycle

9 frames of the run cycle

normal

happy

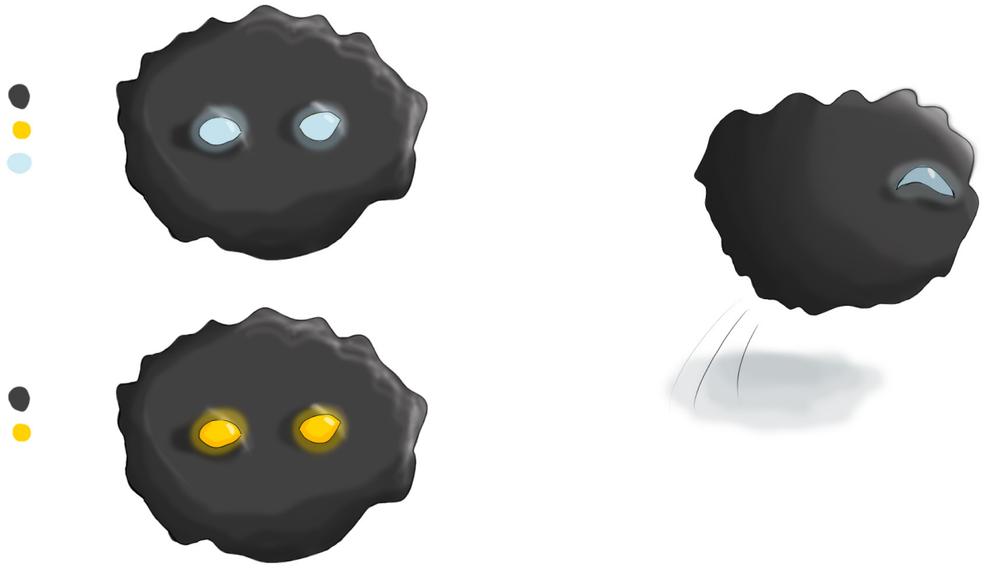
sad

shocked

suprised, expectant

angry

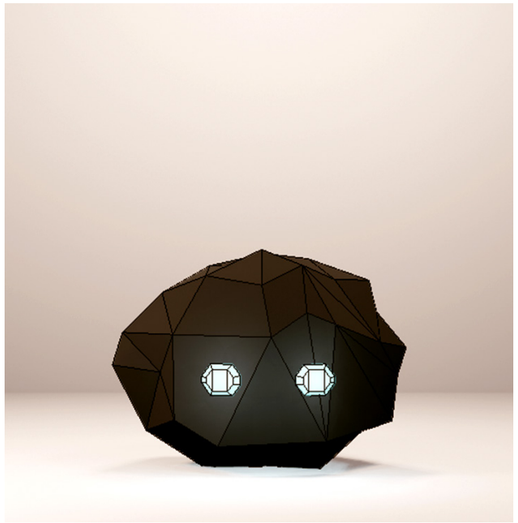
Living Stones



bachelor concept art of all living stones in split world

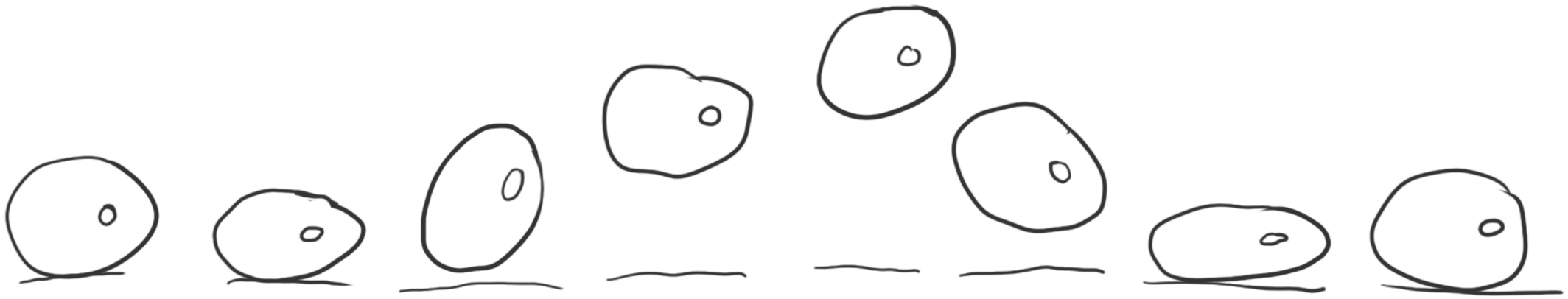
master concept of different stones in the split world

