

Project 3 - Animation & Rendering

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Report for CSC 278

Abstract:

I was asked in this project to perform 5 different things.

Create a simple skeleton and paint weight for the “ Character_model ” file.

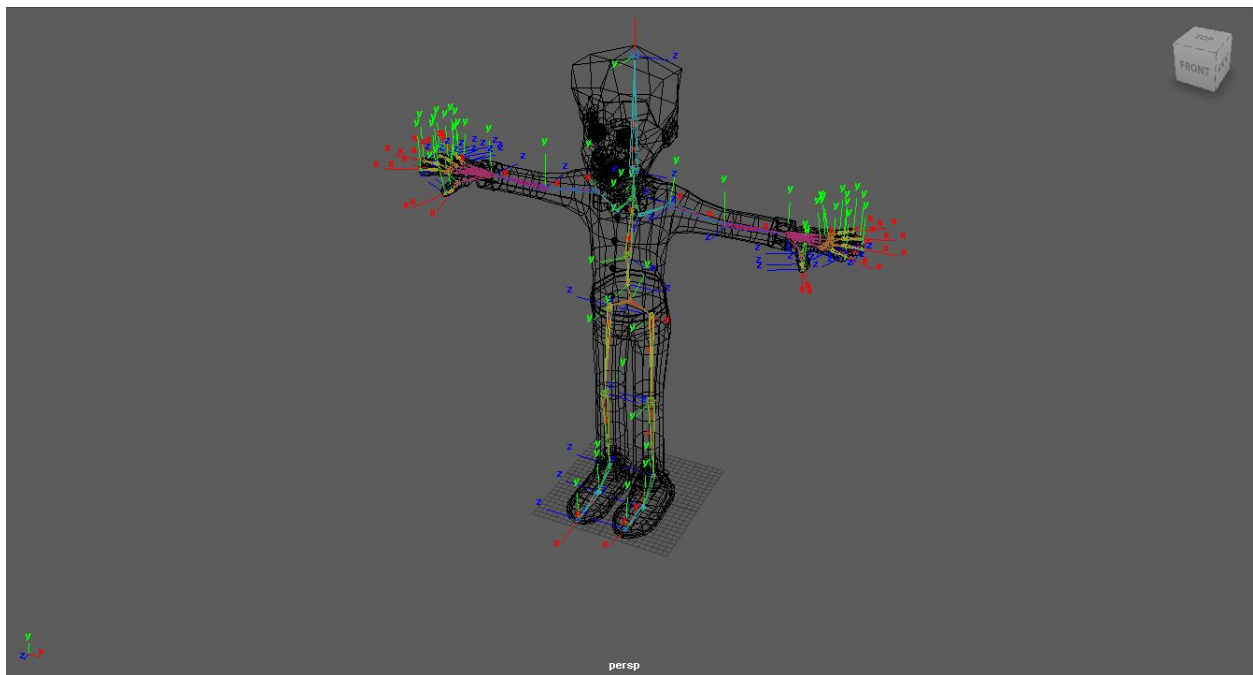
Animate blinking for the “ Character Head ” file.

Animate like the reference for the “ Dog_Moto ” file.

Animate like the reference for the “ Plane_Ready ” file.

Animate a simple ball bounce for the “ theBall ” file.

Skeleton Creation and Rigging:



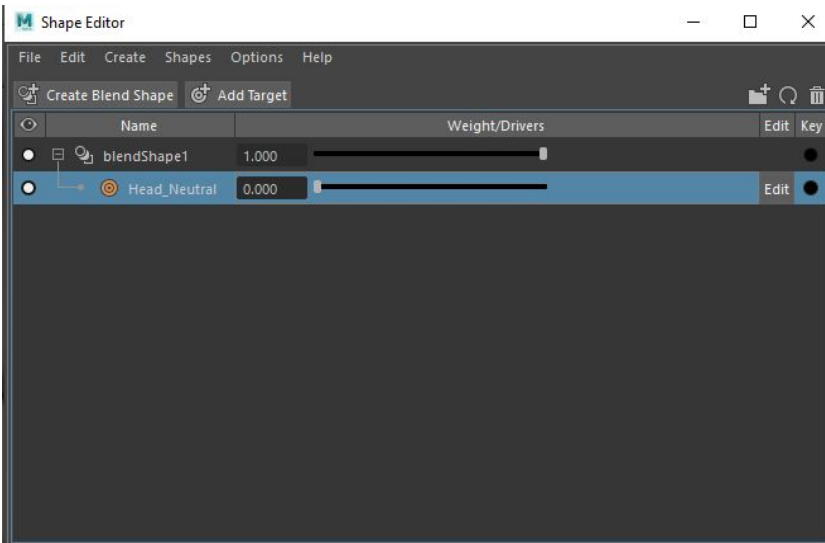
I started out with the legs by creating a joint from the skeleton tab. Extended from the waist down to the toes. After finishing the left side, mirrored it to the right side. Same goes to the arms, started the joints from the shoulder area to the fingers. Connected the legs with a hip joint, then connected the spine to the hip. The arms are connected to the Clavicles, which in turn to the spine.

