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GAD178.2 2D Asset Design for Games: Part 2

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Project Document
GAD178
Project 2

Asset Creation process:

In the first project, I tried to make my sketches pretty clean so it would be easier for me in this project to simply colour the sketches I already had so I didn't change very much in terms of design. I simply coloured and tried to shade and add texture to make it more interesting to look at but I'm not very experienced in colouring.



Asset Creation process:

I knew I wanted to have my main character be able to walk through a large set piece; the log. So I had to break up the log asset into two to create a tunnel effect.



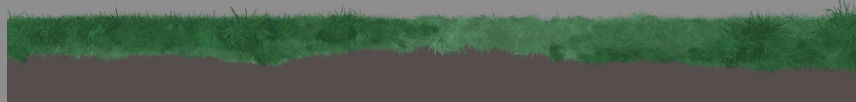
Front



Back

Asset Creation process:

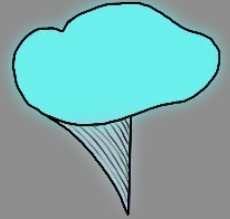
One asset I forgot to actually create in project one was the ground level. When I went into Unity and started laying down my assets, I realised they were just kind of floating there so I created this simple forest floor asset.



I then played around with adding some of the same environment assets and using them as foreground elements.

Asset Creation process:

I added a slight glow effect to some of the mushrooms to have more of a fantasy vibe to the forest.



Asset Creation process:

I then played around with my assets to build my scene using Procreate. This acted as a clearer blueprint than my sketch thumbnail.



Feedback:

I chose to tackle my main character idle animation first in this project. The first obstacle I faced when animating was worrying about having to redraw the entire image multiple times, which would be far too time consuming and tedious. I was concerned about my colouring and not being able to replicate it each frame exactly so it would look off so I skipped this and had a crack at animating just the outlines (below). It was still a bit wobbly, but still pretty stoked for my first go at animating.

In week 6, Anthony showed me some shortcuts to pretty much chop my image into separate pieces (i.e front ear, back ear, head, torso, tail) using the lasso tool then move each piece slightly instead of re-drawing.