master concept of the behavior of the living stones

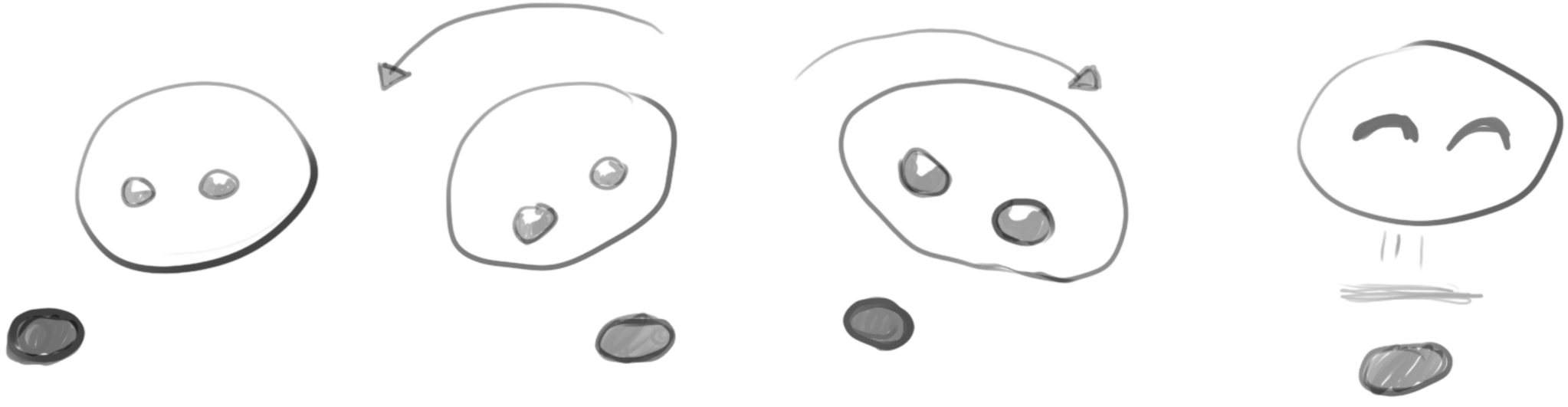


bachelor model with 113 polygons

master model with 436 polygons, that looks like Iris friend from the real world

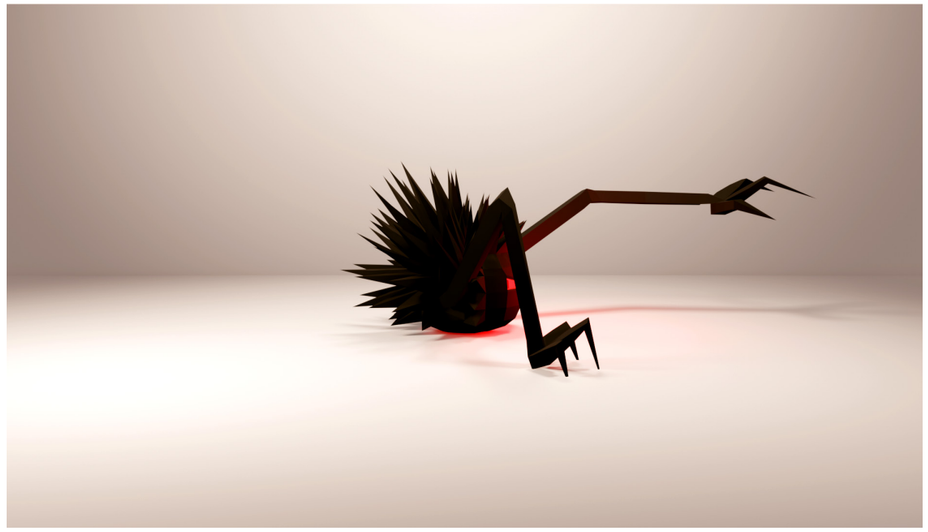


elastic movement of the living stone



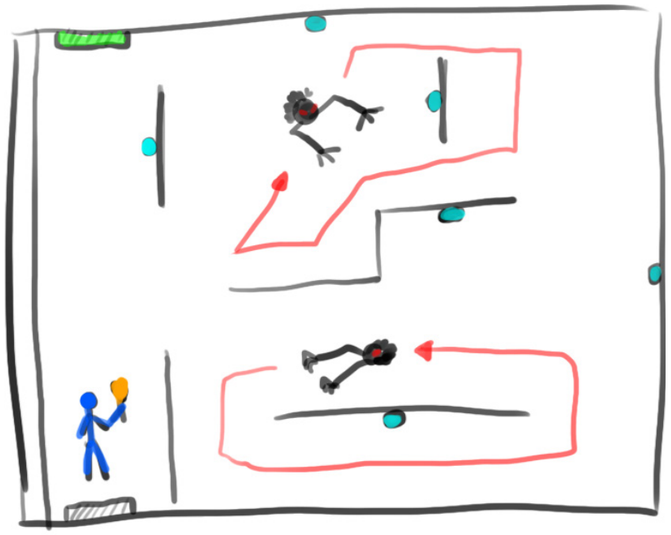
sweet interaction of the living stone with an object

