Animation Final - Stage 1: Analysis and Prototype

Part 1:Collect References

https://miro.com/app/board/uXjVLacZCfo=/?share_link_id=910172709752

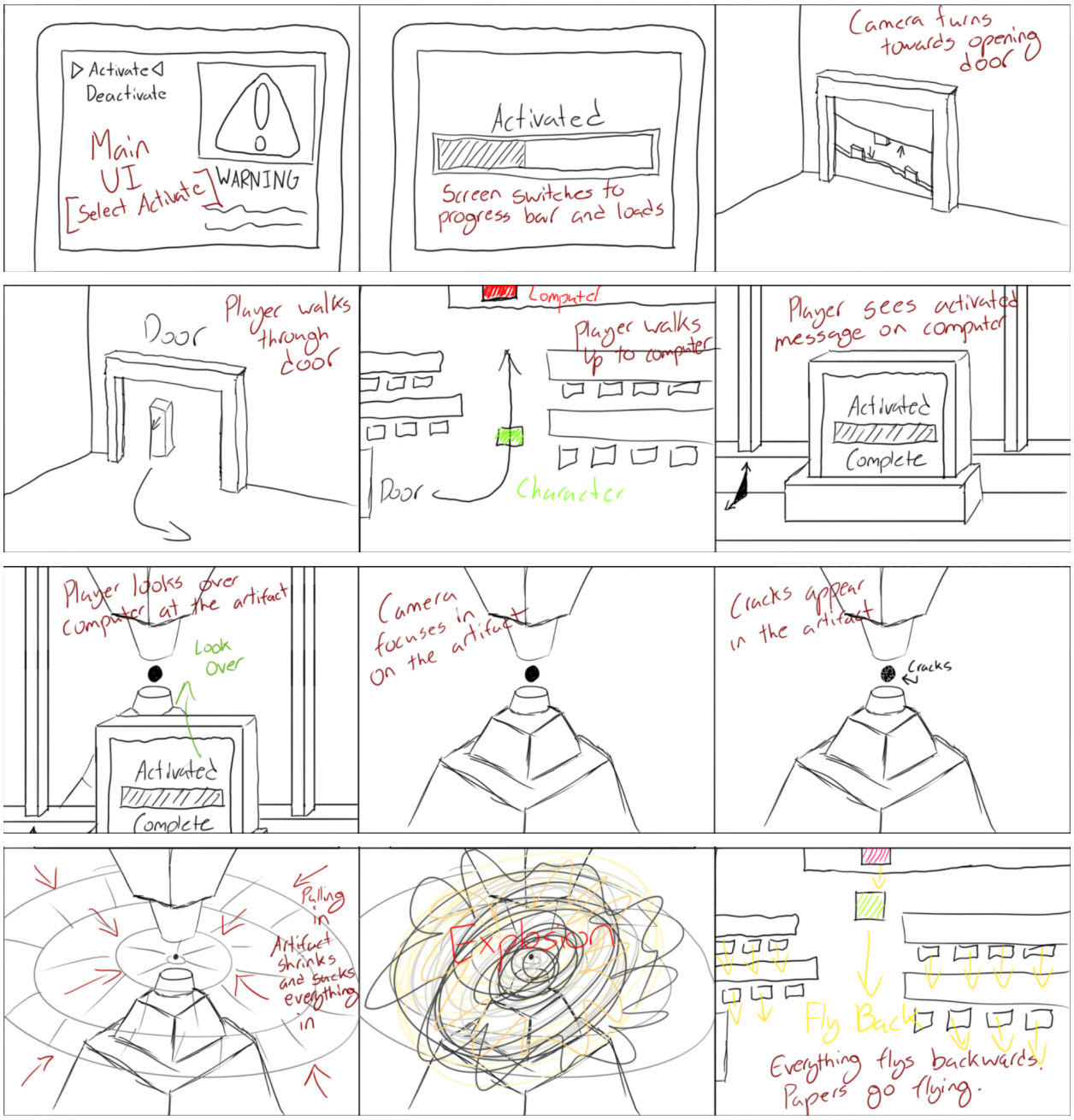
Part 2: Analyze References

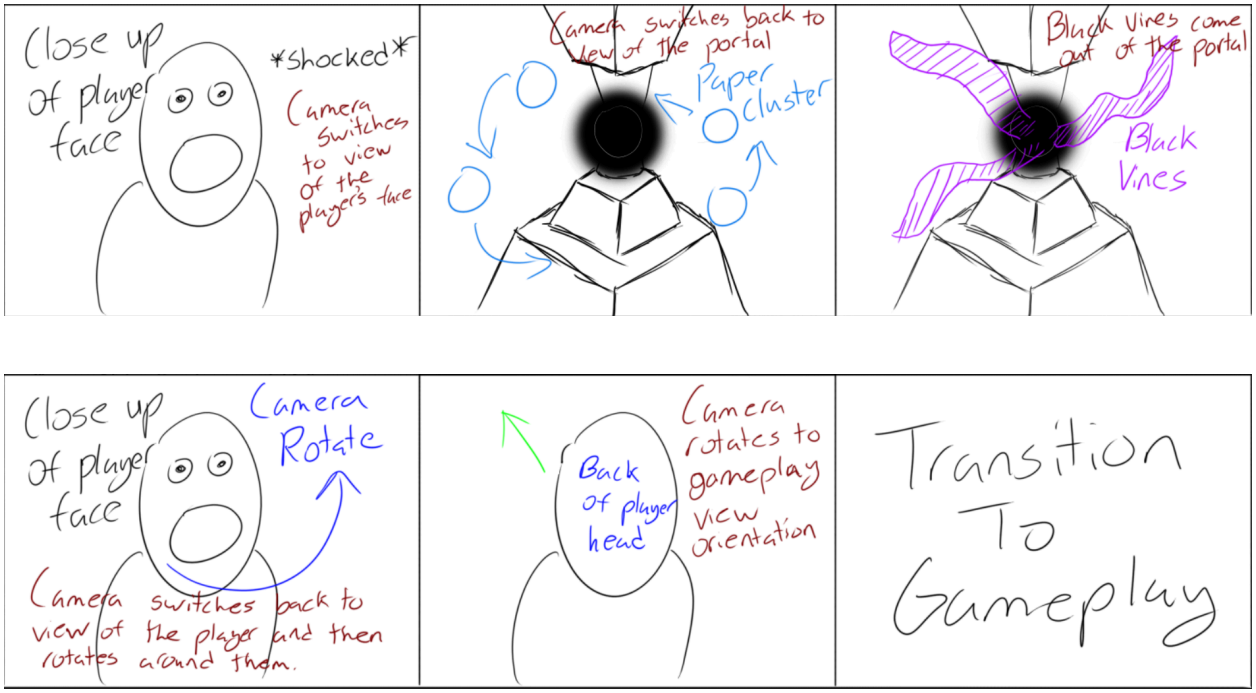
Narrative Paragraph

We are creating an animation that is based off of our GDW game. Here is our story overview from our design document,

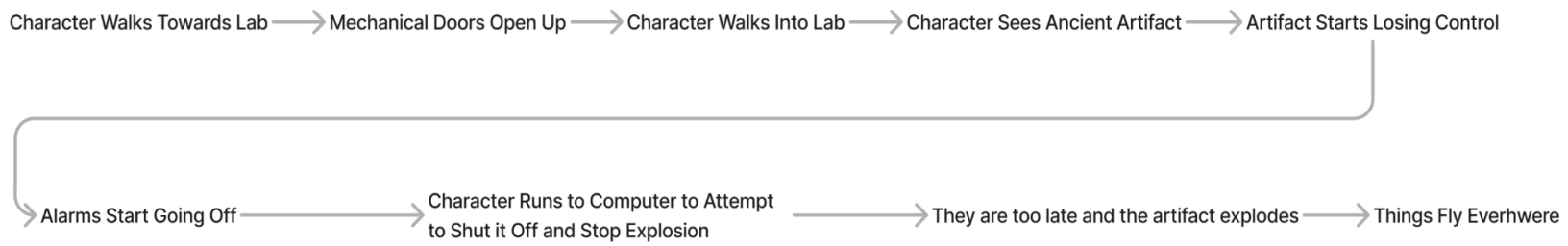
An immovable artifact was discovered in a mine deep underground. A government-owned company was tasked with building a small research facility around the artifact to investigate its properties. Research led to the discovery of multiple unique properties of the artifact. One such major discovery was that when energy was transmitted into the artifact, it would seemingly disappear and then reappear with a greater current/power. Through the promise of unlimited energy and military capabilities, the company was given funding to build a more advanced research facility to study the artifact. On a single day, weeks after the artifact was first discovered, communication between the lab and the outside world suddenly stopped and unexpectedly, the facility sealed itself off. Months later, the world has changed drastically. The sky darkened, plants died, animals went extinct, and civilizations fell. Sickness and monsters run rampant and no one knows the cause.