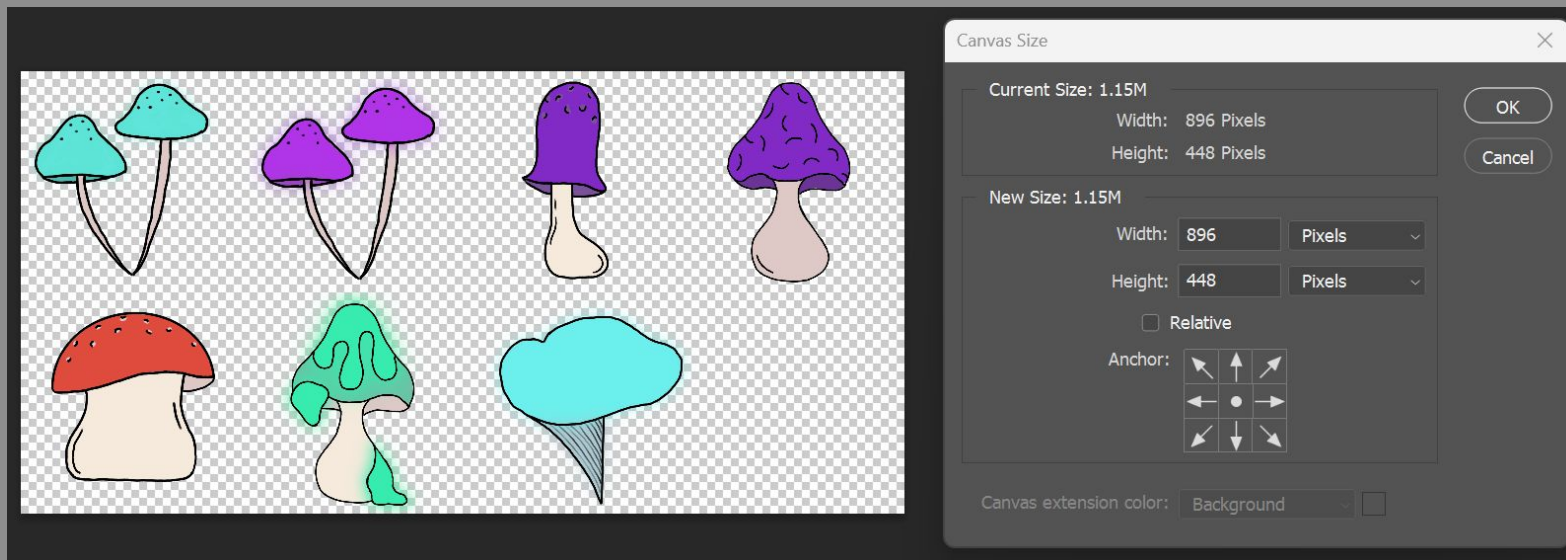
1st attempt



2nd attempt

Sprite Atlas:

My mushroom sprite sheet. Each individual asset is 224 x 224 pixels. I chose this size as I was thinking about the size of a screen (1920 x 1080) and the size I would want these pieces to be in the scene. Each one is to the power of 2, allowing the computer to process the images easier for peak optimization in engine. Having multiple of similar assets on one page allows the computer to use less processing power to load and unload these assets.



Progress into Engine:



I put all my assets in organised and clearly labelled folders, sorted them into relevant layers according to where they lay in the scene and labelled each asset. Duplicating, resizing and reusing the same assets multiple times for optimisation.

Unique Item Asset:

My unique item is an NPC; this forest pixie. I didn't change the design but I did play around with different colouring options. I like the first option the best.



UI Assets:

Here is one of my UI assets. I don't believe the inventory (backpack) would require a sprite sheet as it doesn't move and is a solid piece on the screen. If there was to be an animation of maybe the top flap opening before the inventory popping up then it would require a sprite sheet. Even though I prefer how the darker colours looked, I did think it was too dark for the scene so I changed it and made it lighter. I tried matching the bedroll and waterskin to the sound UI asset to make them more cohesive (same colour as the centre of the flower).



UI Assets:

This is the other asset piece, the sound detection bar. In my vision, when the character is making noise the centre of the swirl would glow and the louder the player is, the the glow would move out from the centre and burst out of the flower with some type on animation when the player is spotted or something in a similar vein. As this is a reactive element, it would definitely require a sprite sheet as its form changes.



Progress into Engine:

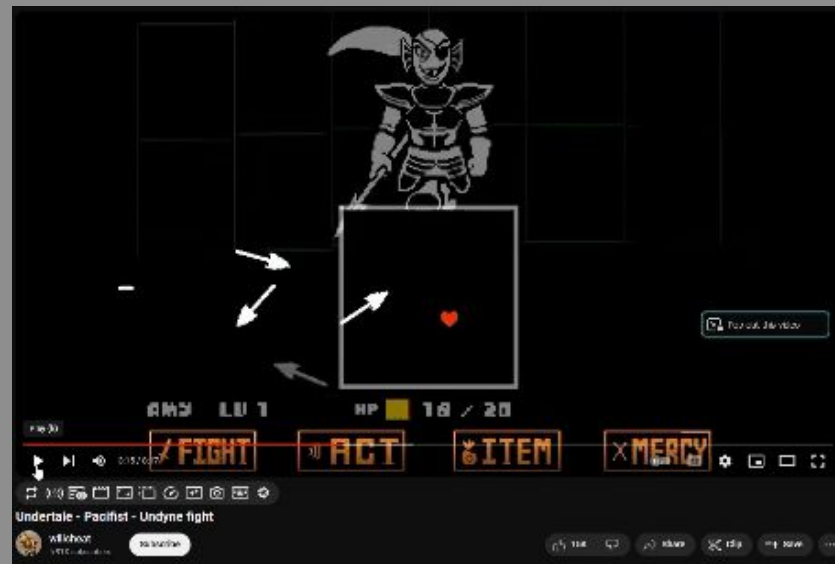


Animation Process:

Before I attempted anything myself, I knew I wanted to do an idle animation as it was my first go at animating anything and idle seemed like a good first step. I took to YouTube and found some 2D game idle animations. The cuphead idle animation was useful as it is very few frames on a loop, simple yet effective. The Undertale animation was useful as you can clearly see the pieces of Undyne's body are disconnected and they move almost independently but together it still works.



