Final Product Proposal

Introduction and Statement of Purpose:

My final product for this year will involve the creation of a short animated clip using the lego minifigure model I created as part of my original work. This piece of animation will be created using Autodesk Maya and my knowledge and skill in the software along with any new knowledge I gain as I proceed through the creation of my final product. The creation of this product will require me to model some extra lego assets in Maya, rig the lego characters and animate my clip of the lego figure. These steps would allow me to create a piece of animation that will display my best work since it will be a small piece that I will be creating over an extended amount of time.

The purpose of my final product is to demonstrate my general skill set in Autodesk Maya while mainly highlighting my ability to animate using an industry standard software. Since the creation of a long piece of animation is too advanced for my skill set and my timeline I will be trying to showcase my best work in this short clip of animation. I will be mainly focussing on the quality of my animation and the incorporation of the principles of animation, along with my research into my animation clip.

Review of Skills and Research:

The bulk of this project will be made up of 3D animation using Autodesk Maya. Throughout this years my research has been targeted towards various animation principles, concepts and standards that are vital to creating animation that is smooth and lifelike. For example, my research on the principles of animation, walk cycles and the complete process of animating a shot will all be very important to my final product. I will be using this information to create a short clip of two lego figures that is interesting and will allow me to apply the new skills I have learned into the creation of my final product.

I already have some experience working in Autodesk Maya to create models and create pieces of animation for class. This has given me a good amount of knowledge of the software I will be using so I will be able to go straight into working on my product. I have also started to analyze some new skills I may need to research and learn in order to create this project. For example, I may need to learn how to create some more complicated textures in Maya by using Photoshop so that the assets I create have some more interest to them. I will also be watching some animated films that have legos in order to understand how they should ideally be animated. This research will add to my prior knowledge of animation and Autodesk Maya, so that I will be able to create a high quality product.

Methodology:

I will begin working on my project by first creating a concept for my animation and creating a storyboard from there. After the creation of my storyboard I will move on to model any of the additional assets I need in addition to the lego figure I already have created. After I have all of the models created I will be rigging my character so that I can animate it later on. I will not be budgeting a lot of time for modeling or rigging as I want to focus on animating for this project. After I create all of my assets I will be moving on to the main focus of my project which will be animating the lego characters. Following the approval of my animation I will be rendering the animation and adding any sound that is necessary for the clip I create. An important part of my entire process will be getting critiques on my work as I progress through the various steps need to create the animation. This will allow me to get advice on my work from my mentor and improve my animation based on the advice I receive into all of my work. Overall these steps will allow me to create a good final piece of animation for my final product.

Materials:

The main material for this project will be the use of Autodesk Maya, an industry standard 3D animation software, which provides a free student version of the software that I have installed on my home computer. This software will make up the bulk of my project as I will use it to model, rig, and animate everything I need for my project. In addition to Autodesk Maya I will also be using Adobe Photoshop which is provided on computers at Reedy High School as well as computers at the CTE center. The overall cost of all of these products and my use of them should be zero dollars.

Conclusions:

The outcome of this project will be a short animated clip of lego minifigures that will be of a high quality and will showcase both my skills in 3D animation along with the research I have conducted in regards to animation. In the creation of this product I will not only learn about how to animate a short clip, but I will also be learning about other parts of the animation pipeline. More specifically I will be able to better understand how a shot moves through various stages such as concepts to storyboard to models and through animation with critiques along the way. This will allow me to understand how people would have to work in a studio setting and will give me a foundation of work for my career area. This project will benefit me as I will be able to show this clip to people who want to see my skills in animation and could also benefit society in general since it should be a form of entertainment.

Timeline (13 Weeks Total)

Week 1:
(February 19 - February 25)
- Final concept for lego shot and started storyboards.

Week 2:
(February 26 - March 4)
- Complete storyboards for critiques. Beginning modeling of assets needed for shot.

Week 3:
(March 5 - March 11)
- Storyboard approval and continue modeling assets.

Week 4 + Week 5:
(March 12 - March 25)
- Finalize all assets and begin rigging in week 4 and finish rigging in week 5.

Week 6:
(March 26 - April 1)
- Blocking of first 5 seconds of animation.

Week 7:
(April 2 - April 8)
- Blocking of animation seconds 5- 10. Critique of week 6.

Week 8:
(April 9 - April 15)
- Blocking of animation seconds 10 - 15. Critique of week 7.

Week 9:
(April 16 - April 22)
- Critique of complete animation and final blocking pass.

Week 10:
(April 23 - April 29)
- Spline pass of first half of animation.

Week 11:
(April 30 - May 6)
- Spline pass of second half of animation. Critique of week 10.

Week 12:
(May 7 - May 13)
- Finalize render and submit to mentor for final approval.

Week 13:
(May 14 - May 20)
- Buffer week to have some extra time to fix any problems that occur throughout the process.