



SM6P07NI Digital Media Project

50% Digital Artefact

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Student Name : Aryan G.C

London Met ID : 20049280

College ID : np01mm4s210087

External Supervisor : Binod Gautam

Internal Supervisor : Pratik Man Singh

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1. INTRODUCTION: -

The second course of the year-long Digital Media Project is where we apply the knowledge we've gained over the past three years of study to create a digital product that can be commercially successful.

With regard to project design and problem-solving, the second evaluation is meant to gauge students' production abilities. The goal of the assessment technique is to gauge how well students understand the key concerns associated with planning and completing a digital media project. Feedback on the early project concepts will be part of formative assessment.

In this coursework, we go into greater detail regarding the decisions made across the pipeline of digital media. The 3D animation TVC (Television Commercial) for an app that is related to the travel and tourist industry was selected as the Digital Media for the project.

2. PIPELINE

Generally, when a digital media is being produced it goes through different phases of production. We in the industry call it *Pipeline*, it is not literally a pipeline where water drops but a pipeline where idea goes inside and comes out as a digital product. The pipeline mostly consists of three important stage which are:

2.1 Pre- Production

In general, there are several stages in the creation process for digital media. We refer to it as "Pipeline" in the business community; nevertheless, it is not a pipeline where water flows but rather a pipeline where ideas enter and emerge as digital products. The pipeline primarily has three key stages, which are:

2.1.1 Planning

The most crucial task should be completed first; in this instance, that task is planning since without it, the project would be chaotic and impossible to understand, which would necessitate immediate revisions. Here, planning is completed by first compiling a list of ideas for a successful 3D animation, which is then grouped in accordance with the pipeline. The list is as follows

Story Creation

Script Creation

Storyboard Creation

Visualization

Modelling

Texturing

Rigging and Skinning

Animation

Particle Simulation

Camera Composition

Lighting

Rendering

Miscellaneous (logo animation, others)

Final Output

2.1.2 Story Creation

Since this TVC is for a travel app, the plot must be centered on travel and branding, which goes like this. It is essentially the process of brainstorming ideas surrounding the production of the 3D animation.

Two brothers are climbing a mountain in the story, but after several suspenseful events, the younger brother slips and falls into a frozen lake due to a snow avalanche. However, the bigger brother dives in to save him, and they swing for a while. The travel app's logo features the phrase "Your Trust in Travel" in the slogan.

2.1.3 Script Creation

It's time to write the screenplay now that the story has been finalized. The script serves to tie the story together scene by scene and aids with story visualization. A script is frequently written and revised; in this case, it has been done two or three times on the website celtx.com.

First Script

```
DREAMS!!!  
EXT. UPHILL MOUNTAIN-SNOW STORM-DAY  
Camera is at constant angle showing the tangent of the snowy hill.  
Two humanoid figure starts appearing from the blizzly tangent one after another.  
On the slight up hill, Dai slowly walks against the blinding blizzard while heavily panting, stops and looks back.  
DAI (WITH ENG SUBS)  
Thik chas KANCCHA!!  
Vai catches up with Dai and replies.  
VAI (WITH ENG SUBS)  
Thik xa dai.  
Camera closeups on Vai while panting on the uphill and a flashback is queued...  
EXT. SUMMER - MANHOLE CONSTRUCTION SITE - DAY  
Flashback converts vai's face to his younger self but still panting.  
Vai looks up to this dai who is leading the way to manhole top and gives hand to vai while smiling..  
EXT. UPHILL MOUNTAIN CLIFF -SNOW STORM-DAY  
Flash back ends and dai's face is shown while reaching out to vai.  
He pulls vai up to the cliff and says  
DAI (WITH ENG SUBS)  
AAja camp yetai raknu parxa jasto  
xa..Rat parna lagyo  
VAI (WITH ENG SUBS)  
Hunxa dai.  
They start setting up camp.  
Dai looks to Vai who is working hard for the camp site.  
Dai's flashback is queued after staring at vai.
```

 Created using Celtx

Figure 1. Script 1

EXT. SUMMER - MANHOLE CONSTRUCTION SITE - DAY
Dai sees vai working hard to gather rocks..
Vai comes up to dai after gathering rocks and says
VAI (WITH ENG SUBS)
Yetti le pugxa dai!!!
Dai again climbs on the manhole and shouts at vai wavering a sticks.
DAI(WITH ENG SUBS)
VAI!!!! EK DIN TYO HIMLA CHADDNE HO
HAMAI
Scene is shown sideways and Himal is at the background as dai points at it.
Vai with blissfull eyes looks at dai.
VAI (WITH ENG SUBS)
AMMM...
EXT. UPHILL MOUNTAIN CLIFF -SNOW STORM-DAY
VAI (WITH ENG SUBS)
Dai!! Dai!!
Calls Vai to Dai who is daydreaming about past.
Dai is taken aback.
Dai puts hand at vai's shoulder and says.
DAI(WITH ENG SUBS)
Hamro sapana pura huna aaba kehi din matrai..
VAI (WITH ENG SUBS)
ho dai.. aaba kehi din
Both share a moment.
Suddenly the earth starts shaking, and an avalanche approaches swiftly.
Both are swept away.
AS they were about to be taken away, Dai quickly grabs a nearby tree trunk with one hand and grabs Vai with another.

 Created using Celtx

Figure 2. Script 1.

4.

SACRIFICES
EXT. UPHILL MOUNTAIN CLIFF - HANGING TREE TRUNK-SNOW STORM-DAY
The scene shows from sideways, A life saving tree trunk, heavy blizzard, Both dangling with Dai's both hand occupied, One with tree trunk, another with his brother.
Both stare each other with dai struggling hard to keep vai from falling.
Dai shouts.
DAI(WITH ENG SUBS)
Parkhi khanccha na aatti!!
Dai tries hard to pull vai but fails.
Vai looks intensely at dai's face cause he knows what will happens if they both keep dangling.
Vai with tearful eyes speaks.
VAI (WITH ENG SUBS)
Hamro sapana puar huna kei din matra,
Vai leaves Dai's hand on to the endless abyss..
Dai looks down still hanging and tears rolling down his cheeks.
FADE OUT:
EXT. UPHILL MOUNTAIN CLIFF -DAY
Sun rising is rising.
Camera zooms out showing Dai asending towards the peak with title at last "DREAMS"

-END-

Figure 3. Script 1.2

Second Script

The initial Script had resource problems and was much beyond my level of expertise as a 3D artist, so I downgraded it.

TRUST

EXT. UPHILL MOUNTAIN-SNOW STORM-DAY

Camera is at constant angle showing the tangent of the snowy hill.

Two humanoid figure starts appearing from the blizzly tangent, one after another.

On the slight up hill, Dai slowly walks against the blinding blizzard while heavily panting, stops and looks back.

DAI (WITH ENG SUBS)

Thik chas KANCCHA?
(Are you all right, young'un?!)

Vai catches up with Dai and replies.

VAI (WITH ENG SUBS)

Thik xa dai.
(I'm fine brother.)

Camera closeups on Vai while panting on the uphill and a flashback is queued...

EXT. SUMMER - MANHOLE CONSTRUCTION SITE - DAY

Flashback converts vai's face to his younger self but still panting.

(POV Camera of Vai) Vai looks up to this dai who is leading the way to man hole top and gives hand to vai while smiling..

Suddenly, rumbling sound is heard and ground starts saking.

EXT. UPHILL MOUNTAIN-SNOW STORM-DAY

The Scene changes abruptly back to the present time.

Figure 4. Script 2

2.

(POV Camera of Vai) Dai has serious look in his face and shouts.

DAI (WITH ENG SUBS)

Hamfal, Kanchaa!!!!!
(Jump, young'un!!!!)

Vai looks down at his feet and jumps, but the ground collapses and vai lost his footing.

(Dai's POV) Vai is seen going down falling with the footing less snow behind him.

Everything is in slow motion.

(Dai's POV) As Vai stretches his hand with last hopeful effort.

Dai grabs his hand.

(Vai's POV) Dai is shown leaning with one hand in a tree trunk and one hand grabbing his younger brother and smiling.

EXT. UPHILL MOUNTAIN-SNOW -DAY

The scene is now showing from a side angle.

"VOSTAY" logo appears and the background scene is not in focus.

In background, Dai is seen pulling up Vai.

Tagline of logo is shown

"Your trust in travel"

-END

Figure 5. Script 2.1

Final Script

Again, with the downgrade because of the same issues.

TRUST

EXT. UPHILL MOUNTAIN-SNOW STORM-DAY

Camera is at constant angle showing the tangent of the snowy hill.

Two humanoid figure starts appearing from the blizzly tangent, one after another.

On the slight up hill, Dai slowly walks against the blinding blizzard while heavily panting, stops and looks back.

DAI (WITH ENG SUBS)

Thik chas KANCCHA?
(Are you all right, young'un?!)

Vai catches up with Dai and replies.

VAI (WITH ENG SUBS)

Thik xa dai.
(I'm fine brother.)

Figure 6. Script final

Vai looks down at his feet and jumps, but the ground collapses and vai lost his footing.

(Dai's POV) Vai is seen going down falling with the footing less snow behind him.

Everything is in slow motion.

(Dai's POV) As Vai stretches his hand with last hopeful effort.

Dai grabs his hand.

(Vai's POV) Dai is shown leaning with one hand in a tree trunk and one hand grabbing his younger brother and smiling.

EXT. UPHILL MOUNTAIN-SNOW -DAY

The scene is now showing from a side angle.

"VOSTAY" logo appears and the background scene is not in focus.

In background, Dai is seen pulling up Vai.

Tagline of logo is shown

"Your trust in travel"

-END

Figure 7. Script final 2

2.1.4 Visualization

This phase of pre-production helps to generate an ideal standard idea about the entire set design and character design of animation and makes the overall tone of the entire environment more approachable.

Here, it is accomplished by compiling data about the scene and producing a work of art. The environment was digitally painted using Adobe Photo Shop.



Figure 8. Digital Art of Environment

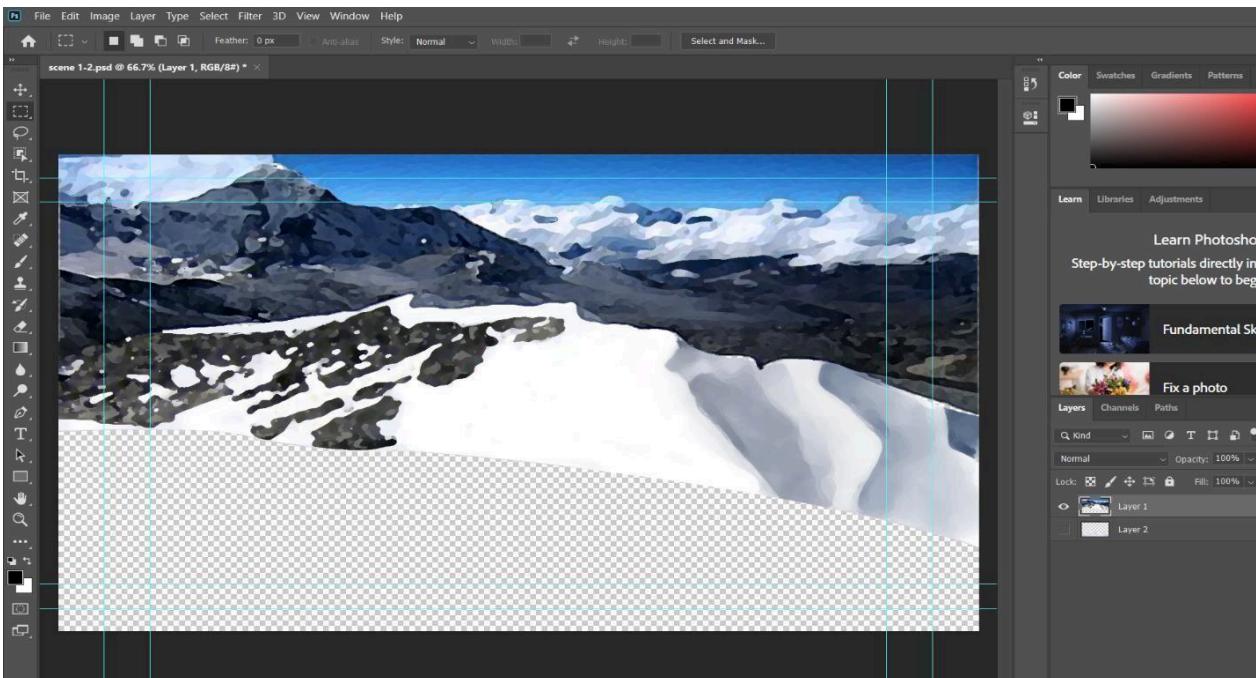


Figure 9. Digital Art Creation

Another method of visualization is to compile the digital art in After Effects and view how it appears when it is snowing. Along with suggestions for geography, character design ideas were also studied.

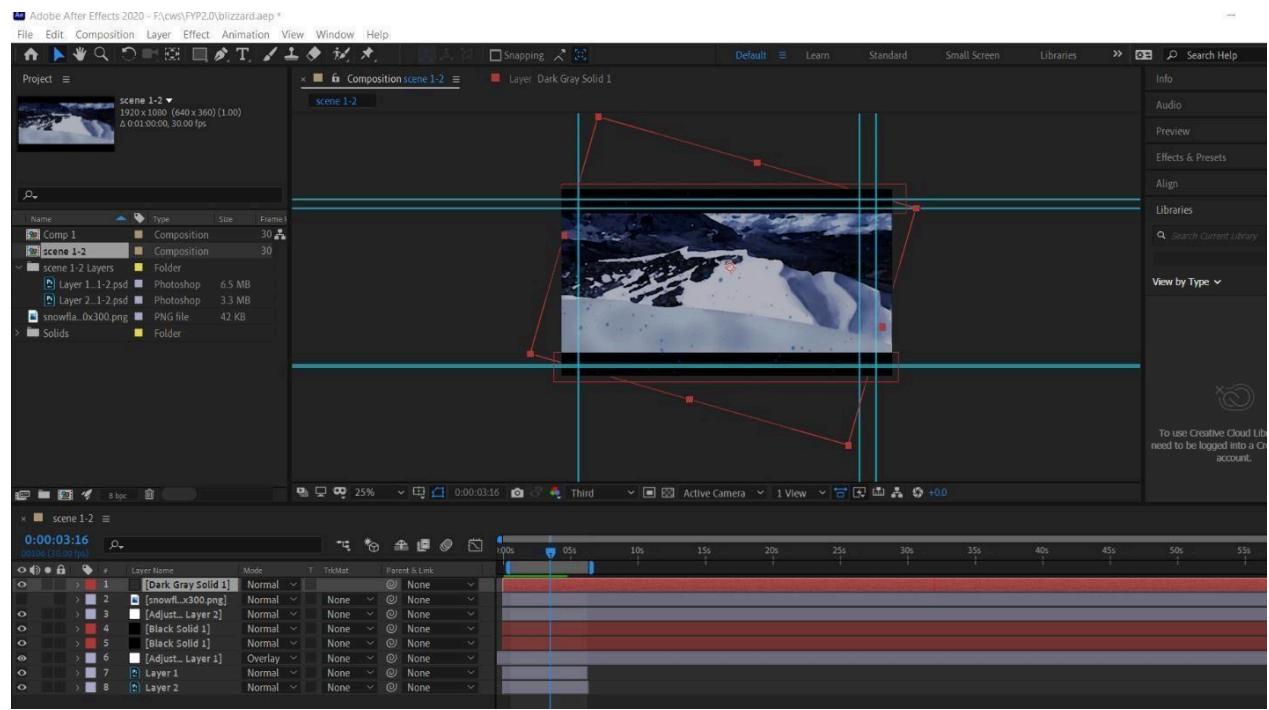


Figure 10. Visualization of Snowy Scene

• 2.2 Production

Now that the preproduction work has been completed, we move on to the production phase, when 80% of the work needs to be completed. The most technical section of the pipeline is this stage since at its core, everything is trial and error, and each action made here is first learnt, then applied, with a different outcome every time.