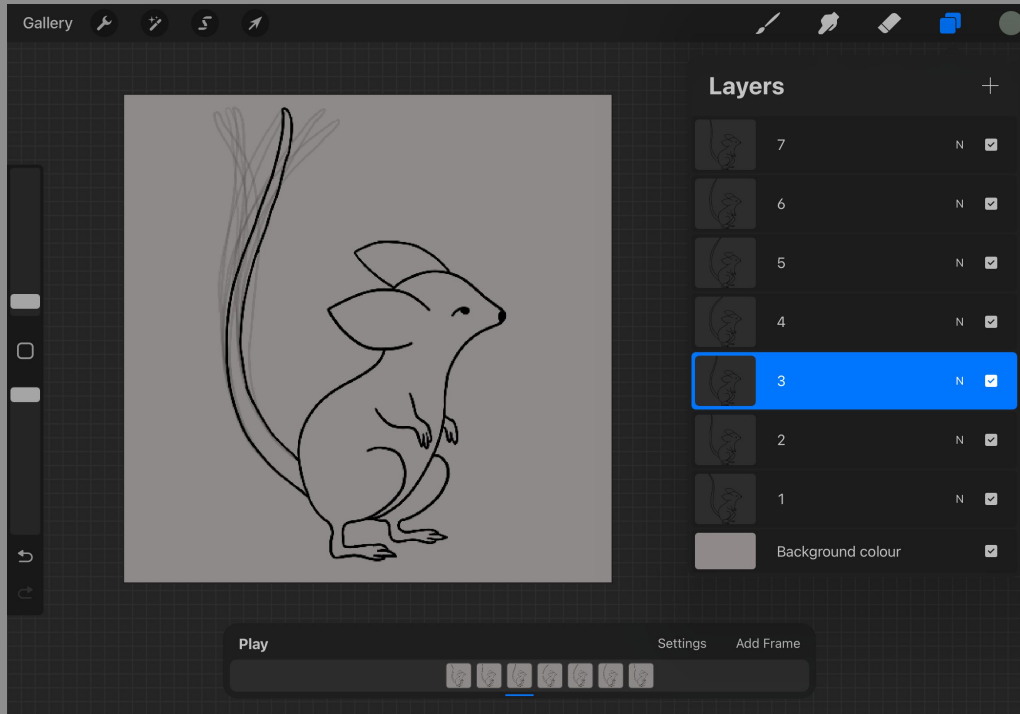
(ProsafiaGaming, 2020, 44:47)



(willcheat, 2015, 03:17)