After the skeleton had been set up, I linked the skin with the skeleton through the skin tab. Before IK linking the top joint of the legs to the bottom of legs, and the shoulders to the wrists, I normalized each joint rotation so that the X axis would always be looking at the next joint, and the Y axis looking upwards. This is done with a script " cometJointOrient " to properly set up joint axis.

Note: The mesh always acts weird, no matter how many times i redid it.

Animating blinking:

This is done by blending shapes. Just duplicating the head mesh and closing the eyelids.



And then controlling it with this slider.

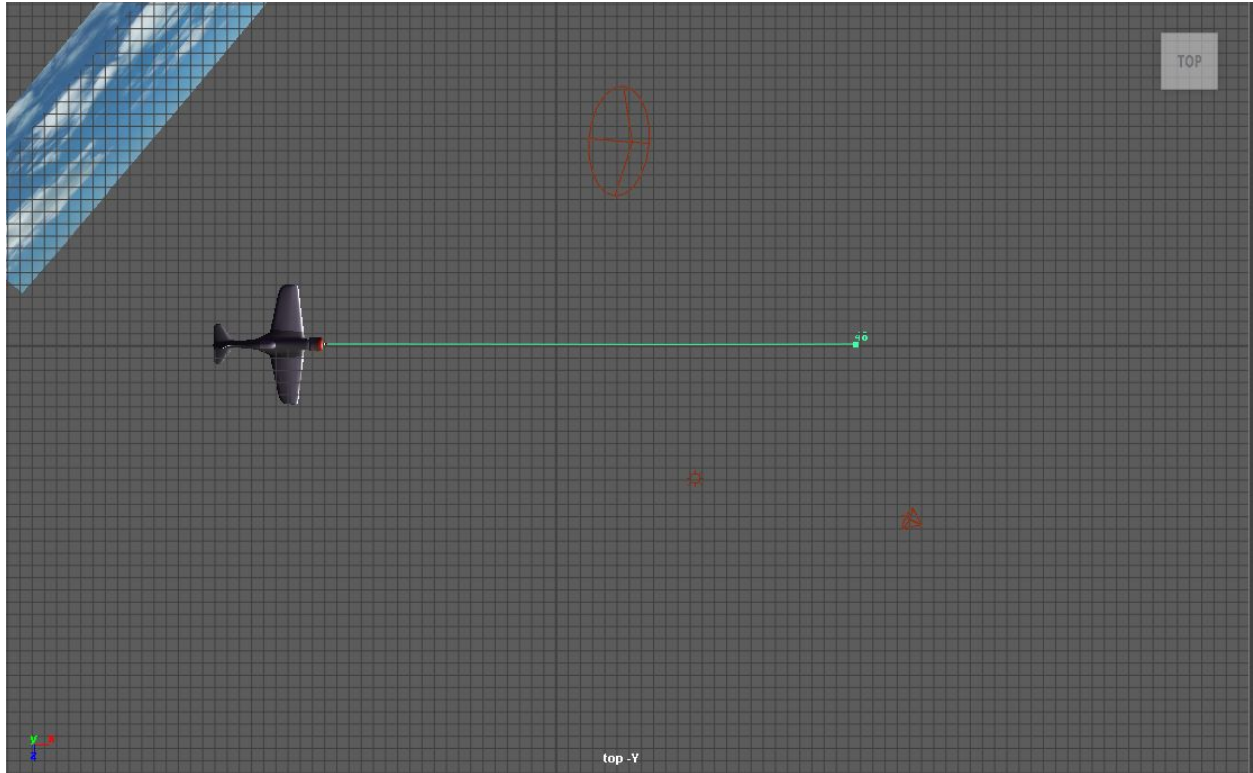
Animating the dogo:

Started out by animating the rotation of the globe. Moved to animating the dogo's rotational movement (moving then stopping). Then the head movements.