Storyboard


Activate
Deactivate
Main UI
[Select Activate]
WARNING
Activated
Screen switches to progress bar and loads
Camera turns towards opening door
Door
Player walks through door
Computer
Player walks up to computer
Door
Character
Player sees activated message on computer
Activated
Complete
Player looks over computer at the artifact
Look over
Activated
Complete
Camera focuses in on the artifact
Cracks appear in the artifact
Cracks
Pulling in
Artifact shrinks and sucks everything in
Explosion
Fly Back
Everything flys backwards! Papers go flying.



Flowchart



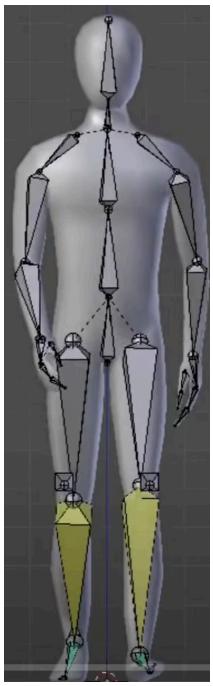
Menu

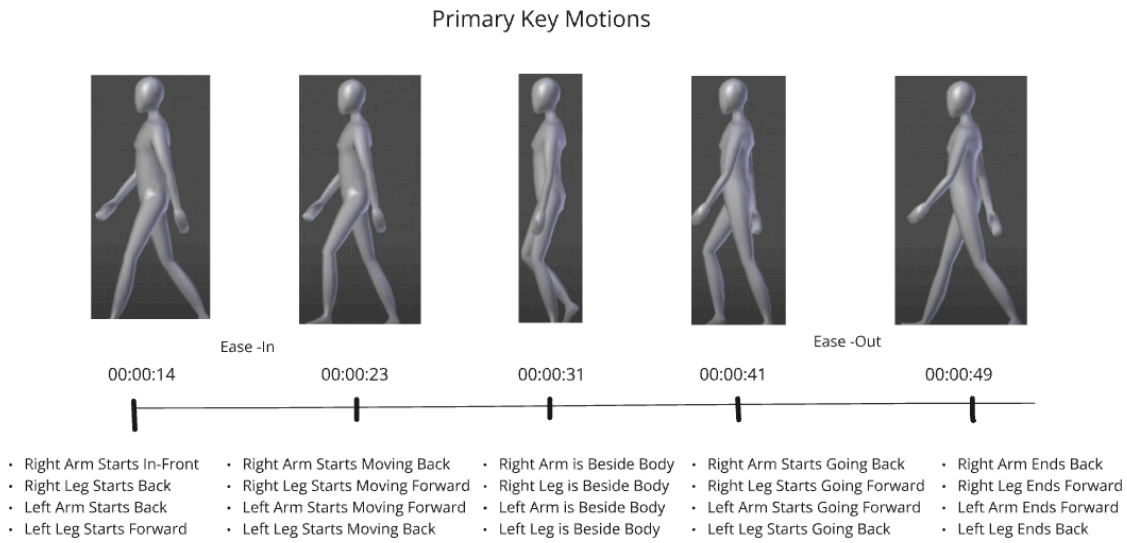
- https://www.youtube.com/watch?v=HLddFvCOFyU
- For our game menu and UI, we will be using an old school style computer that will function as our menu. The menu will show a warning message to the player that blinks every second and display two options. The options will be “activate” or

“deactivate”. The player will only be able to select the activate option and this will cause a green loading bar to appear. The loading bar will take a couple seconds to get to full which then causes the animation to begin. The menu will have the computer screen be animated with the red warning message flashing on the screen. Additionally, the buttons will be animated when the player selects an option. There will be an arrow on each side of the option the player is selected on, indicating that they are currently selected on that option. These arrows will be animated and blinking on and off every second.

