

Production Diary

02/10/18

Group discussed ideas about mechanics we could use in our hover car racing game as well as potential control schemes. We settled on having three levels and basic game mechanics. We weren't sure on what theme we should have for the levels, some potential ideas included Neo-Tokyo, medieval/fantasy, fire, apocalyptic and steampunk.

There was debate to whether or not we should use portals between levels or to have a loading screen

After some debate we settled on the themes of Neo-Tokyo, post-apocalyptic and fire/industrial steampunk. I was assigned to design the Industrial level.

09/10/18

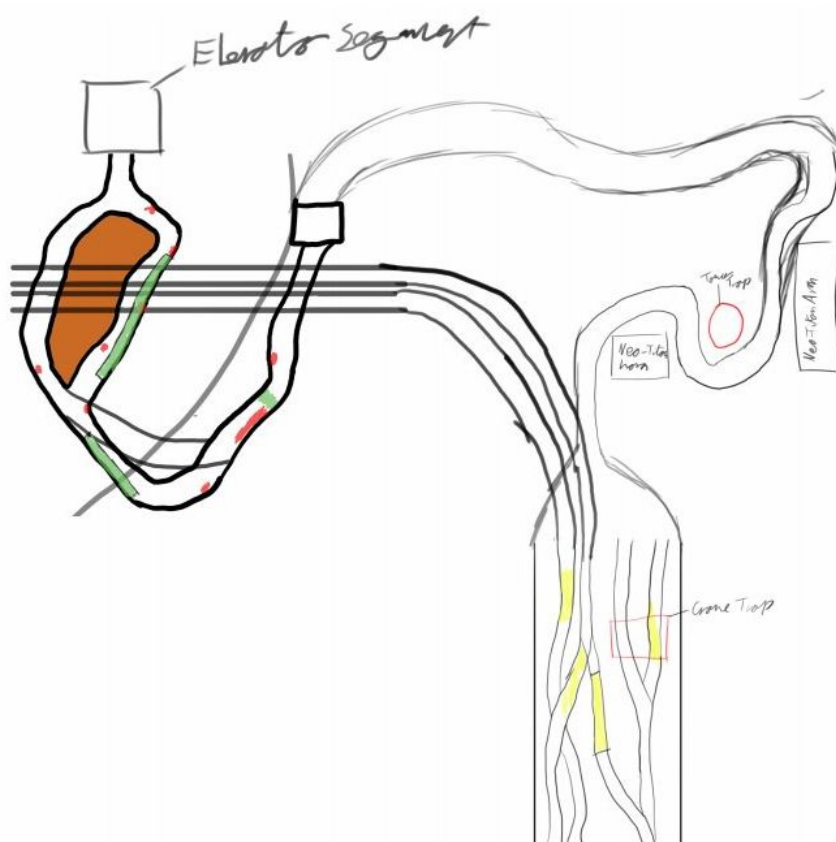
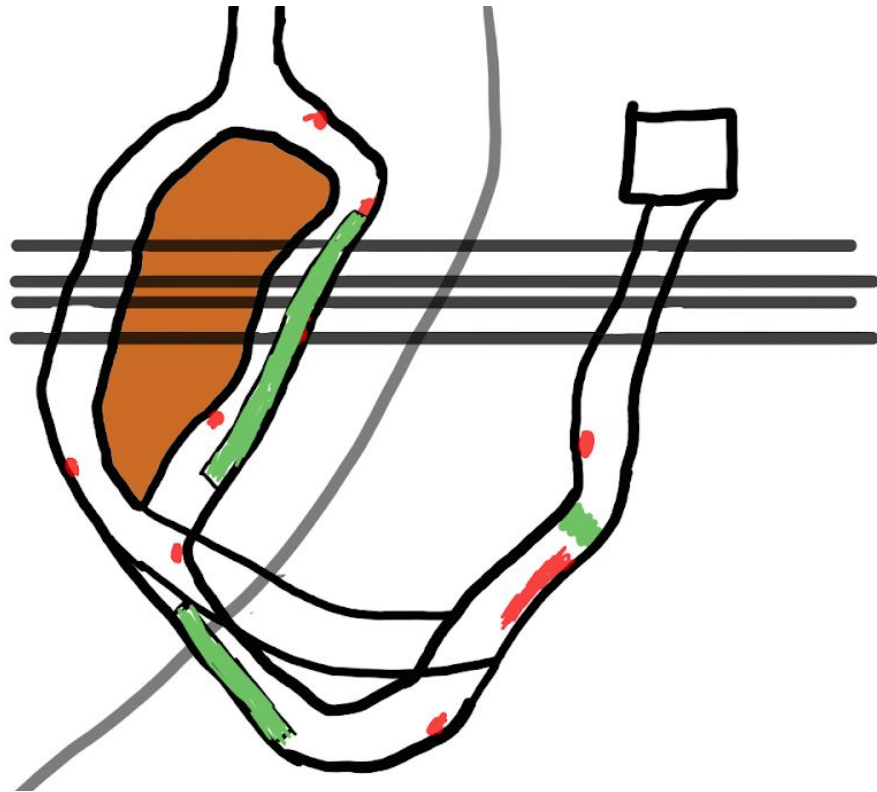
I researched other racing games to try and gather inspiration for my own track design I looked at titles such as Mario Kart, Forza, Need for Speed to try and see what made their tracks so interesting. Mario Kart 8 was the title I took the most inspiration from since it was a title I already owned and was able to do primary research on.