Note:

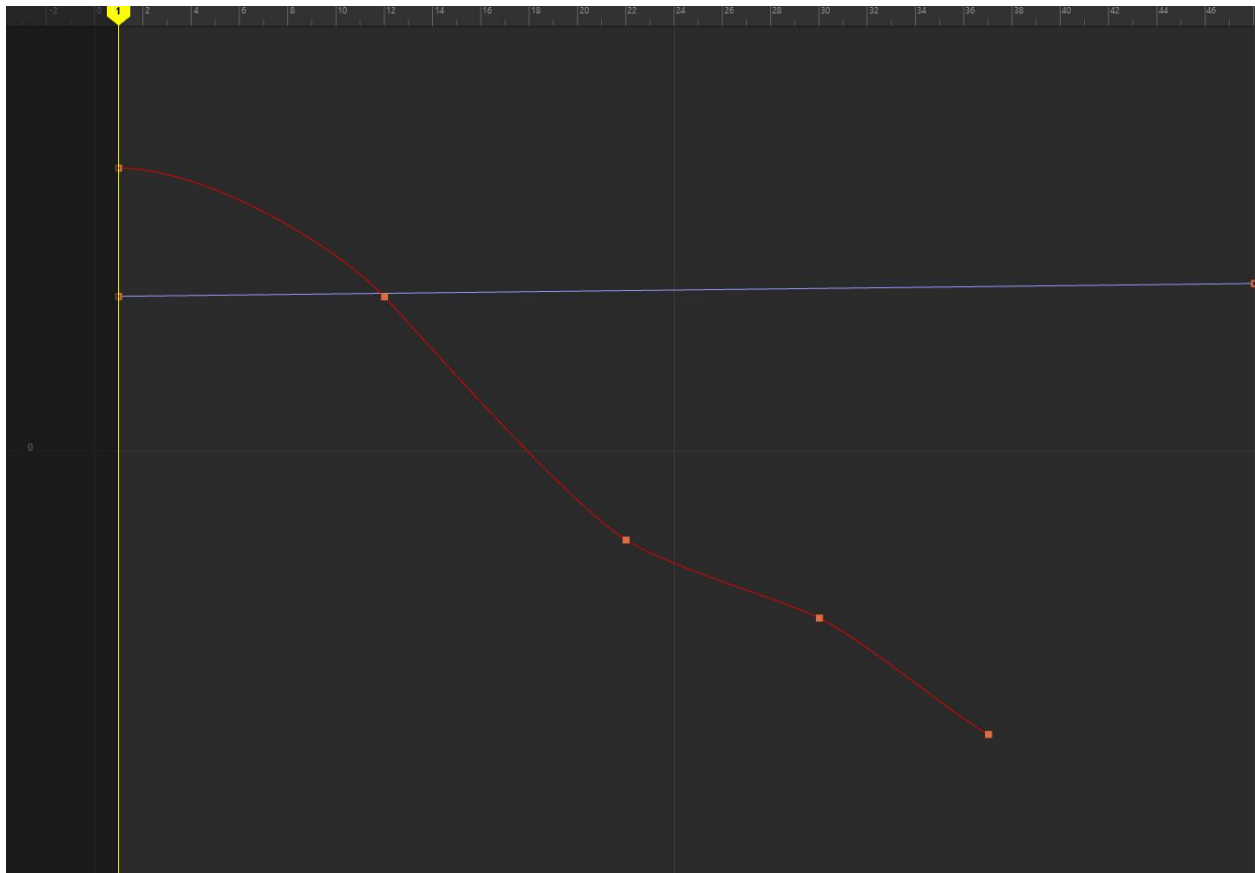
I did not render the dogo because there were lots of missing textures. Nothing against dogos in general.

Animating the plane:



Drew a motion path by creating a CV curve and then selecting the constraint option the Animation tab to commit the plane to it.

After that I just worked on getting the plane movement right.



This is the graph.

Animating the ball bounce:

Followed the reference image you supplied. Made one big maxima, then 2 smaller, each smaller than the last. After that I just

started tweaking the graph in order to make smoother.