Player Walking

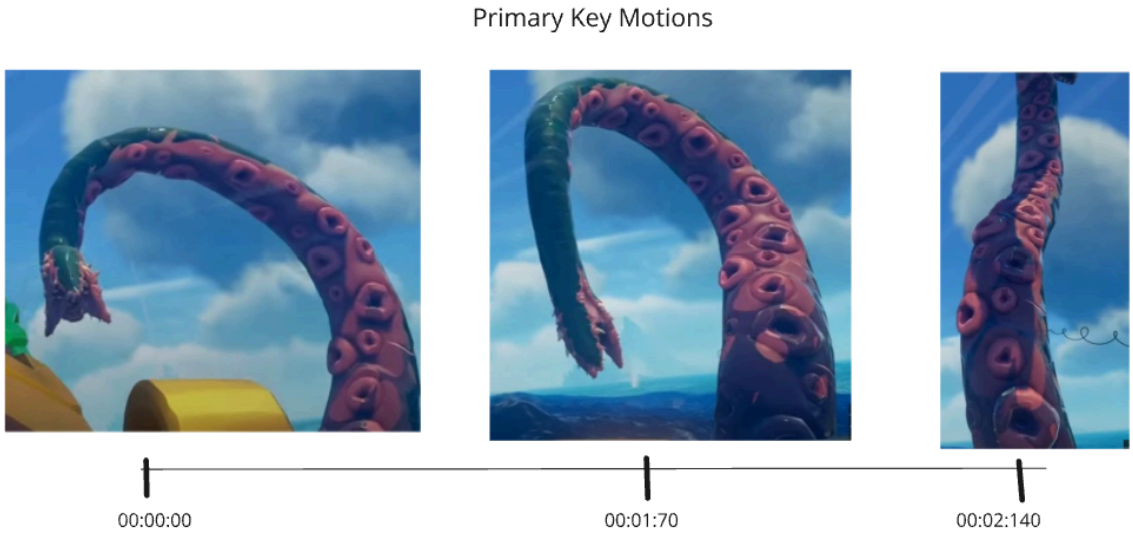
- https://www.youtube.com/watch?v=gFf5eGCjUUg&t=2s
- This animation contains our main character walking. The animation appears to be relatively smooth. From the 12 animation principles, we have a solid drawing with the model, timing, follow-through / overlapping action, and ease-in and ease-out. There appear to be around 25 bones. Looking at the image below, there appears to be one bone in the head, 2-3 within the chest and stomach, one in each shoulder, two in each arm, about four per hand, three for each leg, and then a couple of bones in each foot. This doesn’t include the facial bones which we will add for facial expressions. We will approximately have 30 bones for the face. The movements appear to be relatively simple, slightly moving only a couple of bones at a time to make the character walk. The animation looks pretty fluid and realistic with how the bone appears to move.





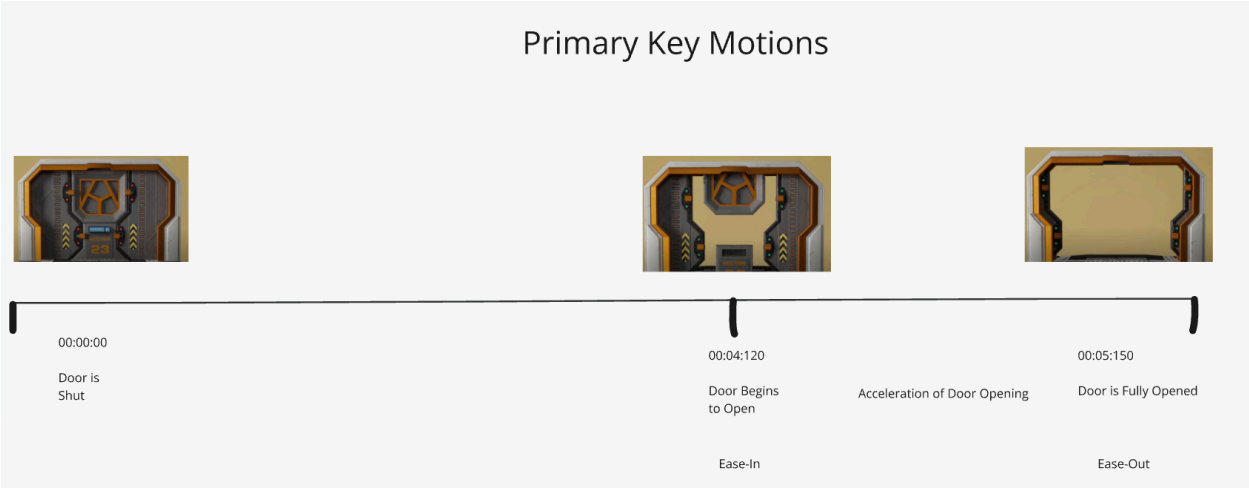
Vines

- For our project, we will be having vines that expand out from the portal. These vines will act as a dynamic object in the scene. As our main reference, we used the *Sea of Thieves* kraken tentacles. This is because the way the tentacles twist, turn, and the smoothness of it is what we want to replicate with our vines. The tentacles in the video appear to be using a spline to animate their movement. We will also be using a spline to implement the movement of our vines. The vines will move relatively fast as they expand throughout the scene.