13/10/18

The main concept of the Industrial level was to have a little shanty town which led in to a thermal power plant. The track and several hazards including cargo trains and steam vents.

14/11/18

After some initial testing of the maps it was discovered that my map was a bit short especially compared to the Neo-Tokyo map which needed to be shortened down.



I came up with several other areas to add to the Industrial level, these included in order of appearance a train yard, assembly yard, power plant and elevator segment.

The train yard will be a lot like a modern train yard with some trains that will either be stationary or moving slowly that the player will have to avoid while driving there will also be a crane for removing containers from the train that will be able to be dropped by players as other obstacles for the player to avoid.

The assembly yard will be a section of the level where several segments of the Neo-Titan will be able to be seen by the player it will also contain a falling tower that the player will have to avoid.

The power plant section of the level will remain largely unchanged however instead of going into the portal it will lead into the elevator section which will be a vertical section of the track which will have debris constantly raining down on the player.

16/11/18

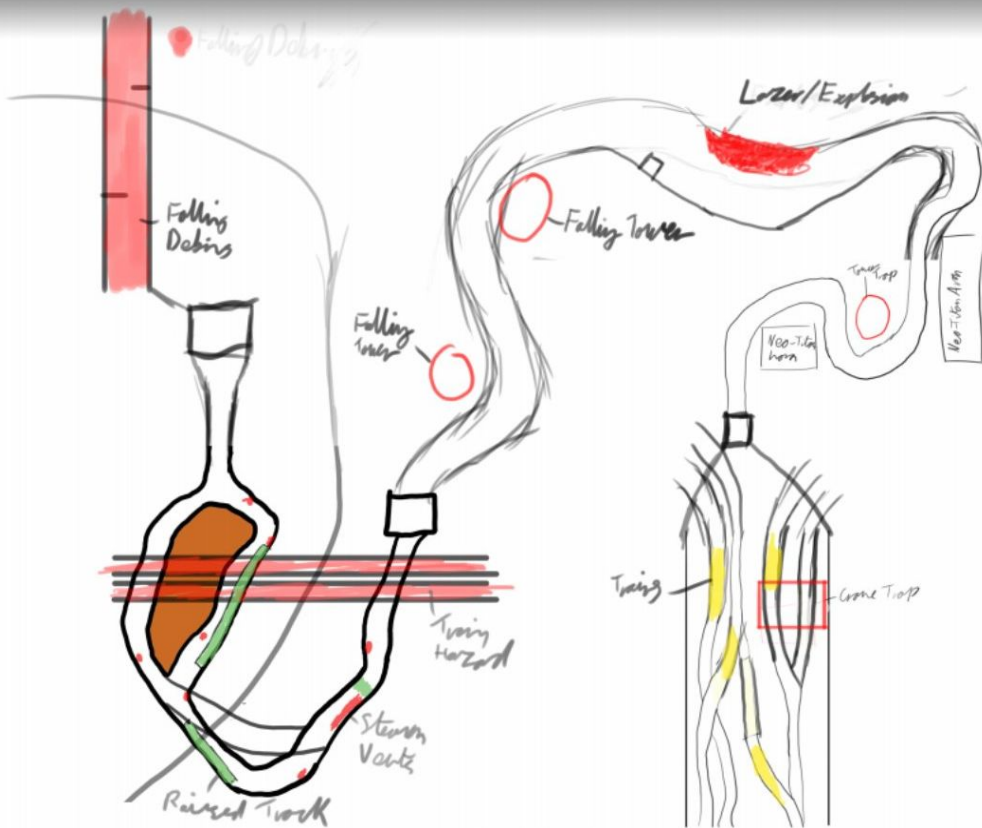
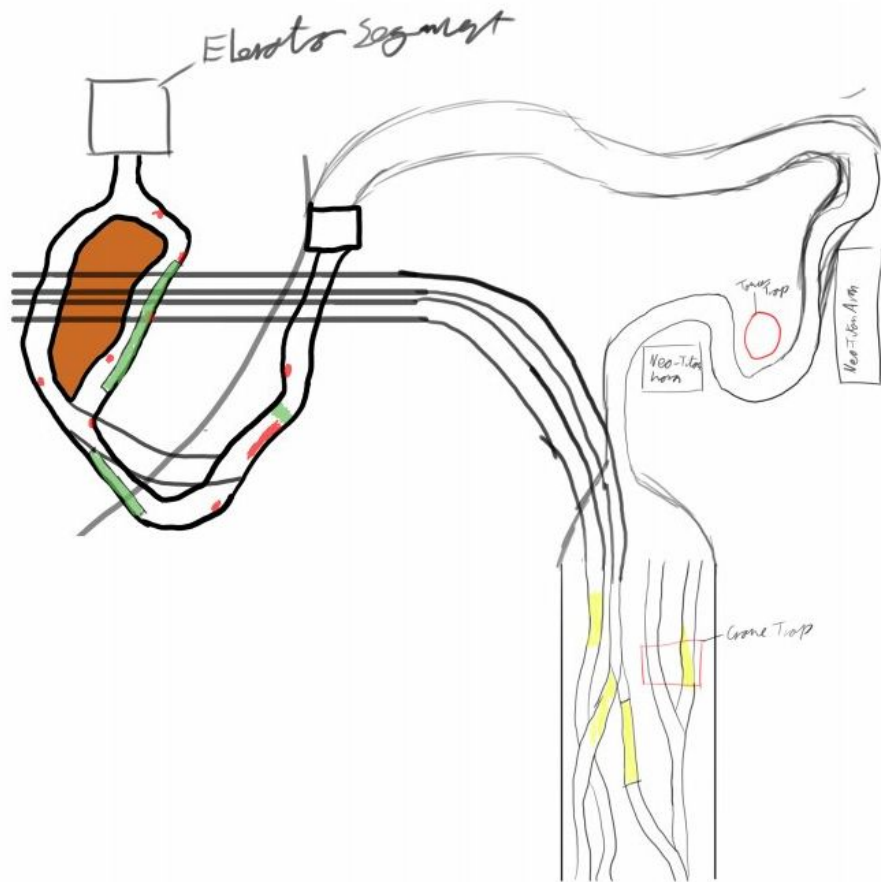
The initial plan was to have the elevator go vertically up and have debris from explosions fall down the shaft however it was brought up that it may be an issue. Since gravity may potentially been a problem the elevator may be changed to a 45 ish degree cargo lift which would still fit the theme of the level while being something we can introduce into the game.

20/11/18

I populated my map with structured with structures to make it more fleshed out and lived in. This mostly focused on the area just before you enter the powerplant which is supposed to be a shanty town however I also added several smoke stacks to make it feel more industrial.

