Class Project 3 – Rigging

Description

Problem – Create an animation rig for Ed.

Solution – To solve this problem, I used what we learned in class, the Human IK tool in Maya, YouTube, and Digital Tutors. To begin this project, I researched how to properly use the Human IK tool. After I learned how to use Human IK, I matched up all the bones to fit the mesh neatly. In order to skin the mesh to the rig, I needed to group the mesh first. I then skinned the mesh to the rig using the skinning tool. After that was done, I created the controllers for the rig using the Human IK tool. Once this was all done, I needed to create a global controller and an eye controller. To create the global controller, I drew a NURBS curve around Ed in the shape of four arrows and parented all of the controllers to it. To create the eye controller, I followed what we did in class. First, I created a NURBS circle and add a point constraint to it to make in line up perfectly with the eye. Then, I rotated it 90 degrees about the x-axis and pulled it out of the eye. Then, I froze transformations and deleted the history on the NURBS curve. I duplicated this process for the other eye. After that, I created an eye box to control both eye controllers by drawing a NURBS curve around the two controllers and parenting the eye controllers to this new controller. Then, I parented these controllers to the head controller. To get the eye constraint working properly, I had to add bones to the eyes and skin the eye mesh to the bones. Next, I parented the eye bones to the head bone so that the eyes would follow the head. Then, I was able to add the aim constraints to the eyes. To do this, I selected an eye NURBS and then selected an eye and added the aim constraint. After I completed all of this, I checked to see if all of the weight paint was right. To do this, I moved all of my controllers and if anything looked wrong or acted weirdly I would change the weight paint on the mesh. Finally, I did my animations.