Doors

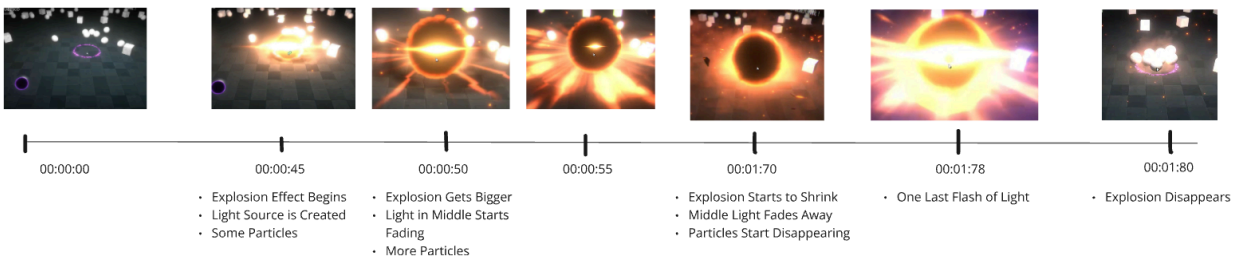
- https://www.youtube.com/watch?v=jeonUvtEnZA&t=1s
- Our animation opens with metal doors opening up. We found these two references that we like and are using as a guideline for our animation. We like the smoothness of the animation as well as the theme of the doors. The door looks very ominous and like something important is hiding behind it. The little details like the latches and the red light security system imply that this is a high-tech facility which is what we were going for. The door appears to have a slow-in and a slow-out effect on the animation as the door opens. There are some secondary actions on the door as it opens up. We see some latches that unlock as well as the security system turning from red to green, indicating that it is unlocking. The latches as well as the actual doors are dynamic components of this animation. It also adds an anticipation factor.



Secondary Key Motions

Explosion

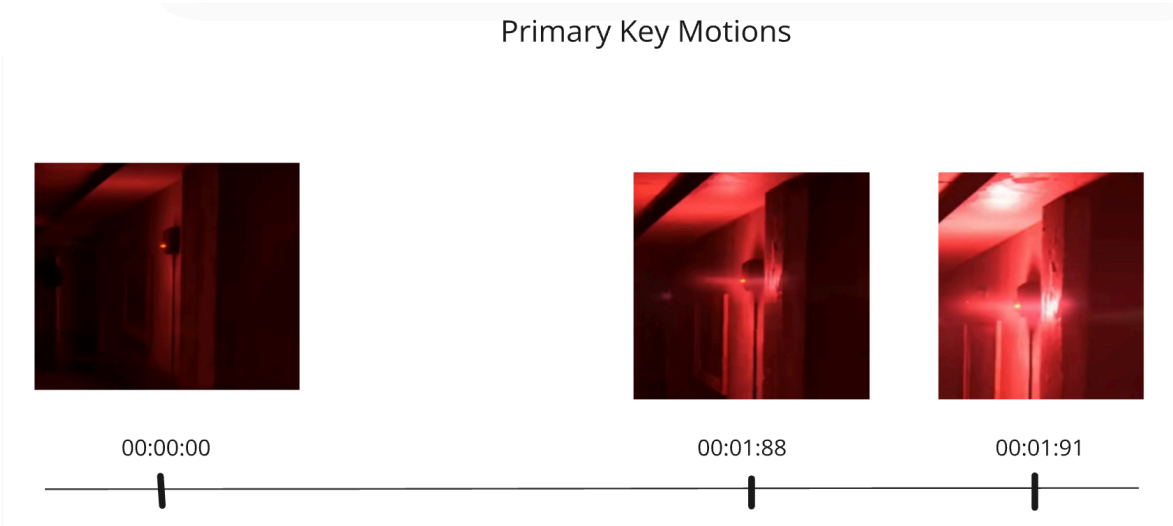
- The explosion effect will act as an environmental animation. We really liked the smoothness and the visual effects of the animaton within the reference video. The effect uses appeal to make it interesting with the different colors and particles and usage of shaders. There is also some anticipation with the build up of the explosion effect. In our project, we will be using this to simulate an explosion.



Red Alarm

- The red alarm will act as both a dynamic object and an environmental object in our scene. We will have the alarm animated so that a red light is flashing on and off. This will be a simple transformation of the light being turned on and off. This

will be a 3D model and will turn on and off based on the timer. Approximately, every second the light will flash red. The light will have 2 states. These states are on and off.



Papers Flying

- The flying papers will act as both an environmental object and a dynamic object. We will use the wind feature in blender to create the effect on the paper objects, making it look as if the papers are being flown around. The papers will be 3D models that will be scattered around the environment. When the explosion happens, the effect of the explosion will cause the papers to fly around the scene, scattering them throughout the area. The papers will have two states. These states are stationary and flying