2.2.1 Modelling

Modeling, which involves creating simple to complicated geometry using 3D technology where there are three perpendicular directions, is the initial step in the creation of any 3D animation.

Terrain

The layout of the scenario, which takes place in a hilly area and has rugged topography, was the first thing to be modelled. Different concepts and methods were utilized to build a mountain, such as first creating the terrain with a displacement map, then sculpting it to make it appear rounder and more cartoonish.

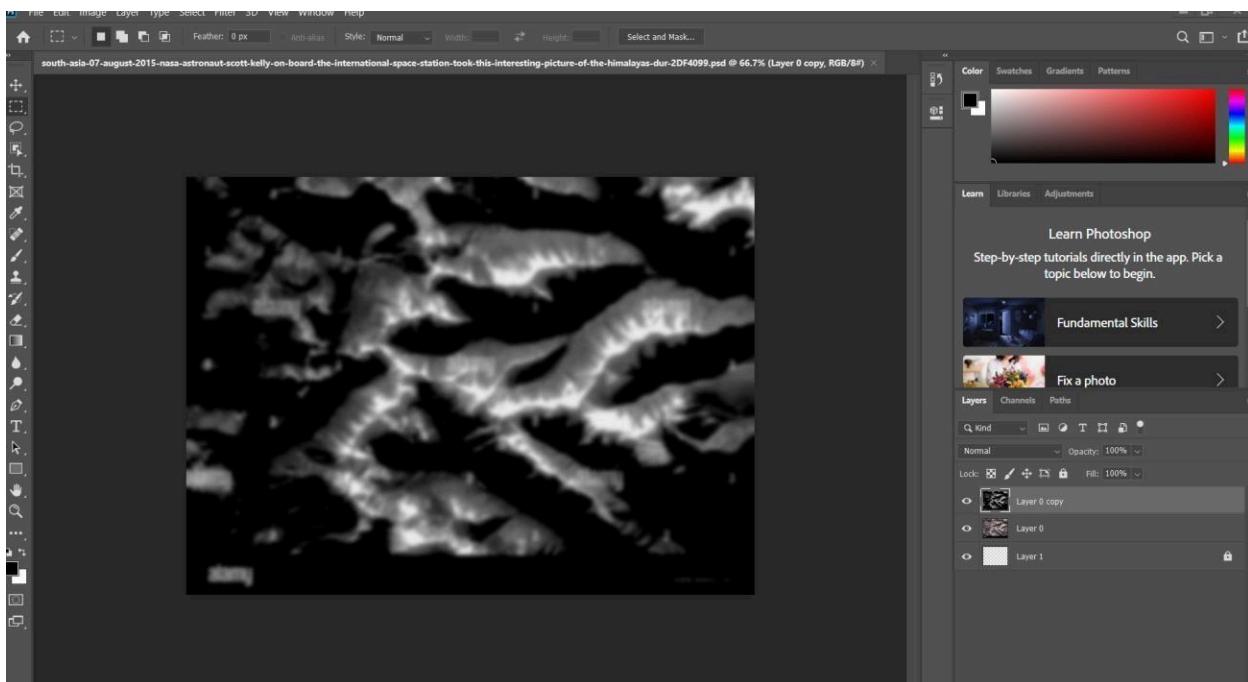


Figure 11. Displacement map creation for terrain

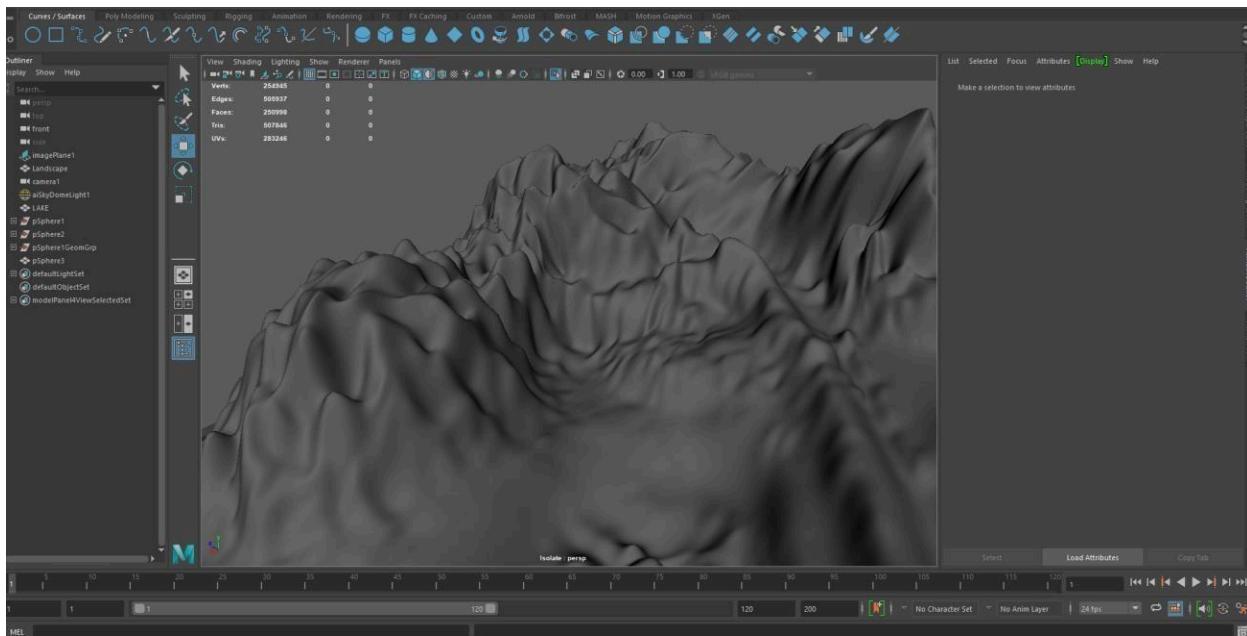


Figure 12. Terrain created using displacement map

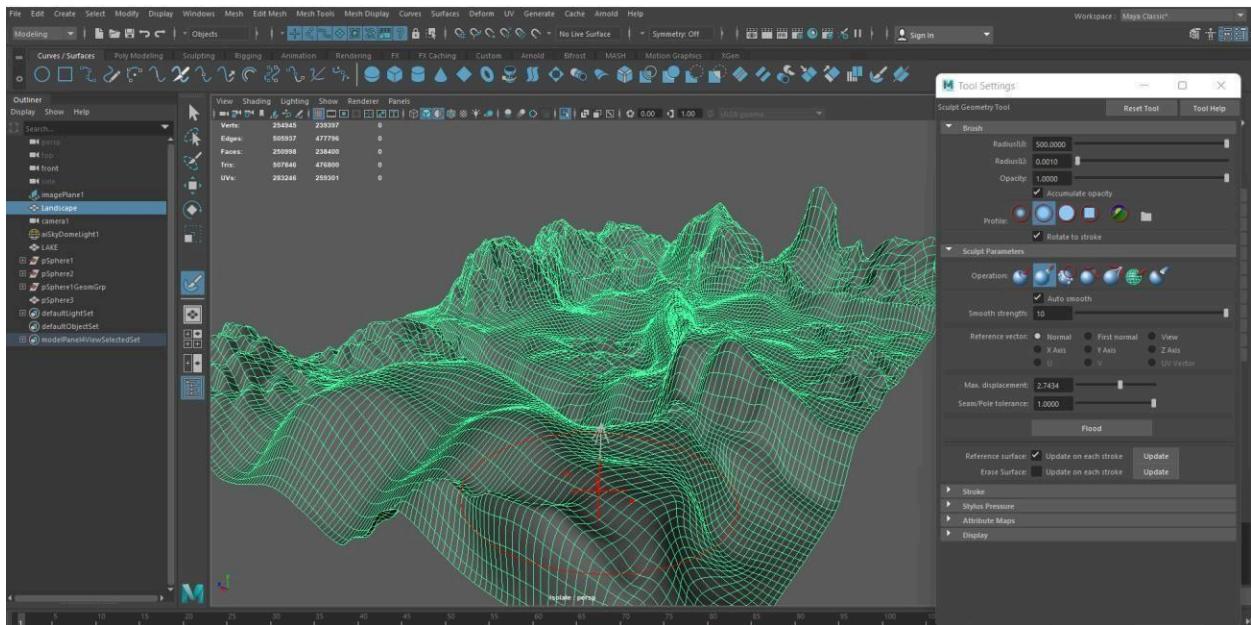


Figure 13. Refining the geometry using Sculpt Geometry tool.

The frozen pond, which is situated next to a canyon, wasn't modelled because it could just as easily be made out of a single basic square with some extra textures.

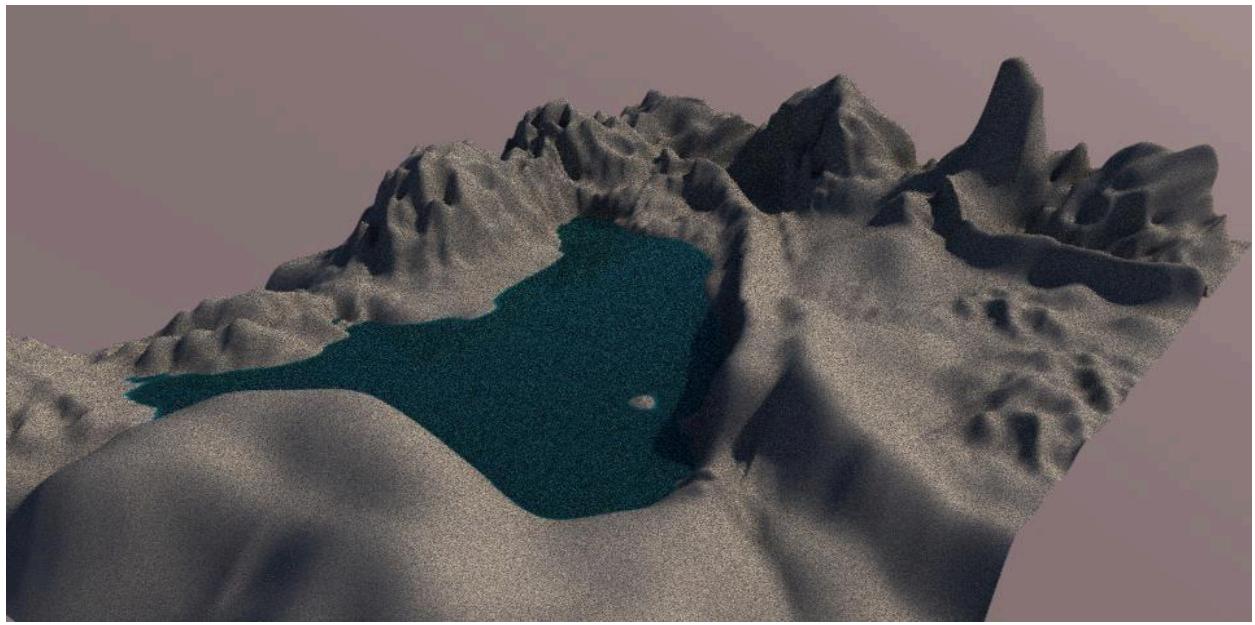


Figure 14. Final Terrain Layout

Tree

The following was modeled after a dead tree that is crucial to the story. To produce the dead tree, a curve with a tree-like shape was first created. A polygon cylinder was then created, with only its base preserved, and by selecting both the curve and the base, the geometry was extruded in the curve's shape. The branch was cut using a multicut tool without interrupting the flow, with the only distinction being that holes at the end of the branch's polygon were attached to the side of the tree.

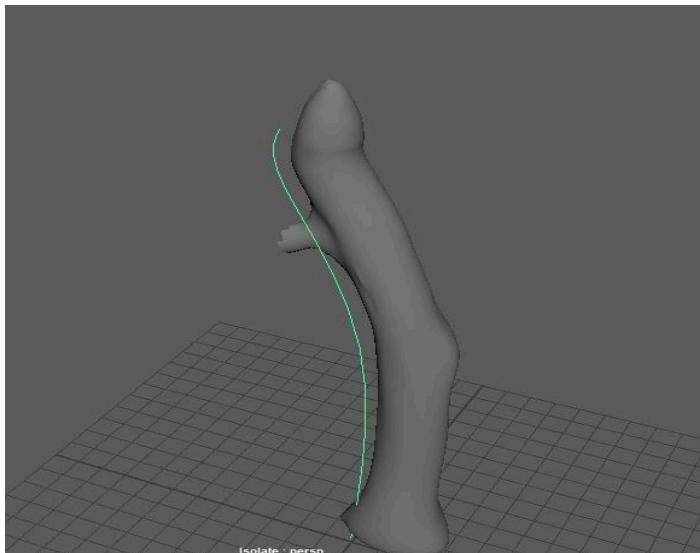


Figure 15. Tree created by extruding face along the path

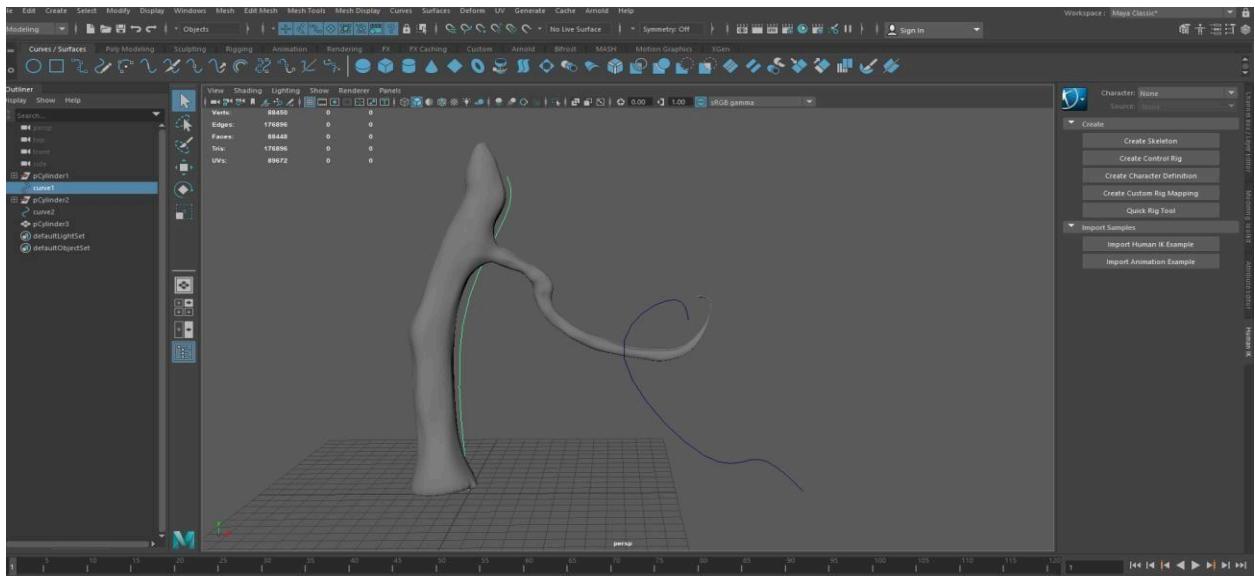


Figure 16. Rest created using same process and merged.

Boots

Following that, boots were developed. The same method used to build the tree was used to create the boot. First, an outline of the boot's sole was drawn using the CV curve tool, and then a surface was made from the curve because it couldn't be extruded. Starting with the sole, the boot was gradually extruded and molded up to the ankle in accordance with the reference image. The position of the small metal nuts, which hold the laces, was likewise made using a cylinder and modified. Using the same extrude along the curve process, laces were produced along the metal nuts. Our landscape is covered in snow, so spikes for the footwear were also developed.