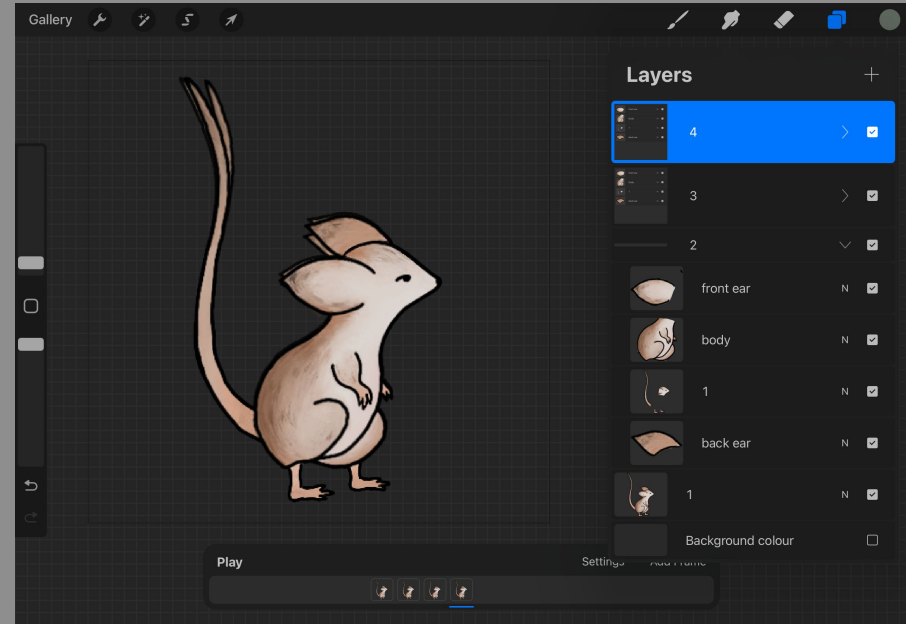
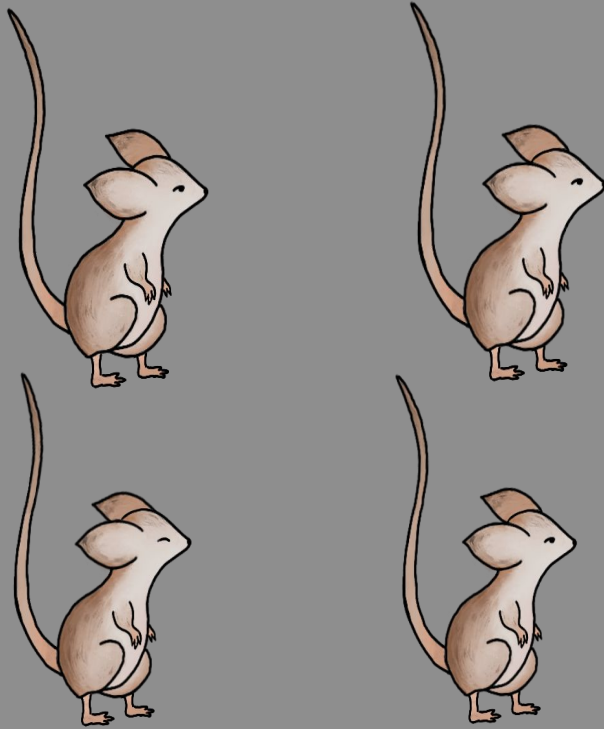
Animation Process:

This was my first ever attempt at animating. Simple outline and with no colour as it was just a test. I really like how the tail flicks different directions, and it did require more frames to get this flick affect.



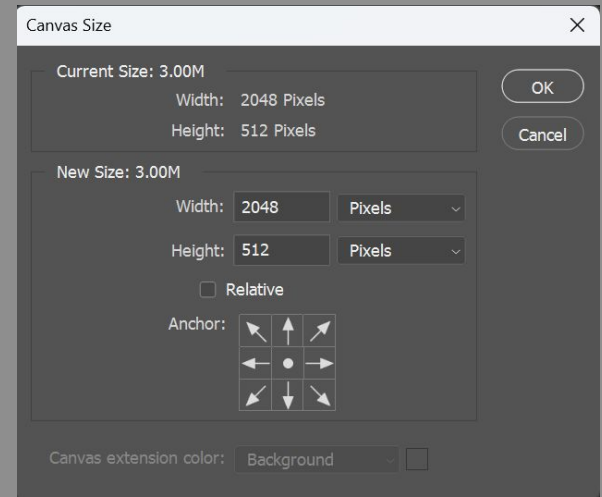
Animation Process:

After receiving feedback on how more efficiently I can change my drawing without having to redraw the entire piece or area, these are the coloured frames I finished with. I moved ears, body, tail and eye.



Animation Sprite Sheet:

Here is my main character atlas sheet for an idle animation and the dimensions. Each individual sprite for this character is 512 x 512 pixels. The sprite file size is to the power of 2 for optimization in engine.



Progress into Engine:



I was able to successfully layer my main character, the mouse, to sit between the two log pieces.

Progress into Engine:

Click to play!



Here is my animation successfully running in engine, and moving in between the logs.

Final Scene in Unity:



Reference list:

ProsafiaGaming. (2020, January 21). *Cuphead - Full game walkthrough*. [Video]. YouTube.

<https://www.youtube.com/watch?v=QF9tzn7UUlo>

willcheat. (2015, September 18). *Undertale - Pacifist - Undyne fight*. [Video]. YouTube.

<https://www.youtube.com/watch?v=LSmt92xQ5g8&t=210s>