23/11/18

I was informed that my map was again too short and I needed to label the sections better for more clarity. As a result of this I decided that I needed to lower the power plant and extend the assembly area to add a bit more time to the track which would add more time and if it needed to be any longer the elevator segment could be extended to add more time to the course. I also added several more hazards and labeled the sections with more details which resulted in several more falling towers being placed in the assembly area and the train carriages stand out more in the train yard section. There will also be a section in the assembly plant where lasers will periodically be fired at a blast shield simulating a weapons test which will knock the players back if they are caught in the explosion.



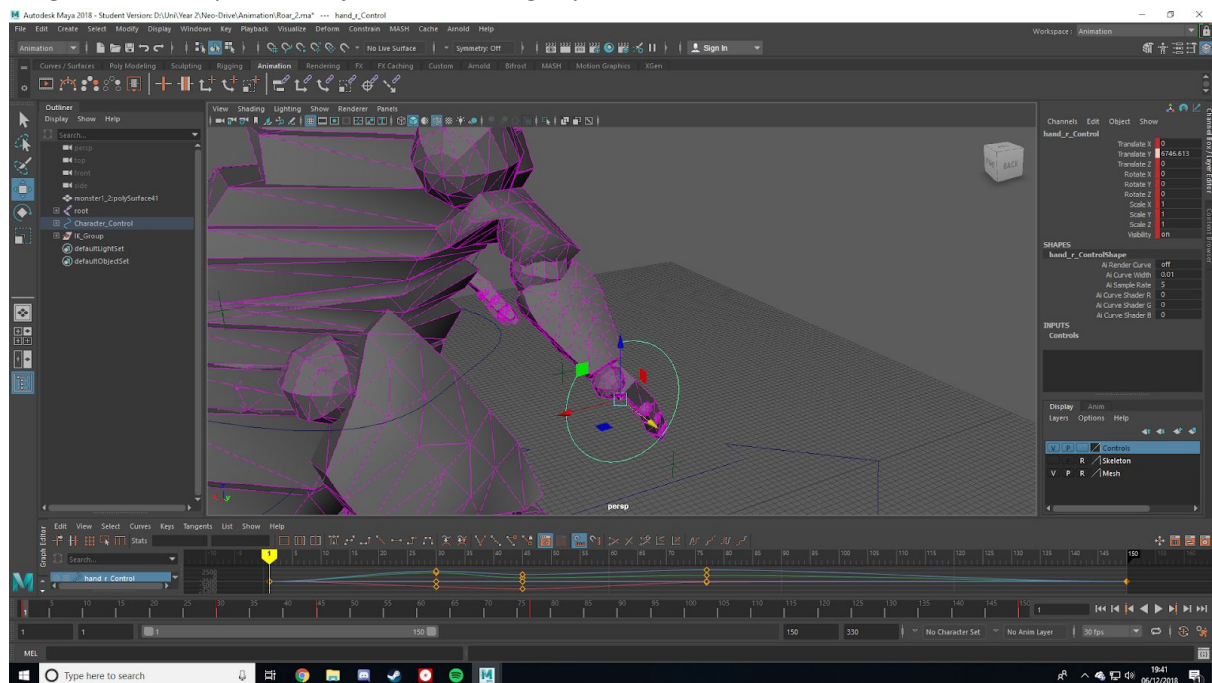
27/11/18

We decided that other animators would be needed in order to complete the Neo-Titan in time and so I was given the task of animating the Neo-Titans roar.

I started watching scenes of monsters roaring in films and other media to try and get some inspiration as to how to do the roar. Practically all of footage I saw had the monsters roaring into the air which I initially planned to do however upon further consideration I thought it would be better to have the Neo-Titan get low and try to intimidate the player by roaring directly at them.