Spikers



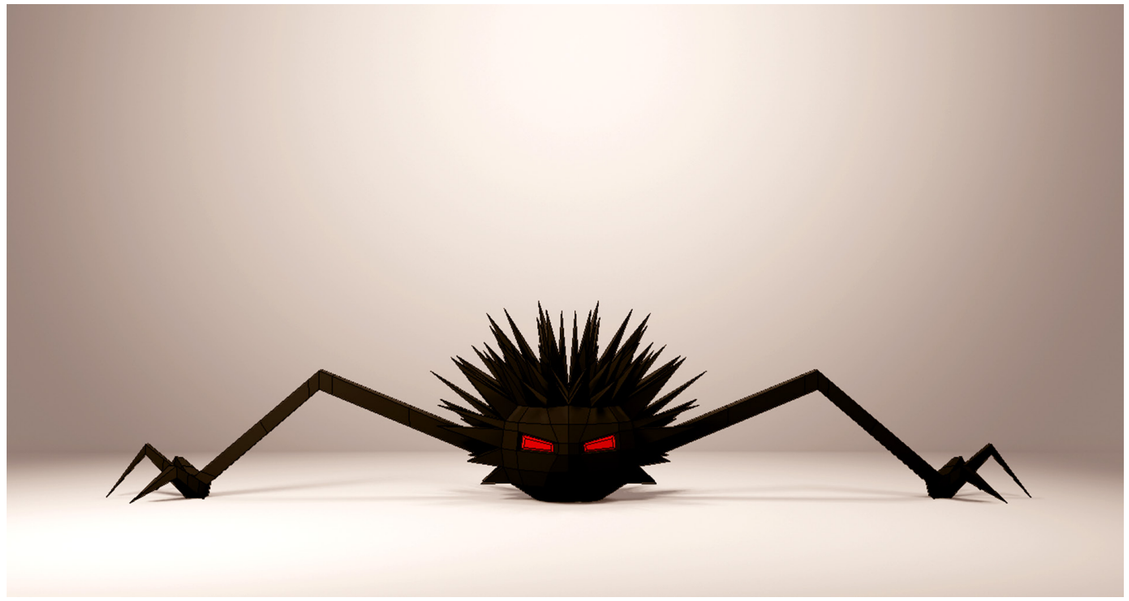
bachelor concept art

old gameplay behavior
with fog

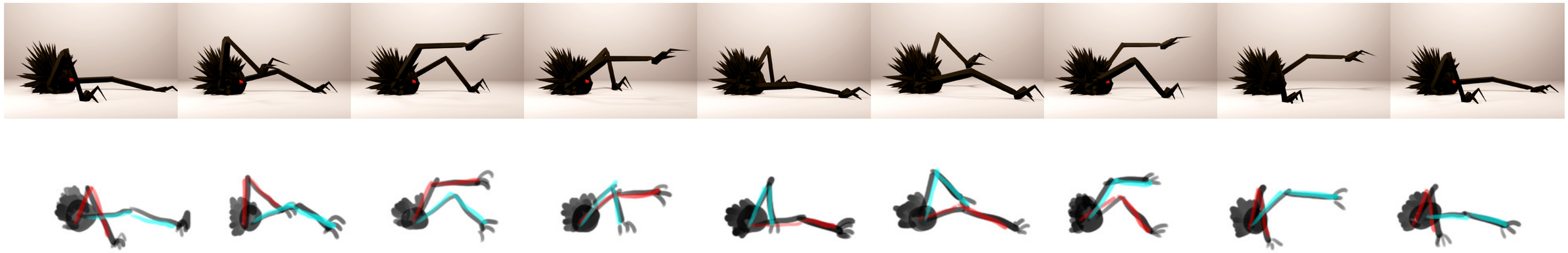


small room with Spikers, less light, no fog needed

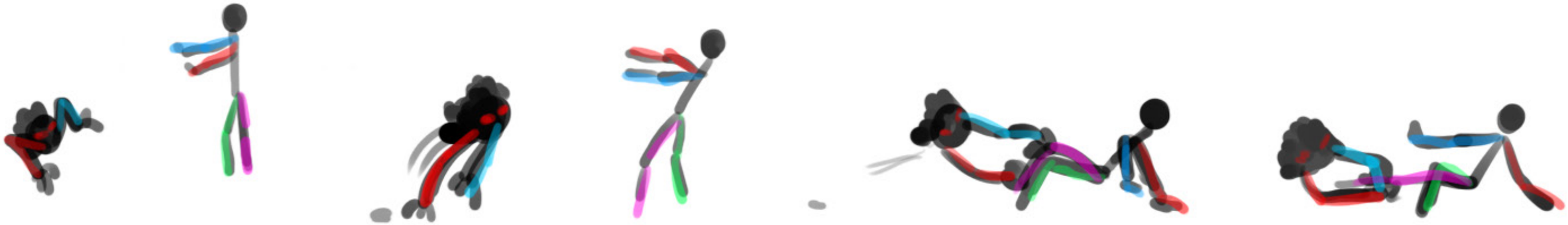
bachelor model with 333 polygons without rig and animation



master model with 638 polygons



9 frames of the movement cycle



attack animation idea

Special Thanks

With the completion of my work I would like to thank my friends for all the funny moments during my free time. I would also like to thank my work colleagues in the Department of Communication at Augsburg University of Applied Sciences, who helped me to escape the daily grind. I also want to thank my family for their support. Also my professor, who has supported me since the third semester of my bachelor's degree with 3D and game expertise. But the biggest thanks go to my boyfriend, who always encouraged me and made me laugh even on bad days.

Have fun and don't forget to visit some virtual worlds.