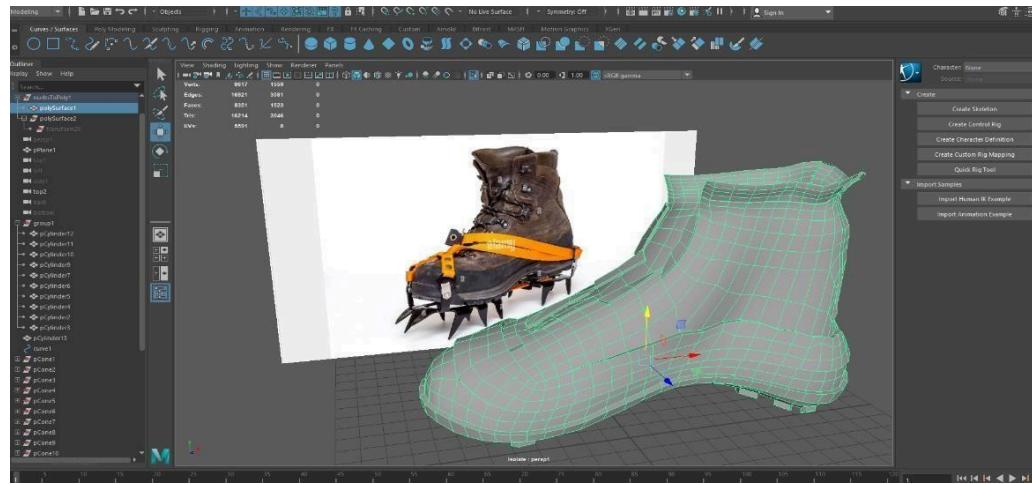


Figure 17. Boots created from reference

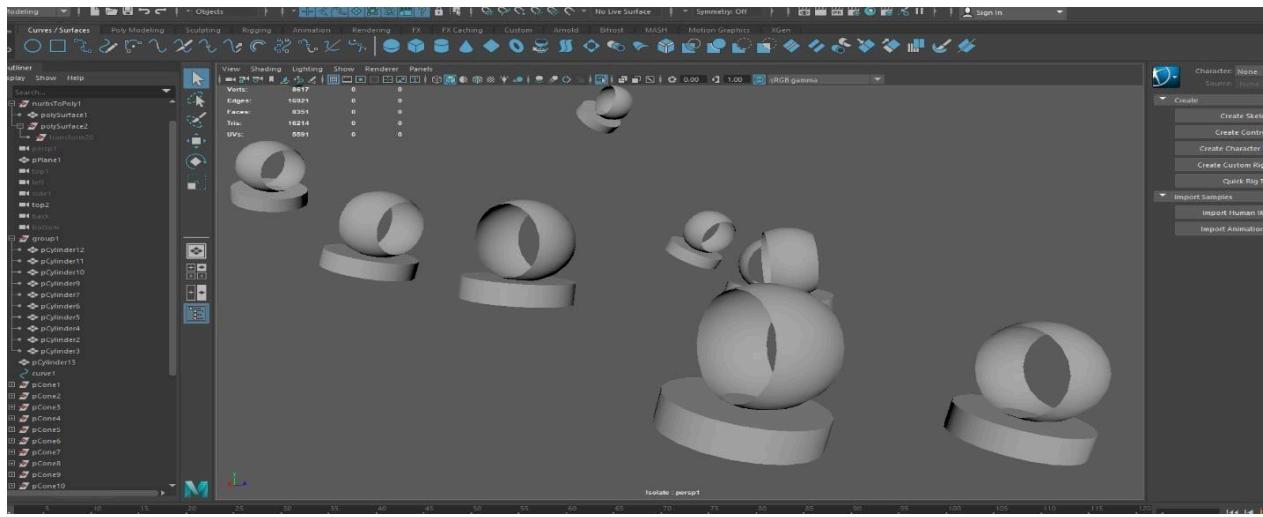


Figure 18. Nuts created using two cylinders and reshaping

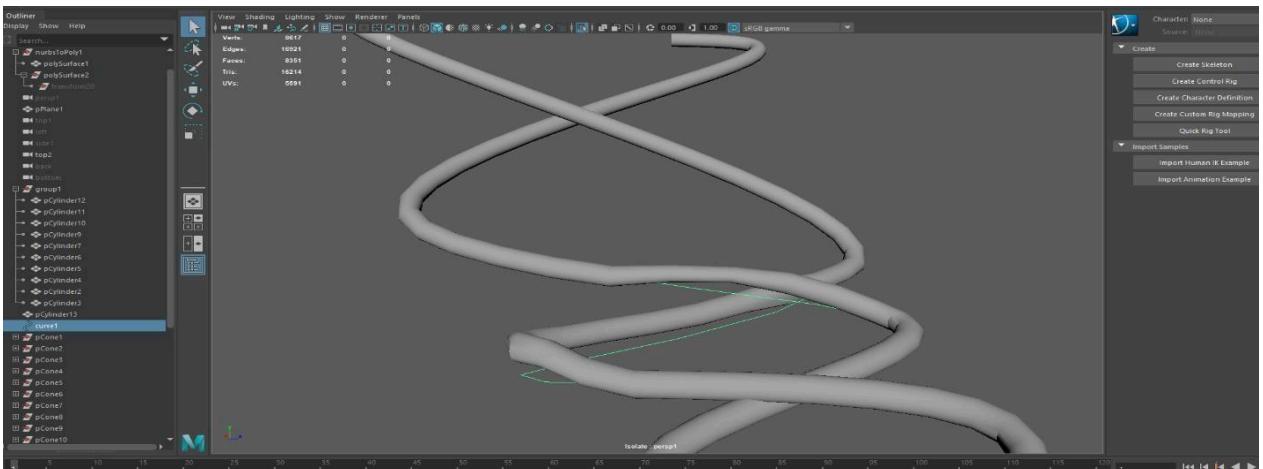


Figure 19. Laces creating using extrude along the curve

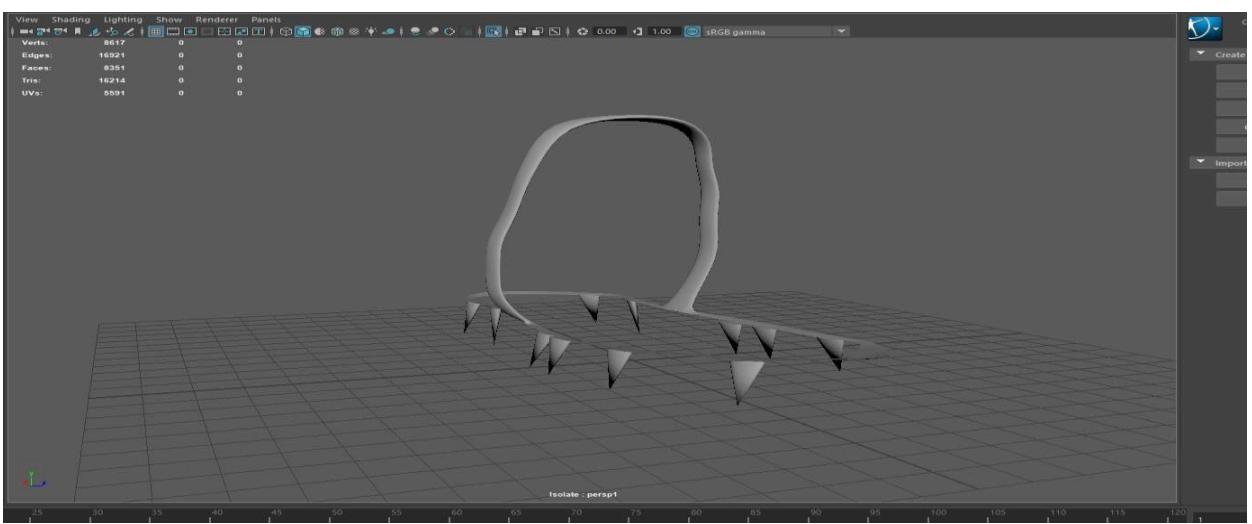


Figure 20. Spikes created

Head

Everyone requires a head, therefore modeling was done using a sphere that was then modified to match the reference image without impairing the surface flow of the entire head. The sphere was first scaled and modified to fit the figure, and then the poles were taken off for the neck region. The form is modified to better resemble the reference image, and after that, the face region is ready. Throughout this entire process, the surface flow of the geometry must be preserved. the region around the nose and eyes, lastly.

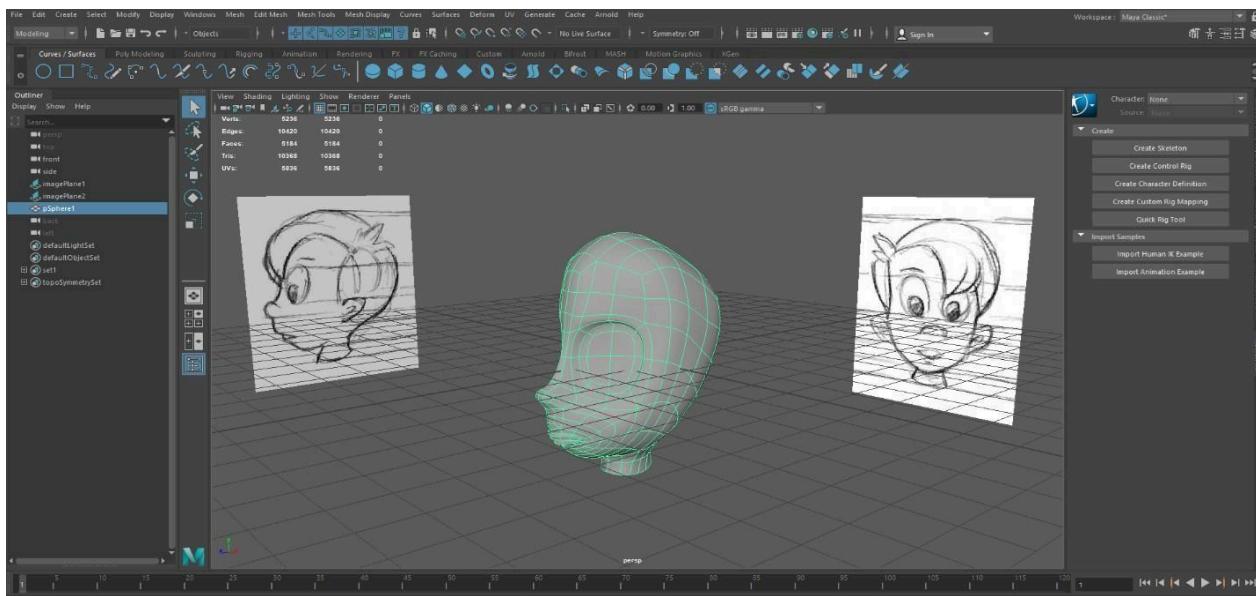


Figure 21. Head created according to reference

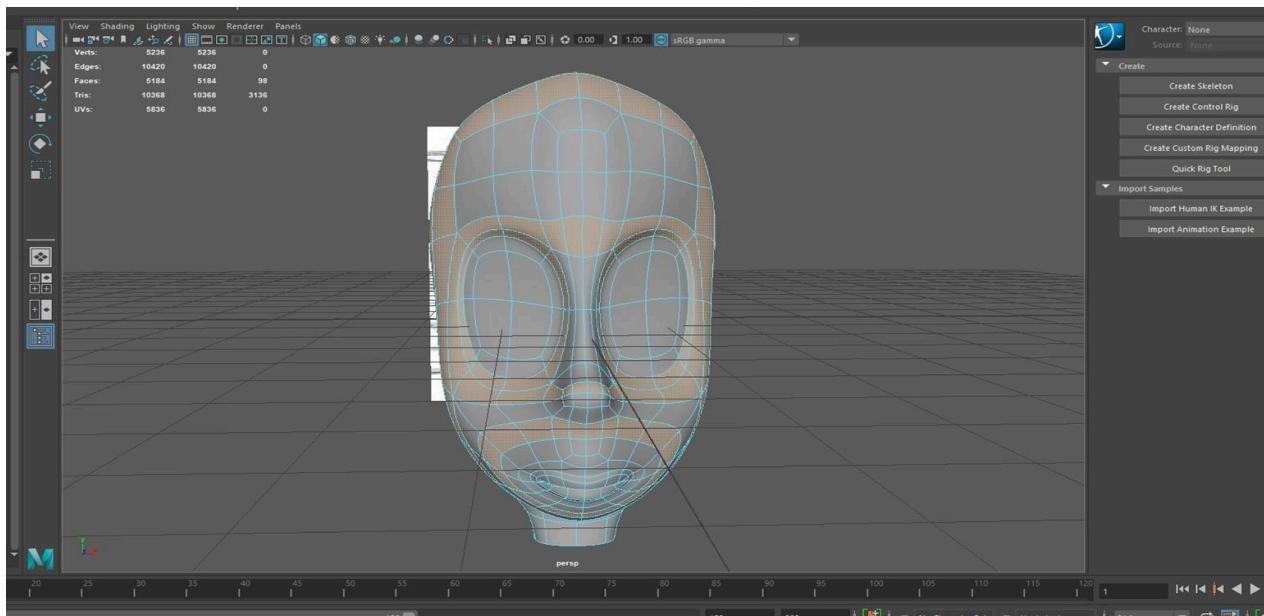


Figure 22. Surface flow of head

Snow Glasses

The same process as for making boots was used to create snow glasses; the frame was initially given shape by a curve, and then it was extruded and reshaped as needed. A plane was used to bend the glass to construct it. The extruded nuts and the rear head cloth were both constructed from cubes that were reshaped.