03/12/18

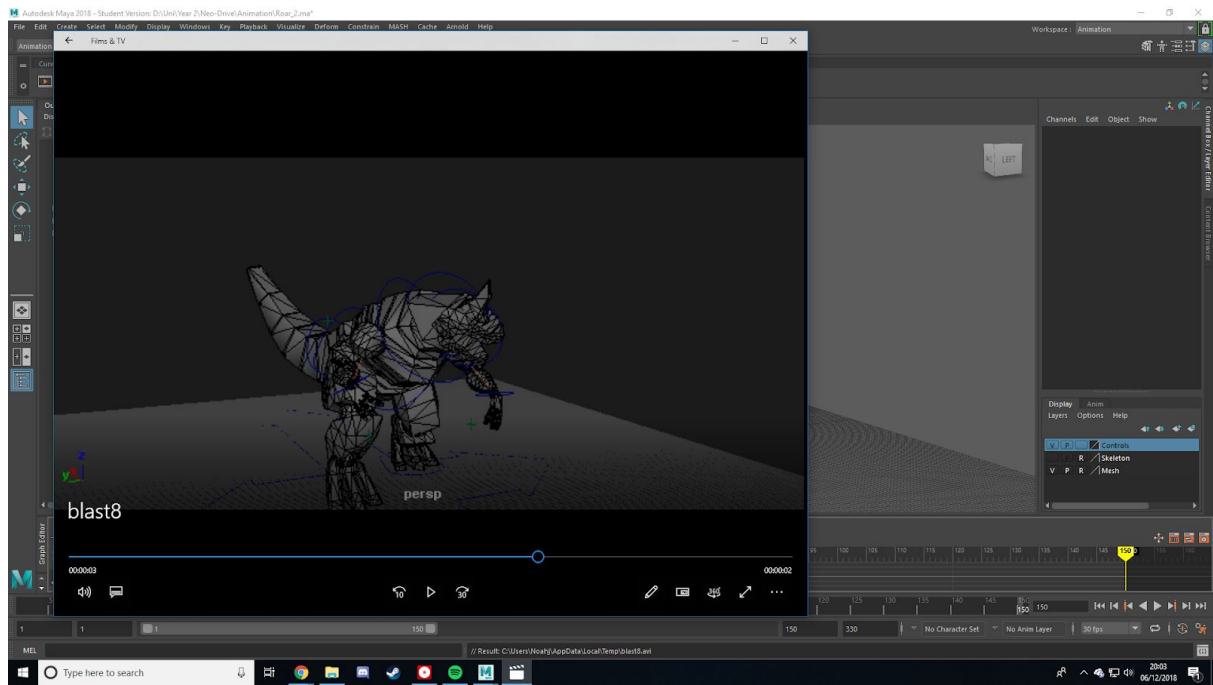
I began animating the Neo-Titan but immediately ran into problems. The weights hadn't been painted onto the model properly which caused some body parts to respond incorrectly particularly severely in the right arm however this shouldn't provide any problems in the final product since the weights will be repainted, it just makes it slightly harder to visualise



