Kent Denver Innovative Scholars Program
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Learning Animation in Maya

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OVERVIEW/HYPOTHESIS

My goal was to attempt a simple animation in Maya . This meant just making one of my objects move from point A to point B.

RESEARCH

During my research period for Maya animations in generall, I found an easy way to attach objects to a track and then play the animation on different speeds.

I used a YouTube video to learn this technique and then experimented in Maya.

Youtube video that showed me the basics of moving an object on a path.

I also researched the smoke to come out of the front of the train as an added animation.

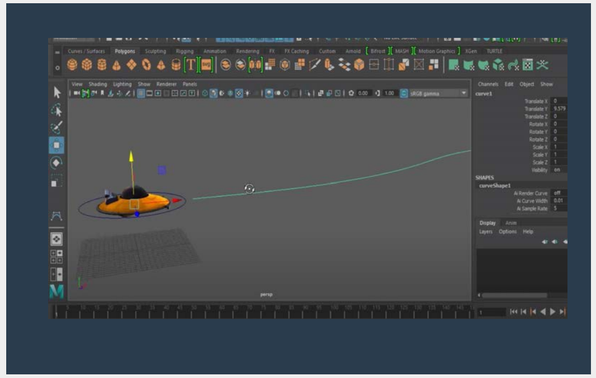

FIGURE 1: Video that I watched

PROCEDURE

The procedure includes many steps of how I modeled, colored, and animated my 3D train.

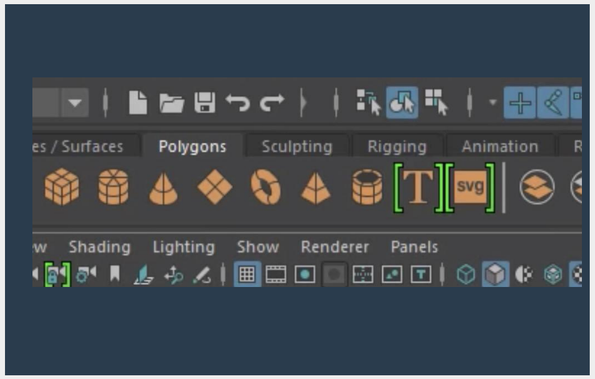

FIGURE 2: Maya toolbar with animation

First I modeled and textured my train to have the object I needed to be able to animate.

I then put down a track using an EV Curve Tool and attached the train to the track.

After this I added the smoke emitter to the front and combined that with the track so it moved with the train.

After testing the speed of the animation and the track of the train I tested the smoke varying the thickness and color.

ANALYSIS

Over the course of this learning path I gained a lot of information about animation.

- The models used for animations need to be much more complex to work.
- There are a lot of settings in Maya to research to combine animating, texturing, and modeling.
- Animation can be very complex but very rewarding!

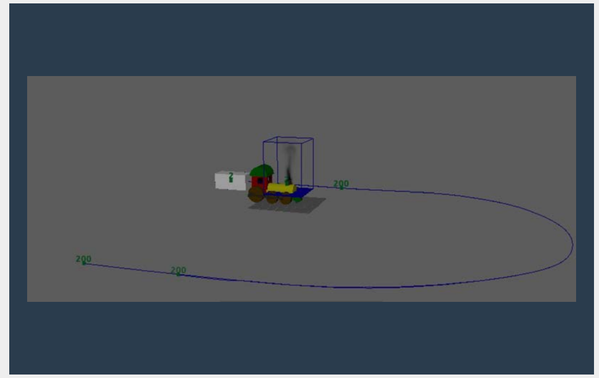

FIGURE 3: The track that the train followed

The track that the train followed is very moldable but can only be shifted so much to maintain a realistic looking path.

The smoke on the train was very difficult to attach to the track.

The Smoke has endless possibilities of how it can be emitted but.

I choose a dark coal like smoke to come out of the front of the train to try and mimic a realistic coal train.

The block on the back is an unfinished second car which was extremely difficult to attach to the path so that it would follow the track and not the train.

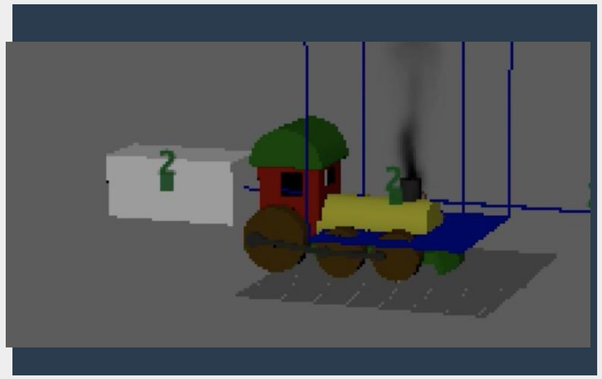

FIGURE 4: The smoke coming out of the train

RESULTS/CONCLUSION

I concluded that animating objects in Maya is extremely fun to do and can take little time or tons of time depending on the amount of complexity you want. I learned a lot about animating objects and am very excited to continue projects like this in the future.