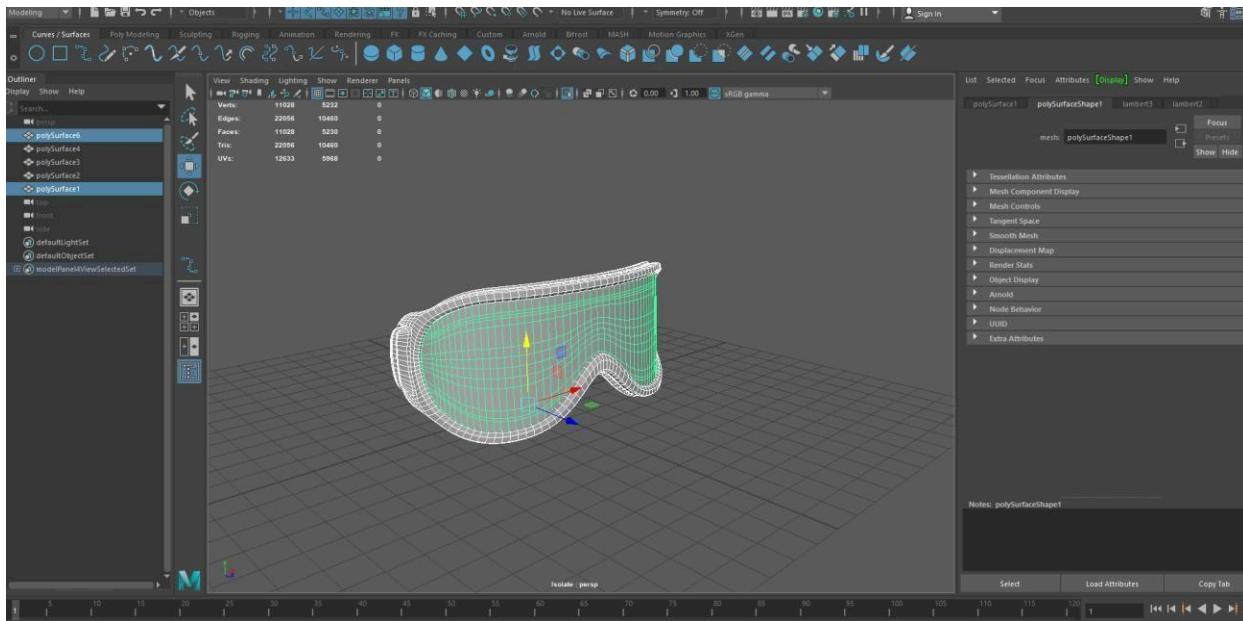


Figure 23. Frame created

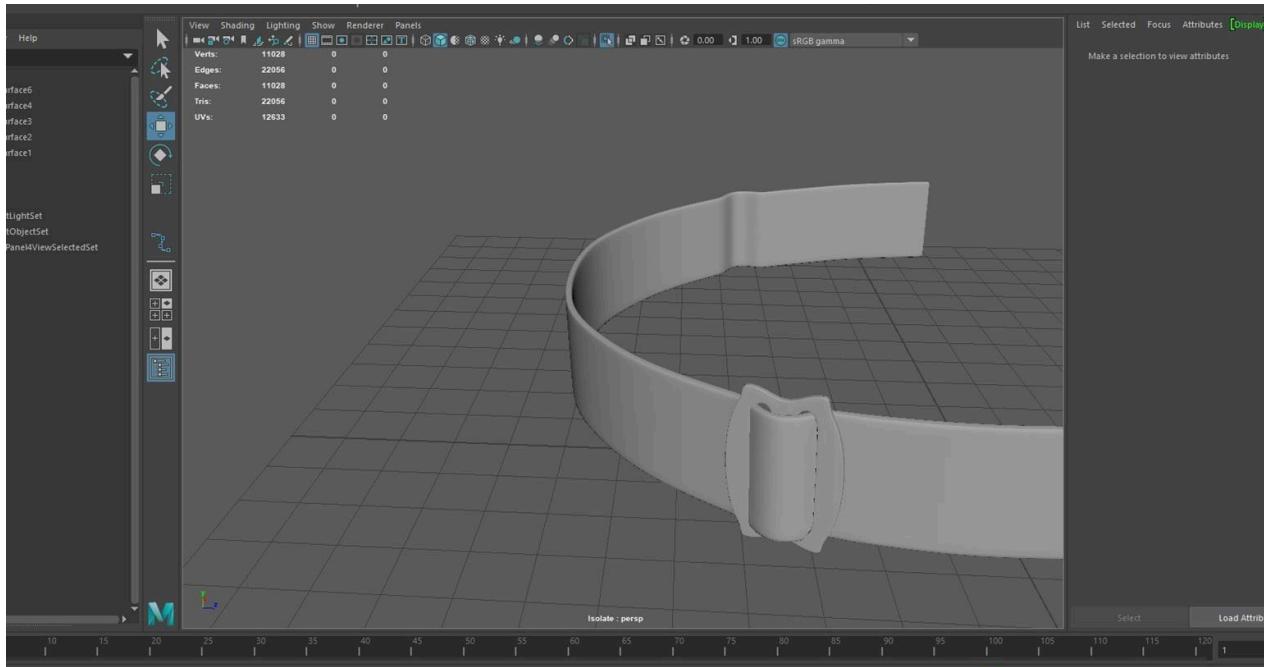


Figure 24. Straps and Nuts created

Eye

It was made by using a sphere elongated and mad a hole in the middle for eyeball part.

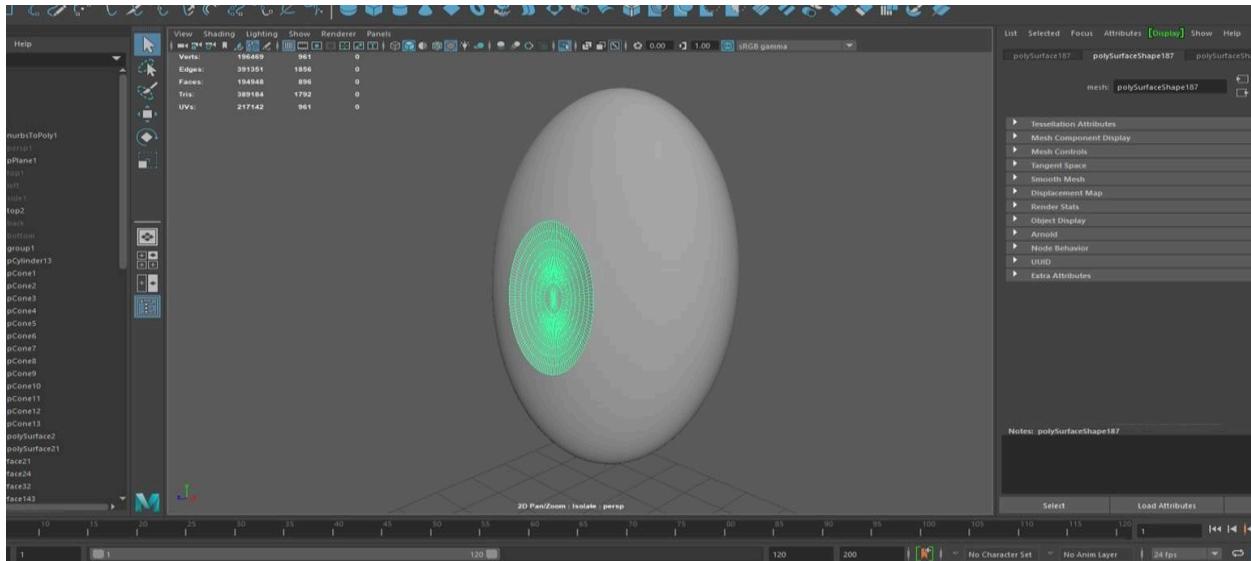


Figure 25. Eye created using sphere

Hat

Hat was then created for the head. It was made by selecting every face on the head save the area around the face, after which it was replicated, reshaped, extruded, and customized to the user's tastes.

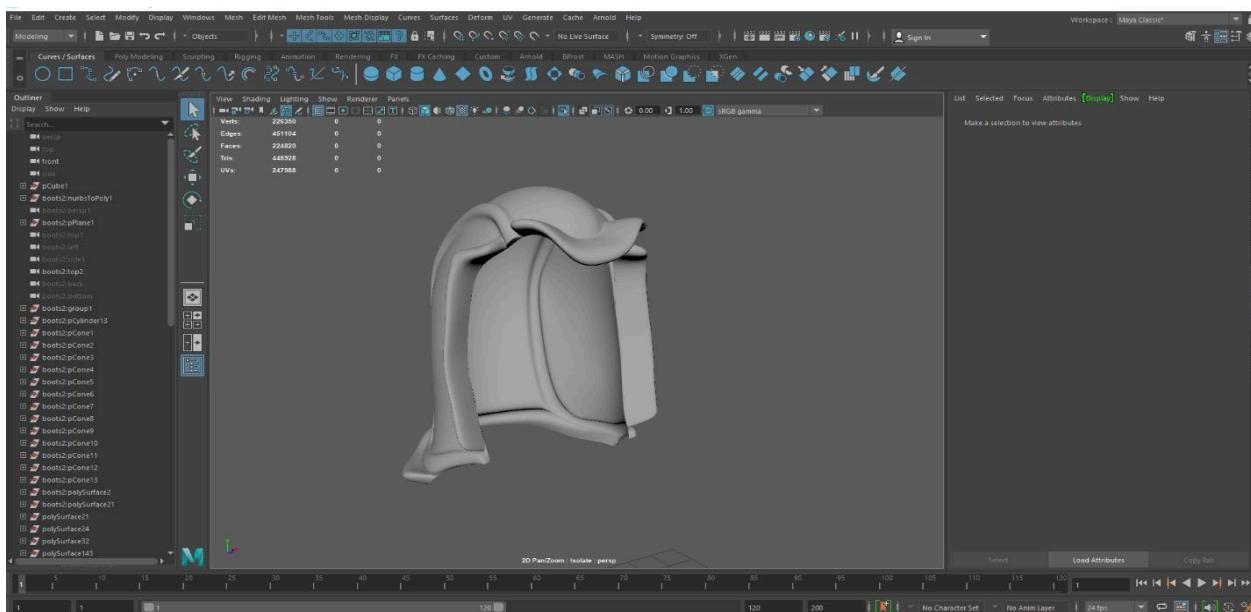


Figure 26. Hat created

Body

The build out approach was used to generate the body, in which the entire body is extruded from a single cube that is modified in accordance with the reference image. First, the cube's symmetry is established, which aids in modeling a single portion. The legs, chest, shoulder, and arms are added after that. The hand is then recreated by transforming cubes into fingers and merging them. All of the components have now been combined, and the other things have been adjusted to fit the character as needed.



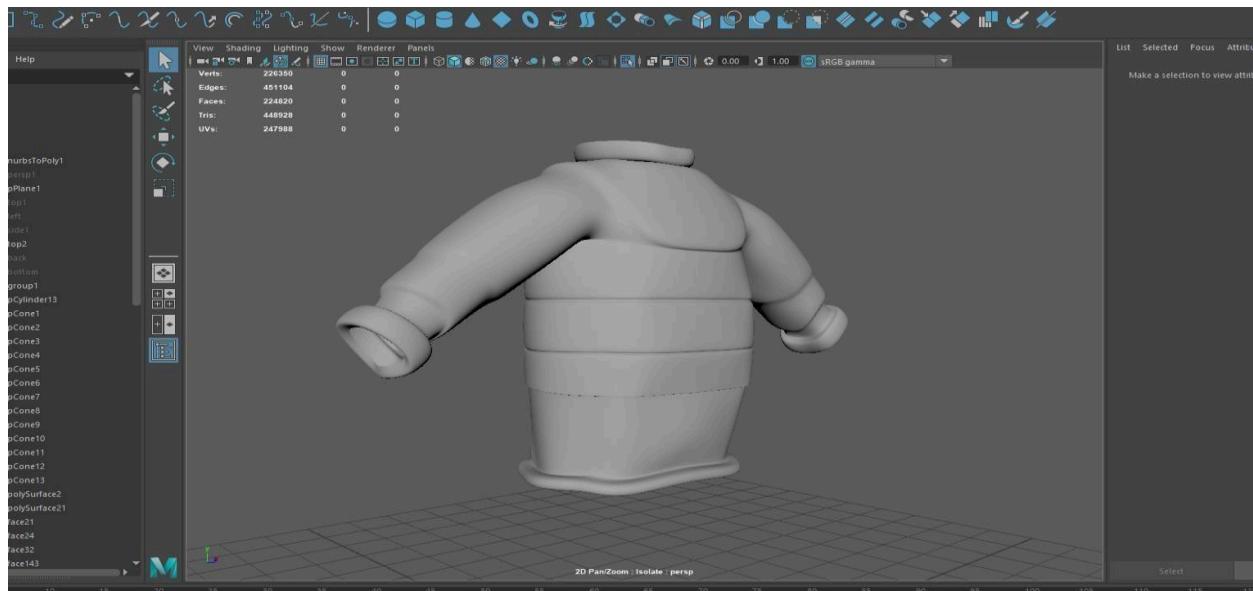
Figure 27. Body and fingers made from built out technique



Figure 28. All things fitted together

Jacket

Similar to how a hat is made, a jacket was made by first selecting the body up to the jacket design portion in face mode, then duplicating it and redesigning it as necessary.



Sticks

Cylinders extruded, reshaped, and occasionally merged to form sticks.

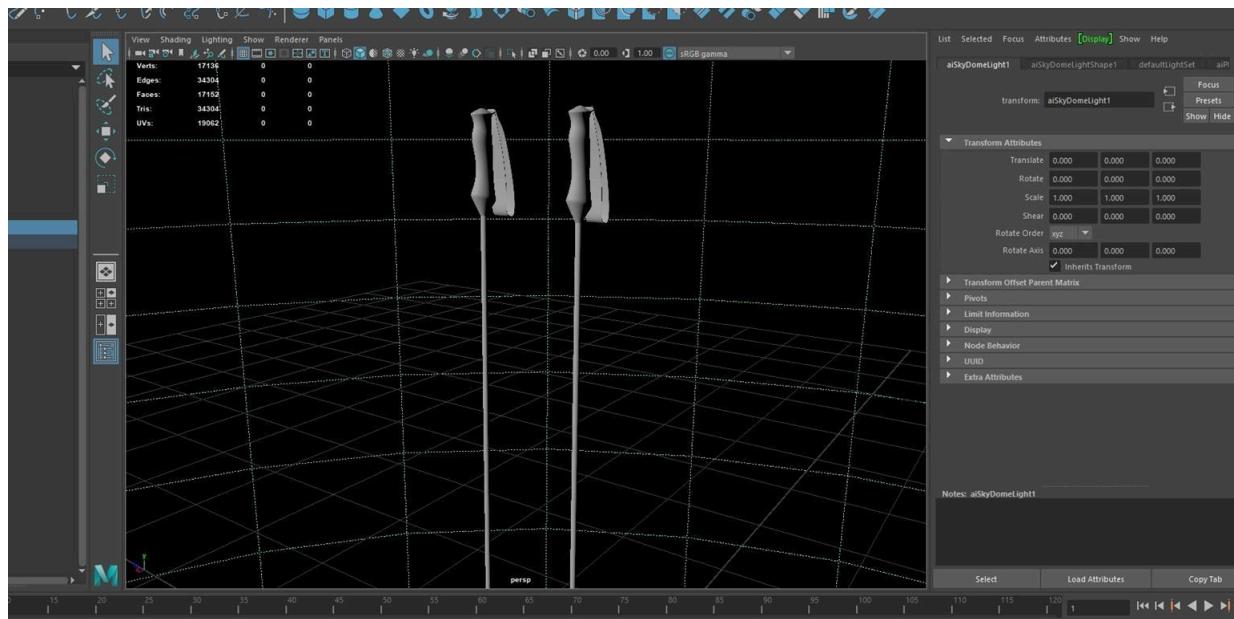


Figure 30. Walking sticks creation

2.2.2 Texturing

After finishing the modeling, we will move on to texturing, which made up the majority of this project's production time. Because there were so few image-based textures used, texture creation took up the majority of the time.

Terrain

The terrain was given new material, called `aistandard_surface`, first, before its base values were changed, a separate 3d texture node called `snow` was added to the base color node, and then another node called `crater` was added to the 3d texture node once more. Three ramps were then built and connected to it after layered textures were developed to balance the rock and snow. Pond was also made as a result of adjusting the basic values and `standard_surface` to the situation.