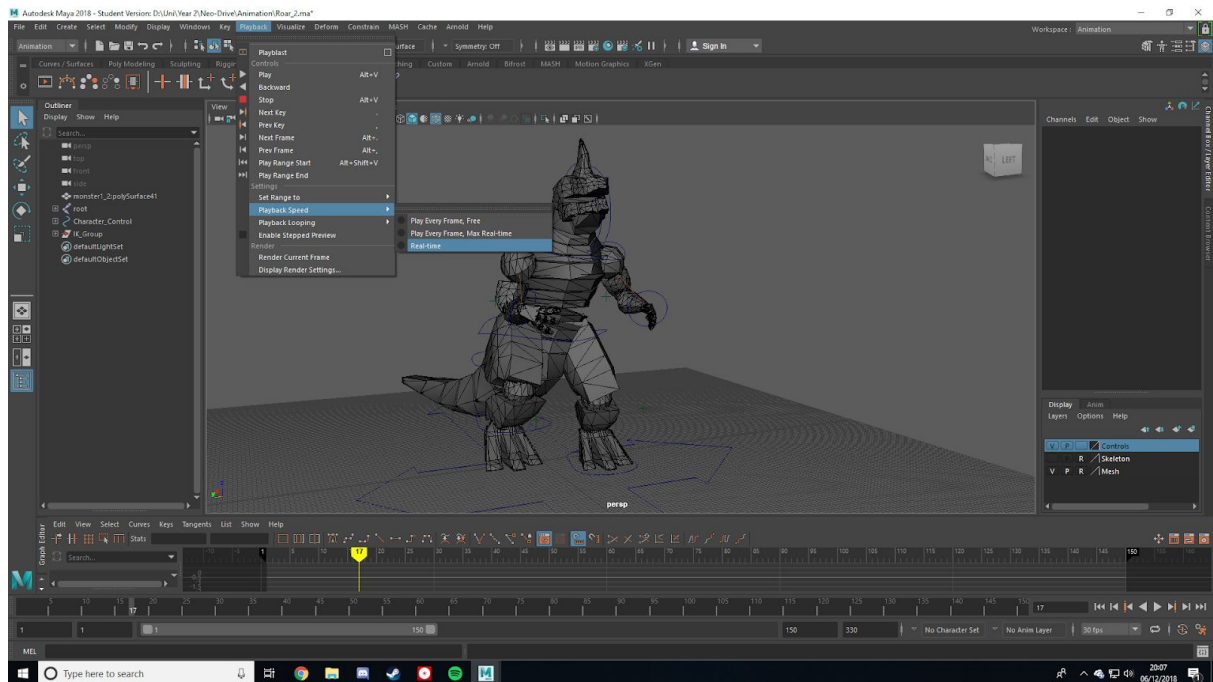
Another Issue I had was that the 'Insert Key' button wasn't working so I wasn't able to actually animate the model. This issue was quickly resolved after talking to one of the other animators who informed me that the 'S' key was a short key for inserting a keyframe which solved the issue.

I wanted the animation to start with a stomp for the Neo-Titan to insert it's presence before the roar which required me to do a bit of experimenting with how far forward it should step which led to myself acting it out in front of a mirror and some back and forth in Maya before it looked right.

Another issue I came across was that when I tried playing the animation in Maya it would play back way too fast so I wasn't actually able to see how it moved accurately. I initially started using the playback function which opened up a separate window which showed the animation.