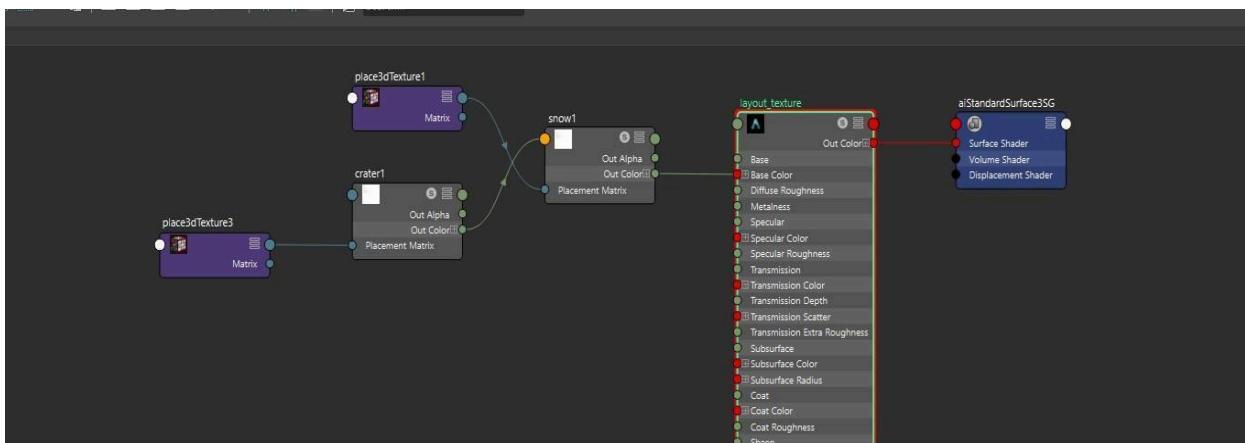


Figure 31. Graph view of nodes connected to material

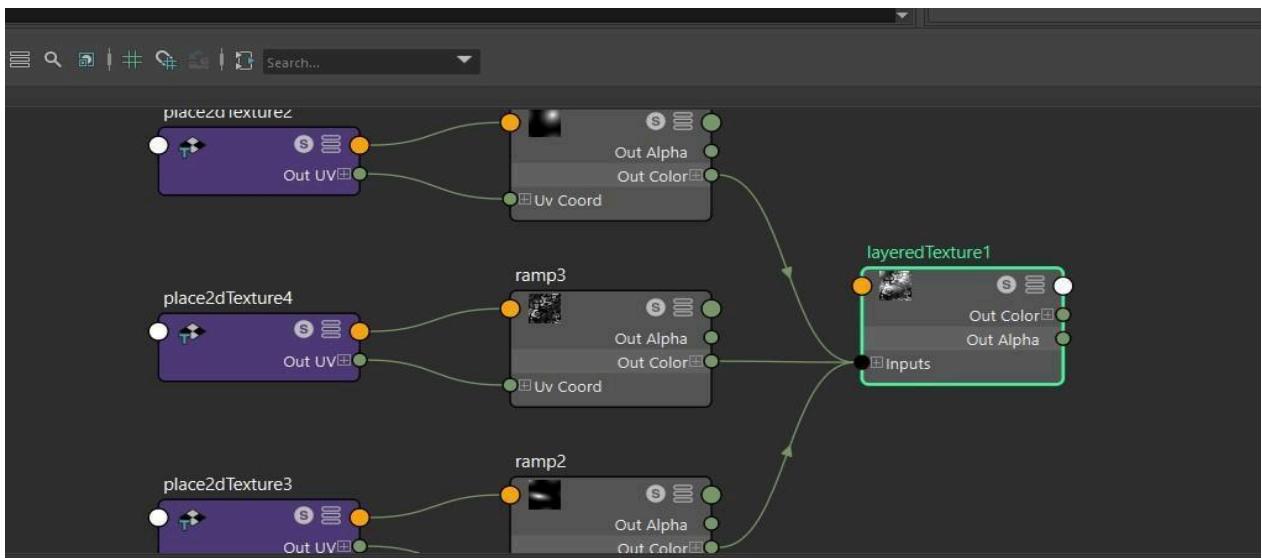


Figure 32. Layered texture node connection

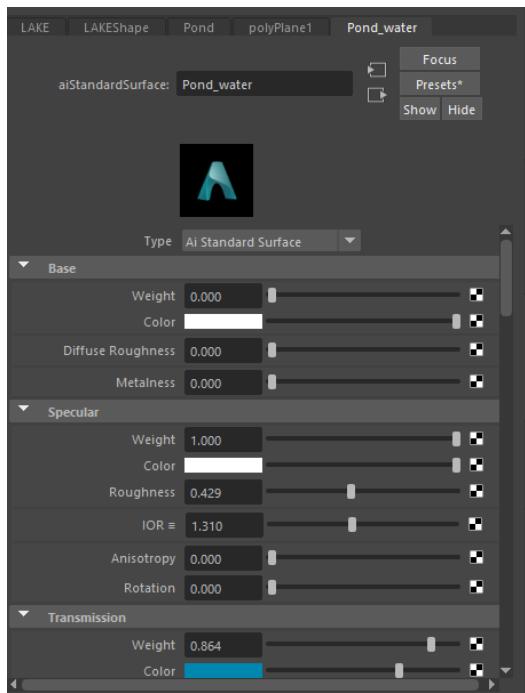


Figure 34. Pond base value

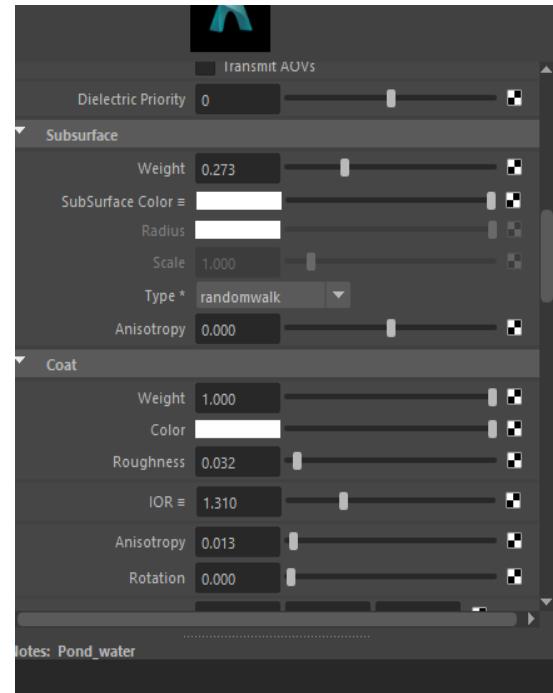


Figure 33. Pond base value 2



Figure 35. Final Output

Tree

The texturing of the tree uses an image-based texture, with the material `astandard_surface`. A JPEG displacement map of the same tree was used to create the bump map, and another JPEG node with the base color was attached to the tree texture.

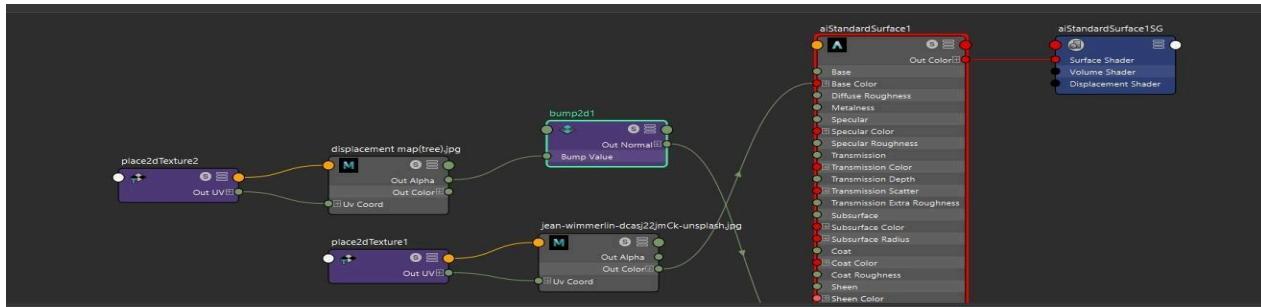


Figure 36. Graph connection of tree nodes



Figure 37. Tree texture used

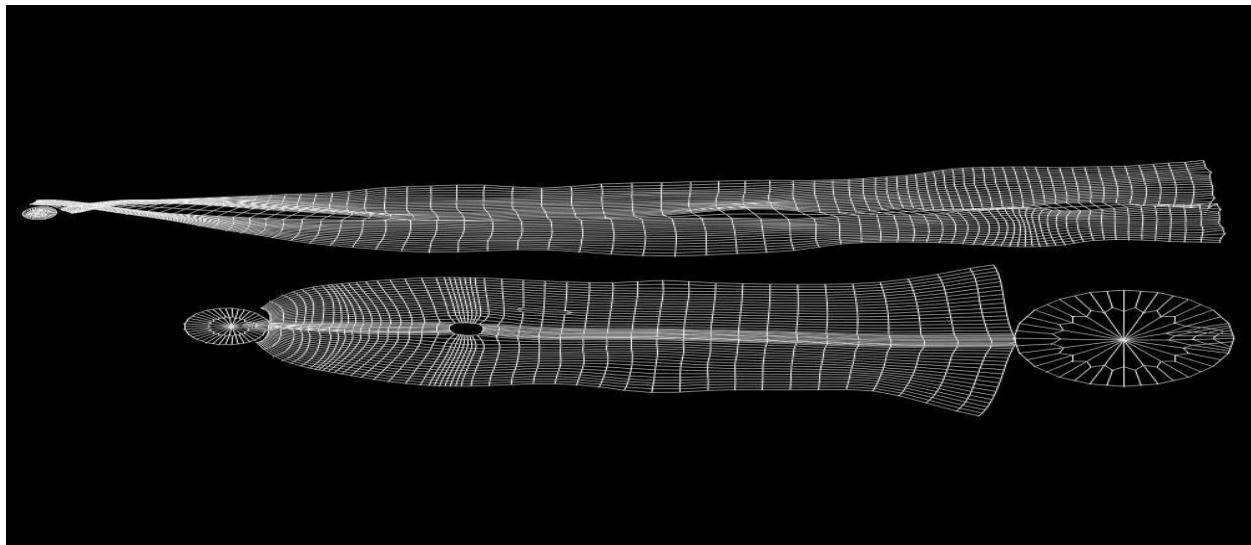


Figure 38. Tree UV

Boots

Since different objects were attached to boots, various materials had to be utilized, but they all had a standard surface. Brown was picked with its nearby base value for the main body color. This texture was used for all of the objects in footwear.

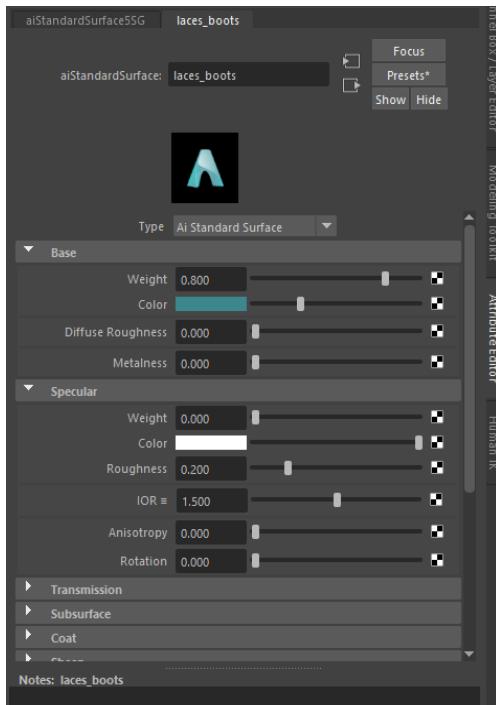


Figure 39. Boot laces base value

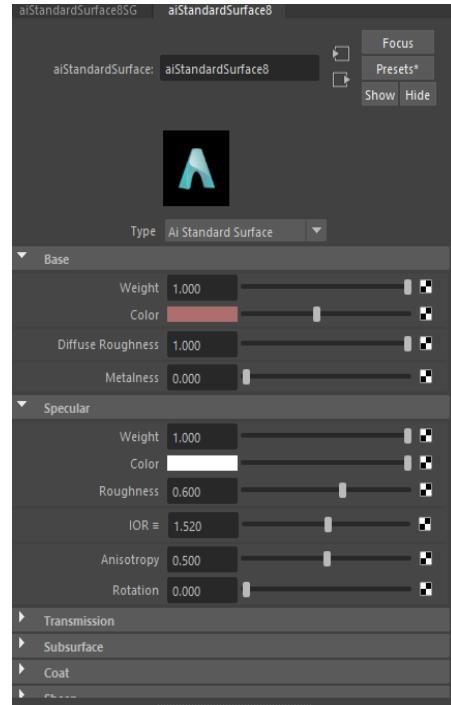


Figure 40. Boots main body base value

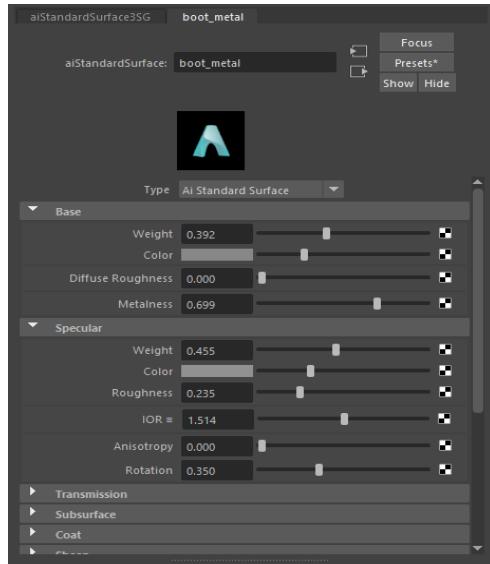


Figure 42. Boot metal base value

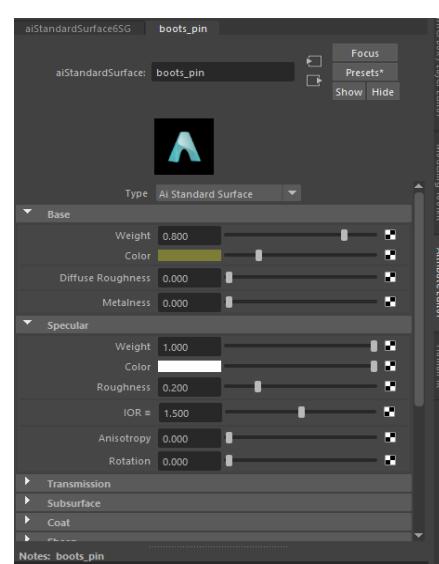


Figure 41. Boots pin base value



Figure 43. Shoe final render

Snow Glasses

First the UVs were cut necessary for the material allocation, then the frame and the glasses were given different material

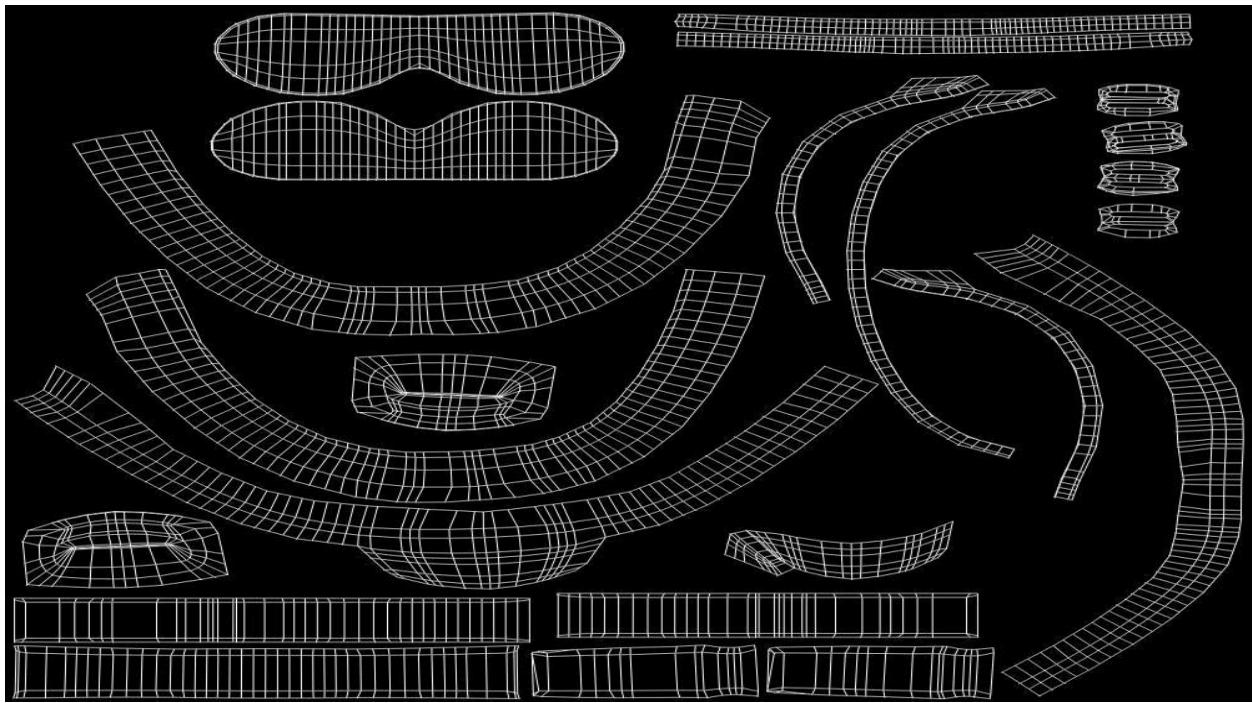


Figure 44. Uv cutting of glasses

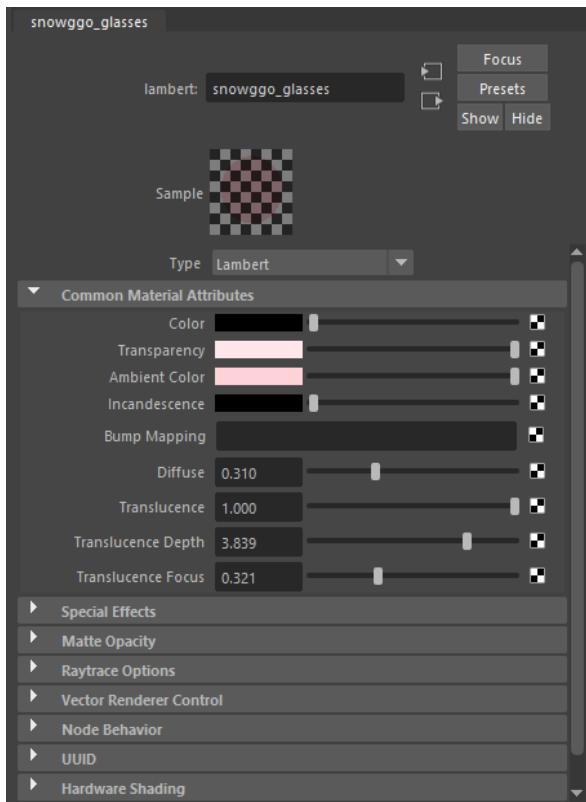


Figure 46. Glasses lens base value

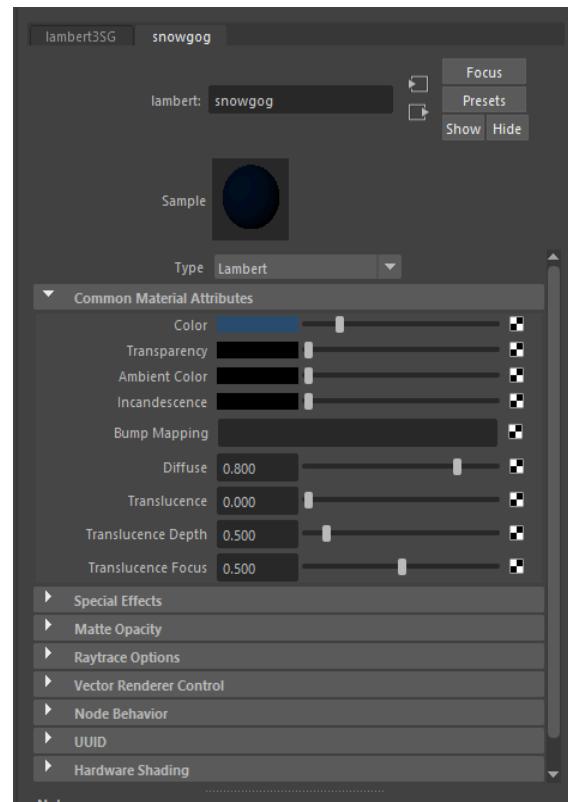


Figure 45. Glasses mainframe base value



Figure 47. Final render Snow glasses

Hat

The uv was first reduced, and after that, the shells were chosen into two groups made up of two materials and given various node values. One received the zebra texture and its bump map, while the other received base color plus an additional node known as a fractal.

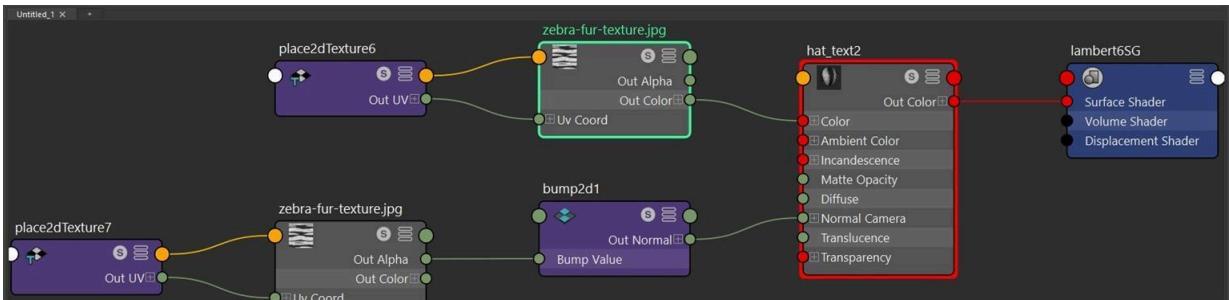


Figure 48. Fur texture nodes

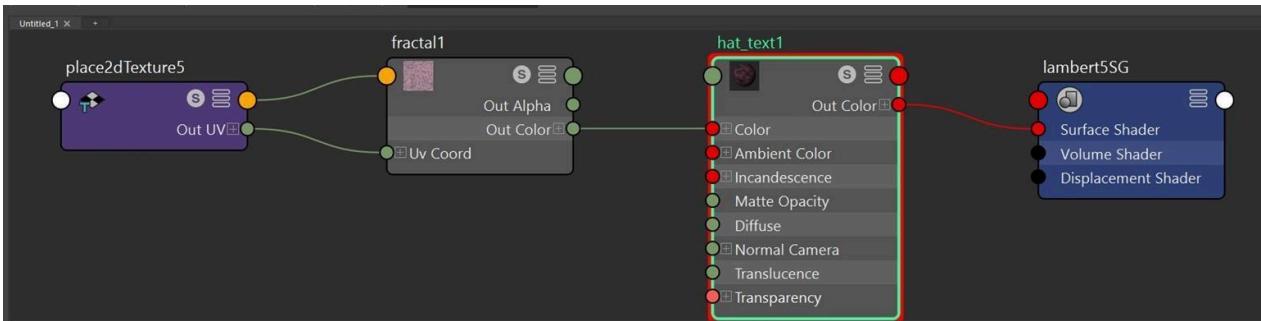


Figure 49. fractal node

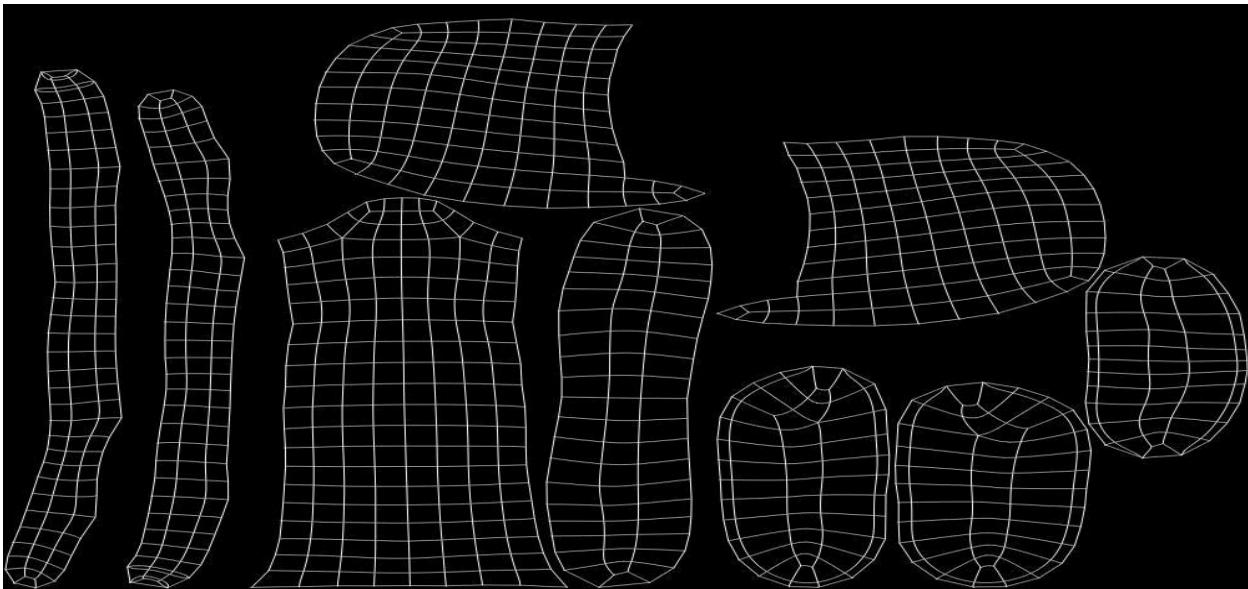


Figure 50. Hat UV



Figure 51. Hat final render

Eye

As before, UV was divided, and the outer eye was given an image-based texture, while the inner eye was given a black color.

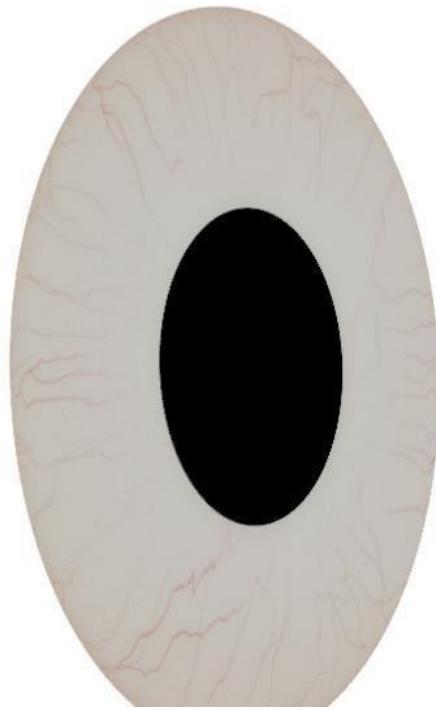


Figure 52. Eye final

Jacket

After creating the UV, two groups with two different materials—one with base values and no additional nodes and the other with a fur texture and bump map—were constructed.

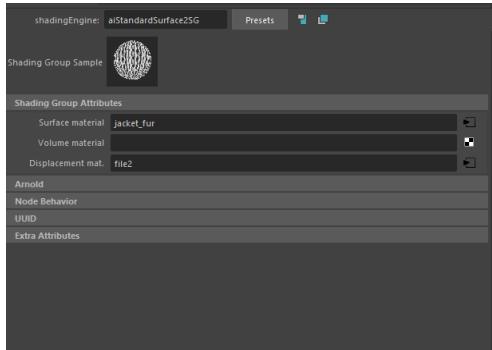


Figure 53. Nodes path in jacket material



Figure 54. Jacket final render

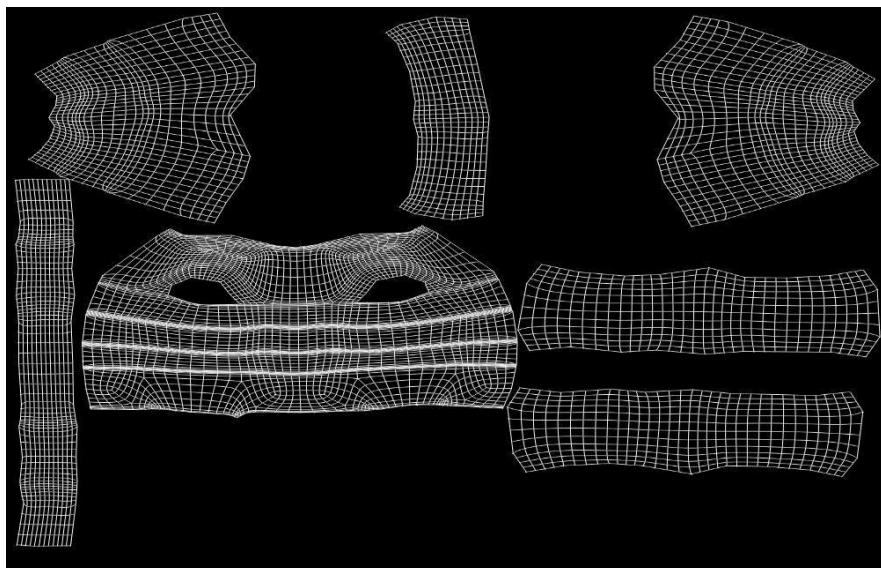


Figure 55. UV Jacket

Walking Stick

First the Uv was cut and then image-based textures were added to the cut UV.

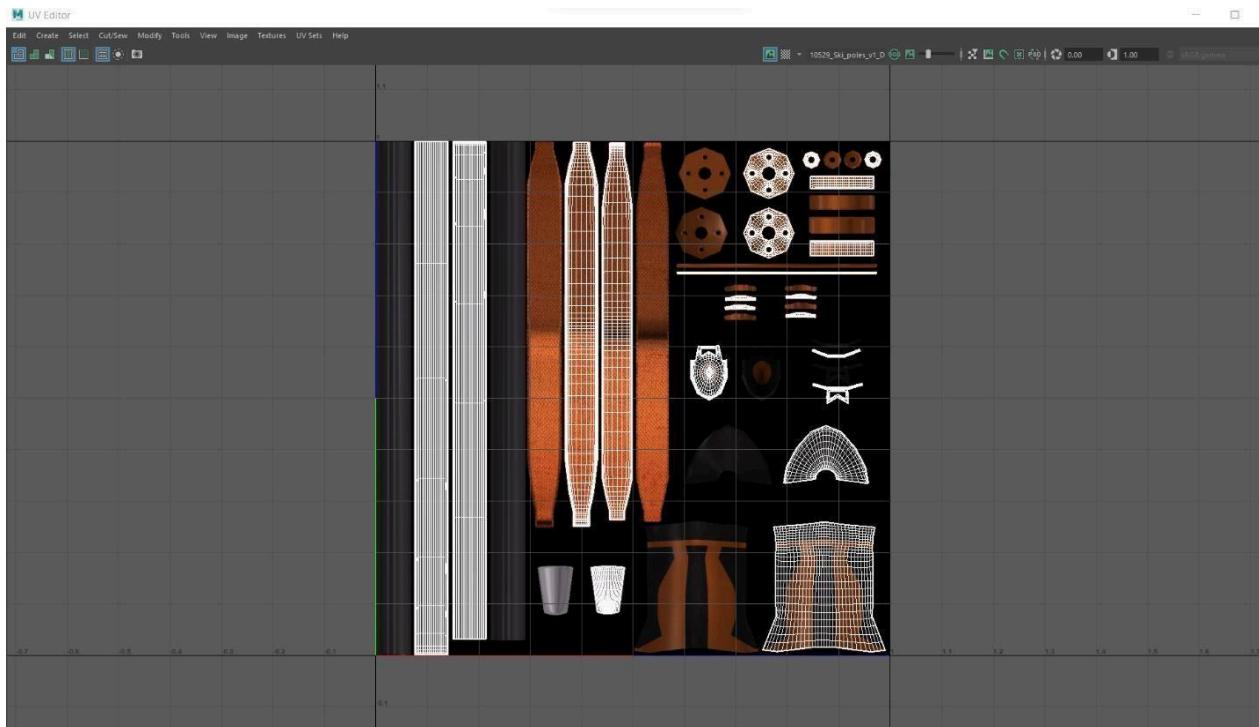


Figure 56. UV of stick with texture.