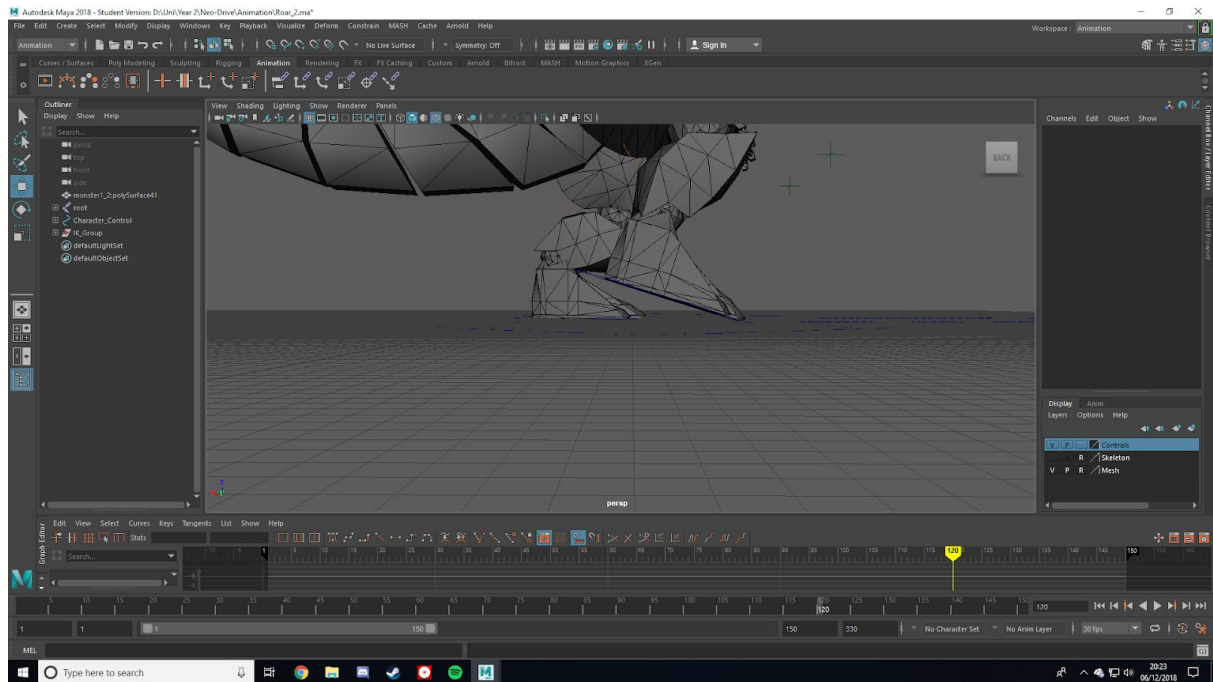
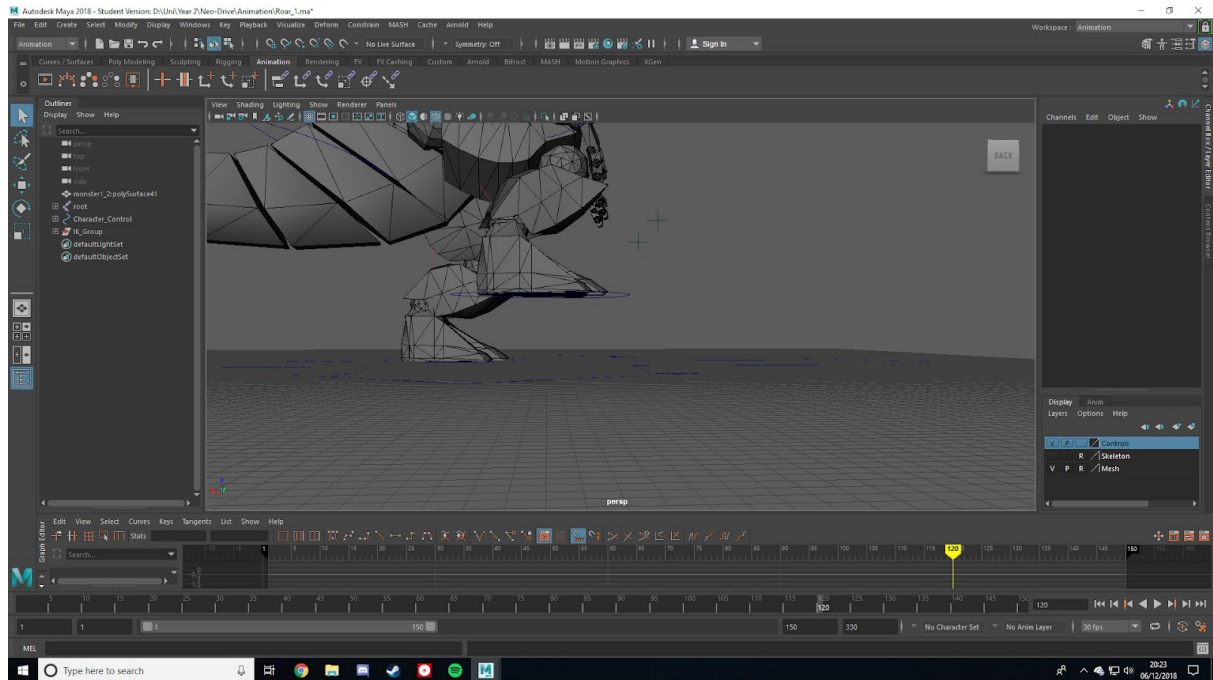
I used this a solution for a while before deciding to explore the playback menu in more depth and discovered the option to change the playback speed setting it to play back in real time made viewing of the animation a lot easier and more convenient.



Another problem I had which I realised when I was that the tail only had one point of rotation which meant that I was unable to move it as fluidly as I wanted it to. Unfortunately I was unable to sort this issue since it was a problem with the rigging itself but it may be changed in the future by adding some IK's into the tail which would provide it with more flexibility.