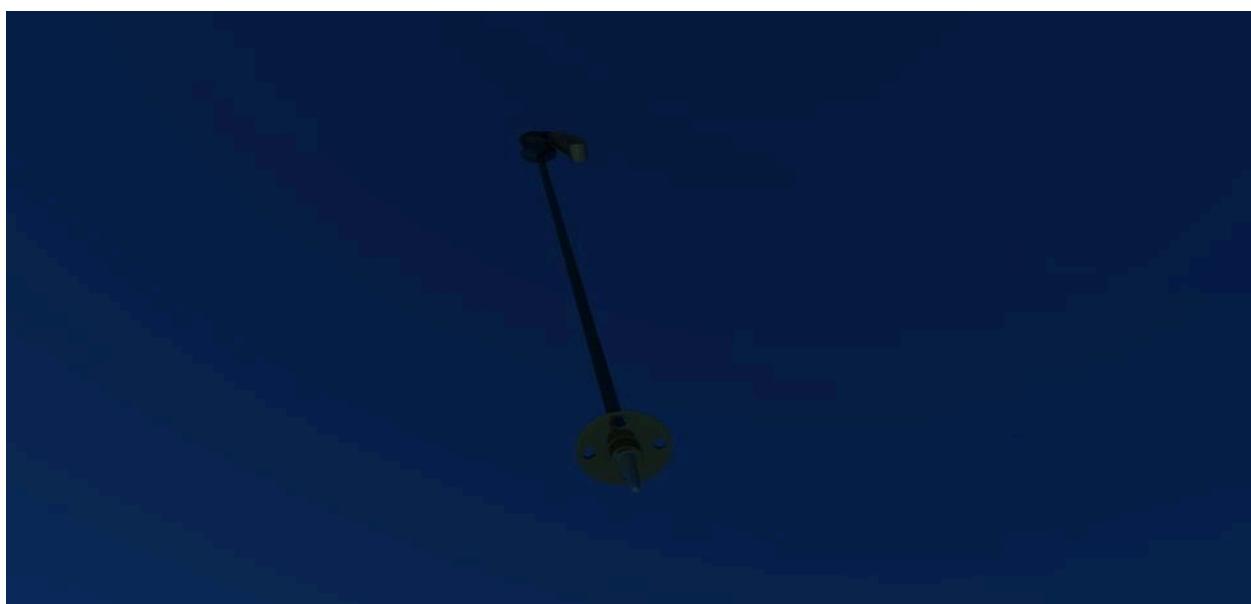


Figure 57. Stick final render

Body and Hand

Body and hand share the same UV, so in order to texture them separately, each shell was given a new material and a different texture. Both procedural texture and a texture resembling hand gloves were employed for the body's skin.

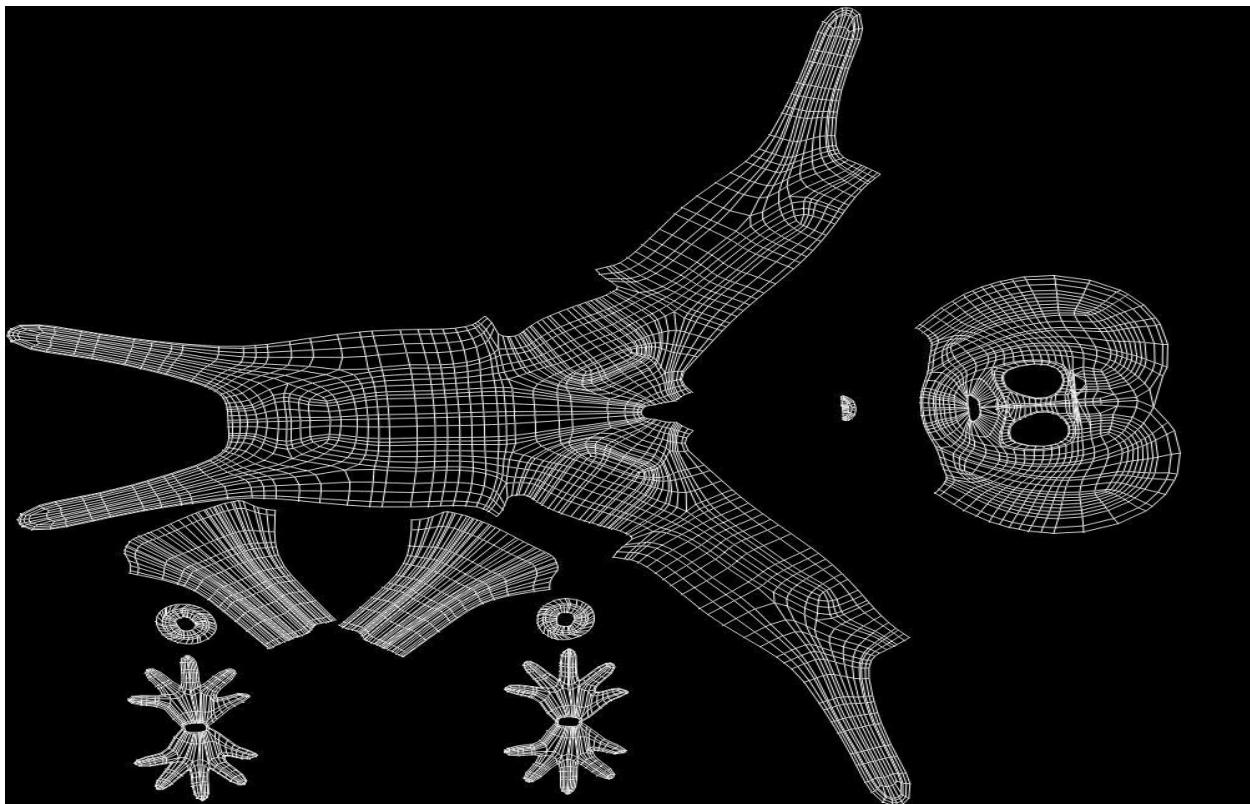


Figure 58. Uv of hand and body

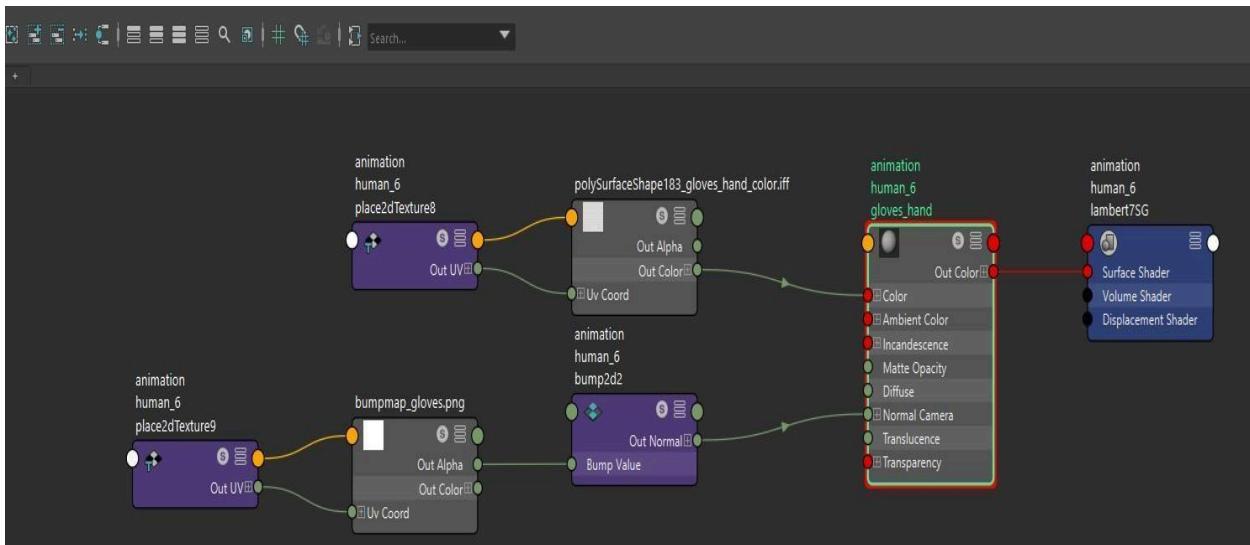


Figure 59. Node map for Gloves

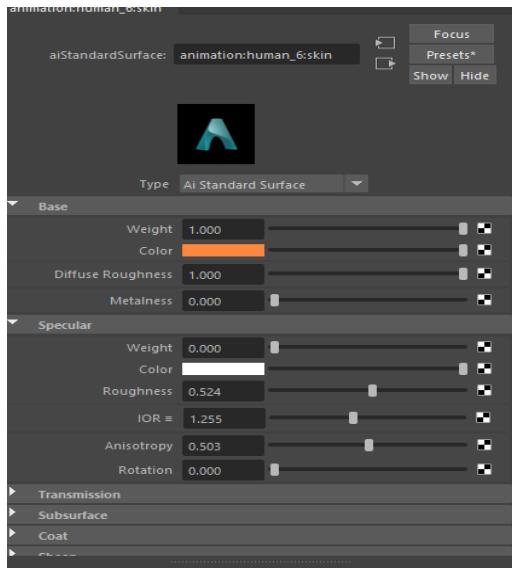


Figure 60. Skin base values



Figure 61. All combined final texture

2.2.3 Rigging and Skinning

After texturing, the character must first have a skeleton created before rigging and skinning weight onto it. The technique of integrating joints to create a character mesh is known as skinning. The skeleton functions as the joint system found on the human body. The joints are given IK controllers, which are essentially set driven functions, after they have all been positioned in their appropriate positions and given the necessary names. The joints are then given controllers and constraints that assist characterize their movements; for example, it is useless to give knee joints a twisting function because they only rotate in one direction.

The next step in the rigging process is skinning, which is crucial since it establishes how much control a particular joint has over a given area. Assuming a joint moves the head, the character mesh must also move the surrounding muscles, or more, in addition to the head. This is where skinning comes in. To appropriately skin the character, the affected area is manually painted over with the use of the paint skin weight tool after the joint has been selected.



Figure 62. Character joint creation with proper orientation

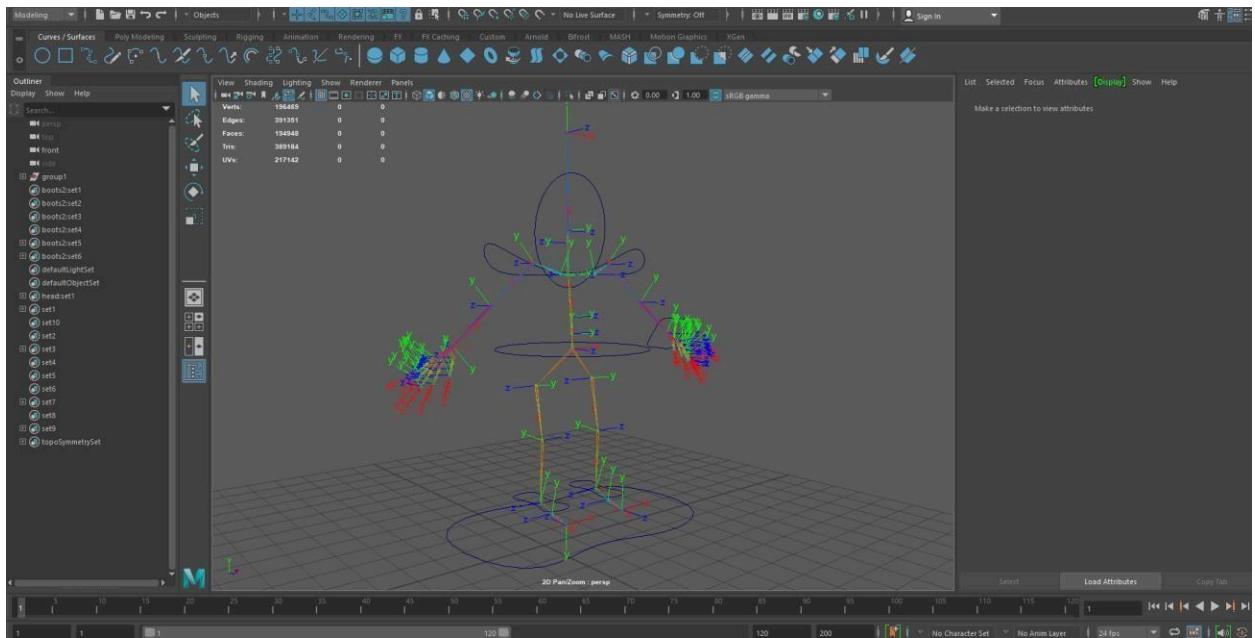


Figure 63. Rig with controller constrains created

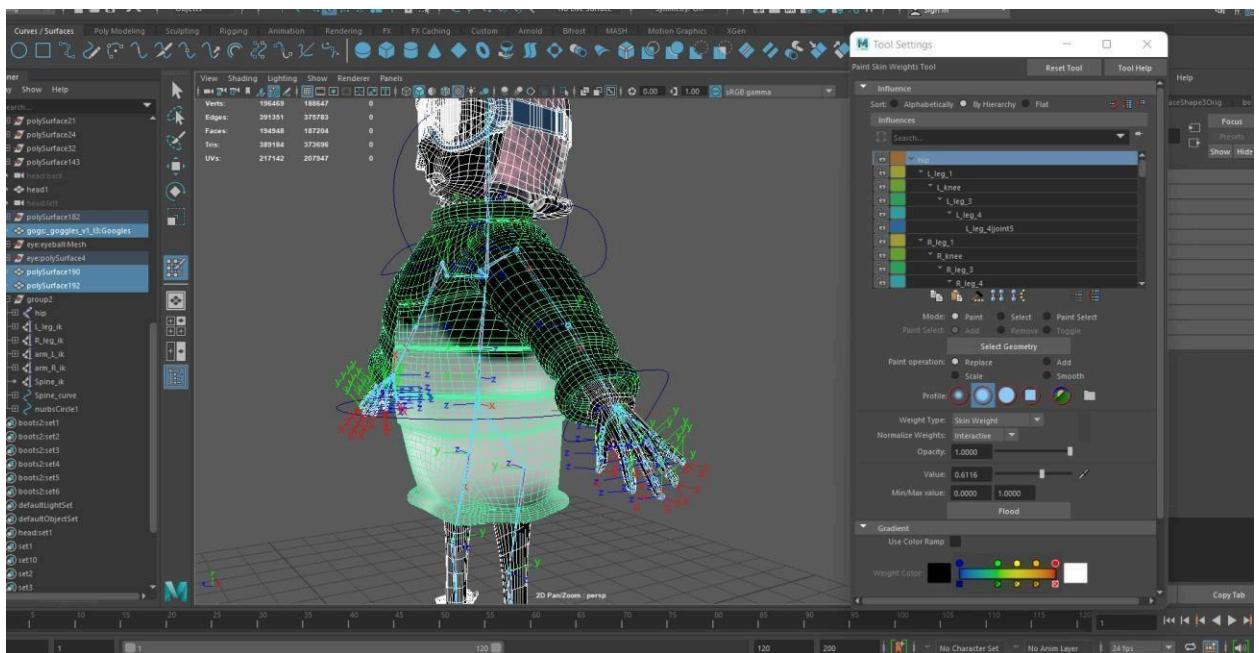


Figure 64. Skin weight painting manually

The fingers were also needed to perform clutching actions, so they were also rigged and skinned then added set driven keys.