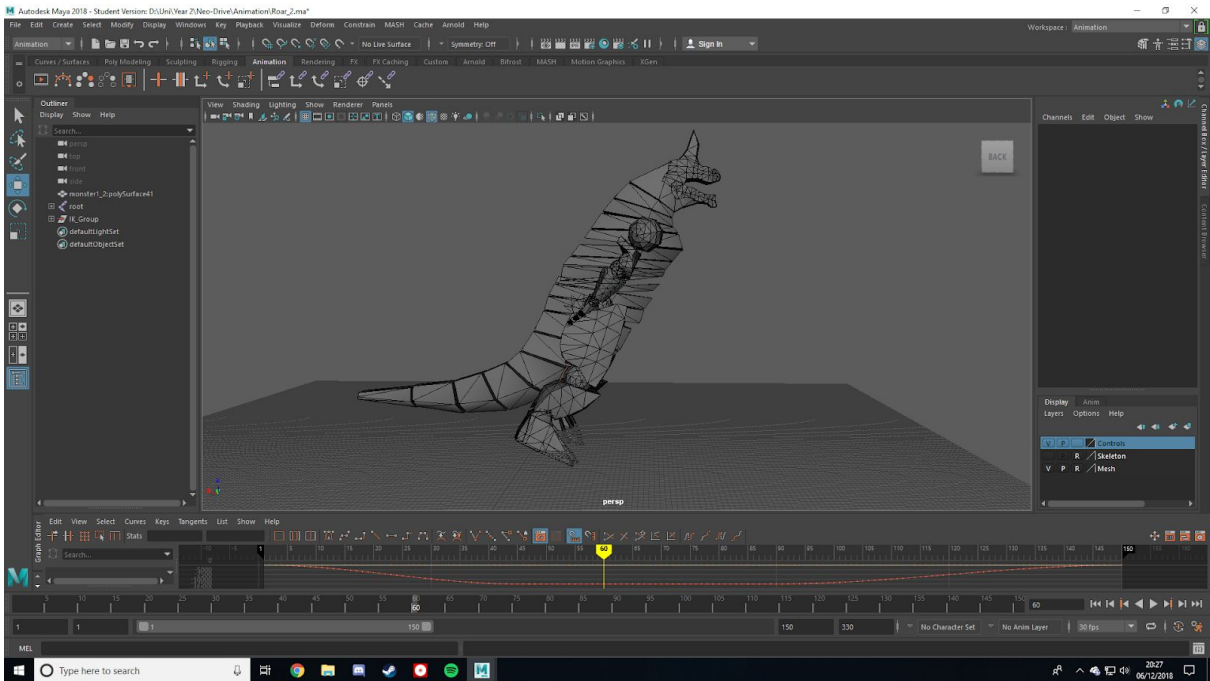
4/12/18

After showing the animation to the rest of the development team and getting their approval I was about to export it when I noticed that I didn't like the way the Neo-Titan's right leg returned to its starting position. I had previously just reversed the step it took initially with it's right leg however I changed it so that it would now drag it back instead of lifting it in a reverse stomp.



I think that this change made the animation look more fluid and natural improving the overall quality of the animation.

While trying to bake the animation onto the skeleton I noticed a problem that once I deleted the control rig and played the animation the Neo-Titan would just lean forward like Michael Jackson or torpedoing out of the water before returning to it's starting position.



After trying some combinations I discovered it was because it was because I was selecting both the control rig and the skeleton when I was baking the animation when I should have just been selecting the skeleton.

Gantt Chart

	8/10/18	15/10/18	29/10/18	05/11/18	12/11/18	19/11/18	26/11/18	03/11/18
Tasks								
Level Design								
Research Racetracks								
Concept racetrack								
Modify Track								

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Level Design								
Research Racetracks								
Concept racetrack								
Modify Track								
Animation								
Research								
Animation								
Baking/Exporting								

My plan didn't change much over the course of the project since it was simple besides the additional tasks of animating I had to add later on meaning I had less time to modify the track.