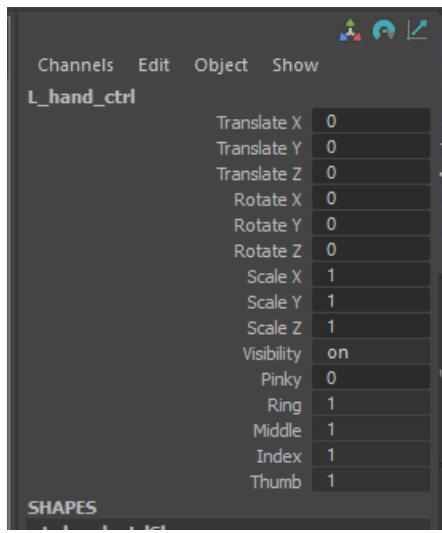


Figure 65. Set driven attributes created for each finger.

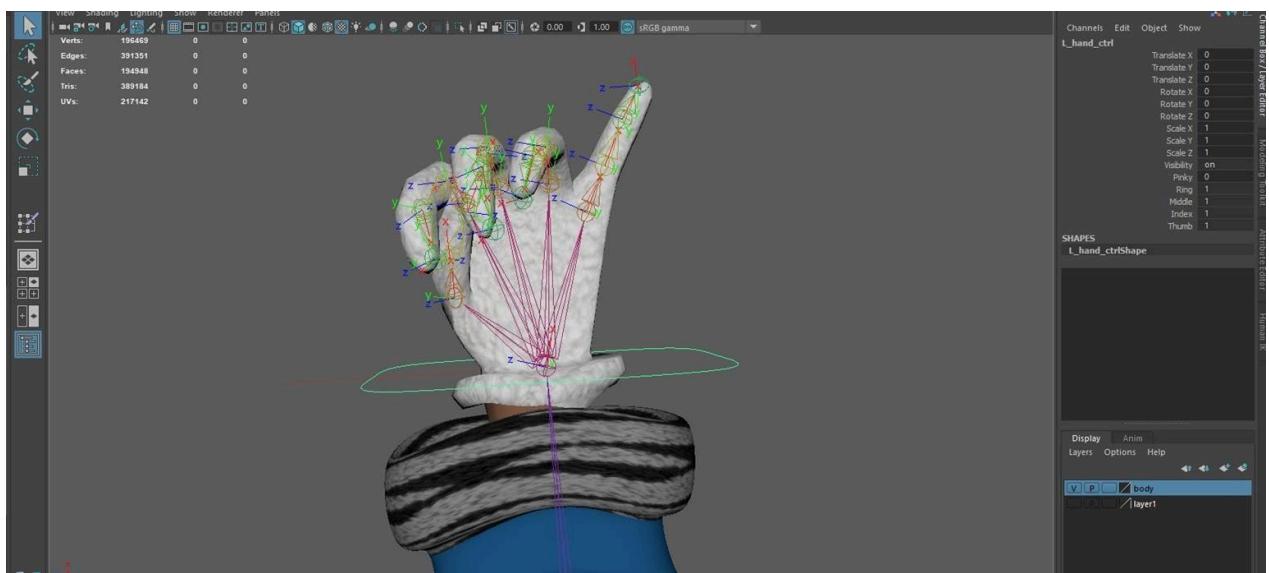


Figure 66. Effects of set driven key used in fingers

2.2.4 Animation

Animation follows rigging, and because the files are so large, each scene was individually animated in its own Maya binary file. For instance, a master scene was built with all of its data in its intended location, then scene 1 was created by copying the master scene and animating it.

Name	Date modified	Type	Size
scene 13.mb	5/10/2022 7:38 AM	Maya Binary File	45,992 KB
scene 11.mb	5/7/2022 1:16 PM	Maya Binary File	45,984 KB
scene 12.mb	5/7/2022 10:54 AM	Maya Binary File	45,989 KB
scene 9-10.mb	5/6/2022 3:29 PM	Maya Binary File	46,038 KB
scene 8.mb	5/5/2022 7:25 PM	Maya Binary File	44,929 KB
scene 5-7.mb	5/4/2022 11:42 PM	Maya Binary File	44,945 KB
scene 3-4.mb	5/4/2022 8:26 AM	Maya Binary File	44,934 KB
scene 2.mb	5/3/2022 10:40 PM	Maya Binary File	44,899 KB
scene 1.mb	5/3/2022 8:11 AM	Maya Binary File	44,899 KB
vai 3.mb	4/28/2022 4:45 PM	Maya Binary File	20,901 KB
vai2.mb	4/28/2022 4:40 PM	Maya Binary File	23,986 KB
.mayaSwatches	5/9/2022 8:26 PM	File folder	
incrementalSave	5/6/2022 8:15 AM	File folder	

Figure 67. Scene setup

Scene 1

The first scene features both characters walking in a cycle. To accomplish this, just one figure was employed, and the walk cycle principle was applied to the movements. The appropriate controllers for the necessary movement were keyframed, and in order to make the cycle of walking continue, the walk cycle curves were finally made infinite.

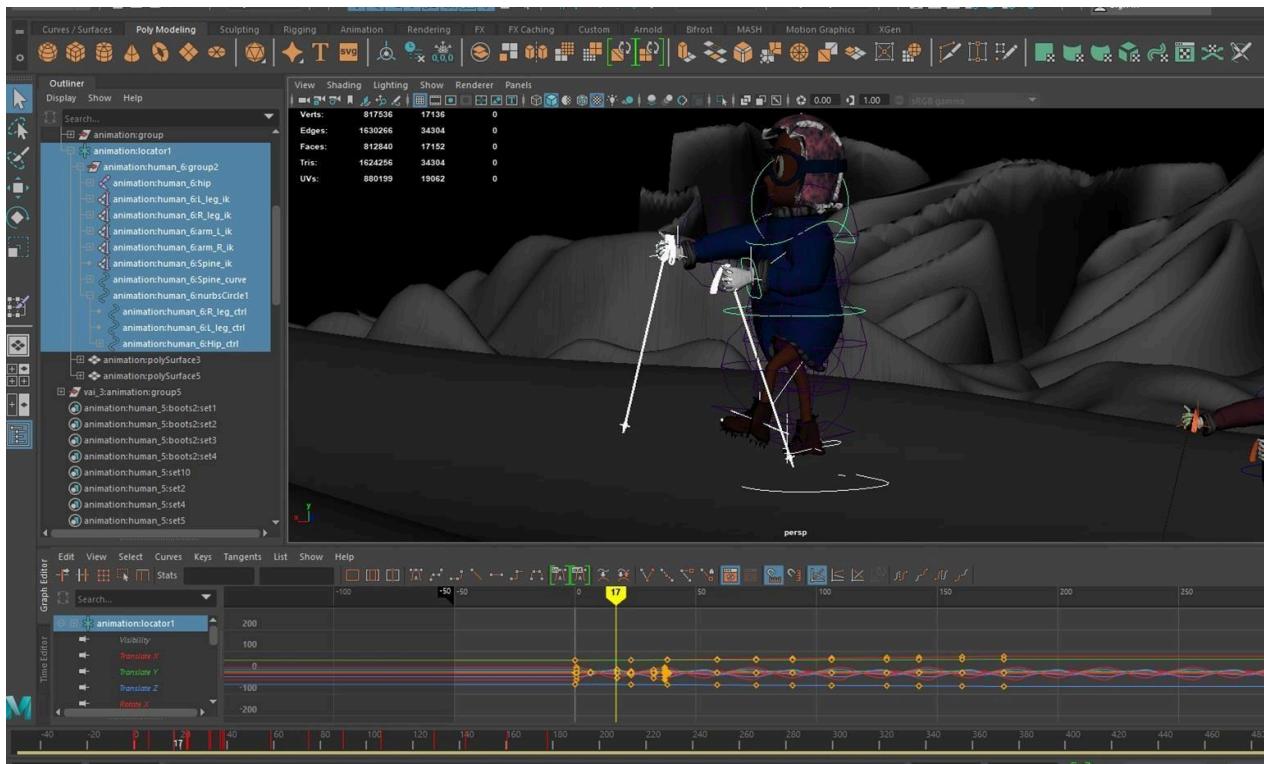


Figure 68. All keyframe in Scene 1

Scene 2

The only difference from scene 1 is the camera composition, which we shall talk more later.

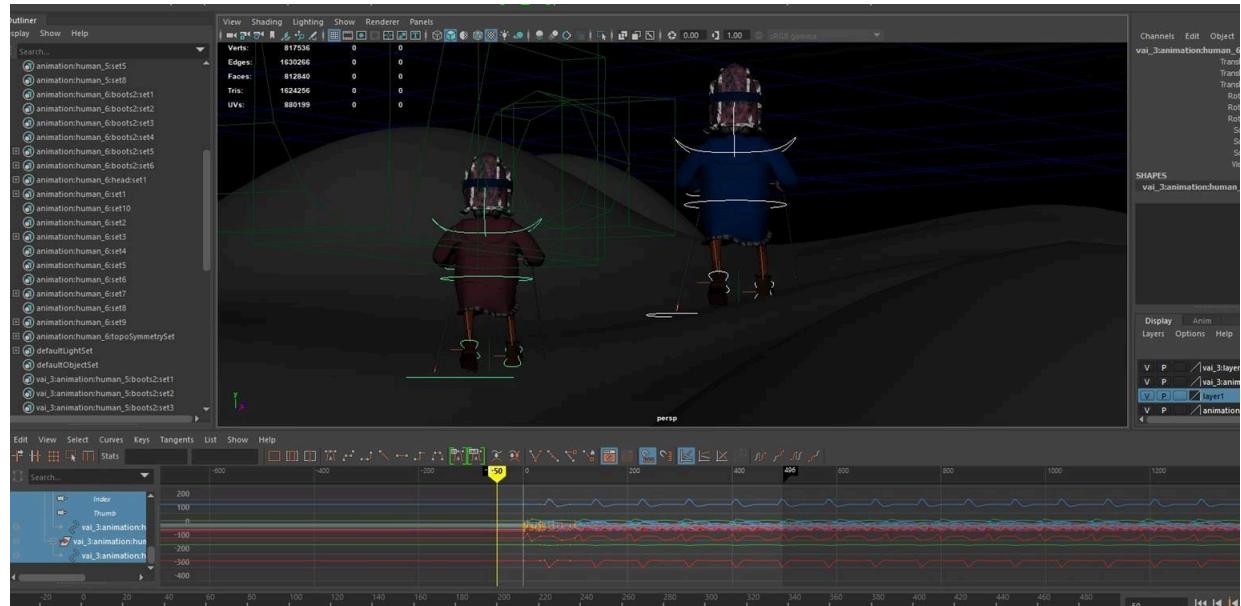


Figure 69. Both characters keyframe Scene 2

Scene 3

In the third scenario, Dai turns and gives Vai an upward nod; this is accomplished by keyframing Dai's hip and neck controllers.

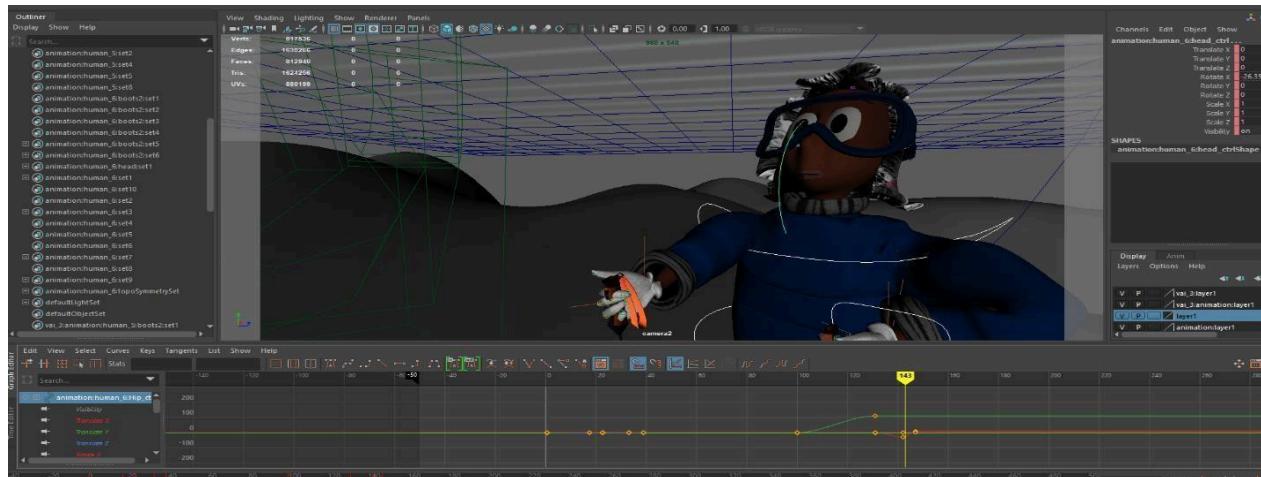


Figure 70. Keyframe used in Neck and Hip controller of Scene 3

Scene 4

Vai is shown in this scenario looking up to address Dai; this was accomplished by keyframing Vai's neck and shoulder controllers.

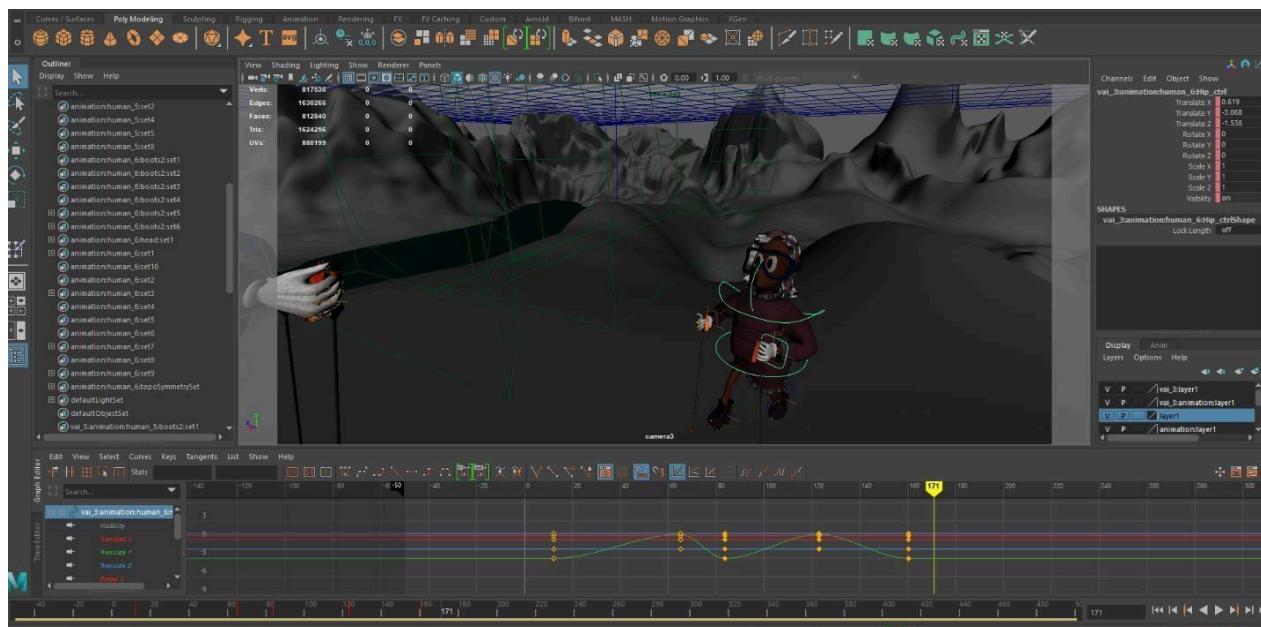


Figure 71. Keyframe used in Scene 4

Scene 5-7

The only difference in the three scenes' animation is the camera setup. Vai offers Dai a thumbs up in the sequence, which was made feasible by keyframing the set driven key in the actors' fingers and neck and shoulder controllers.

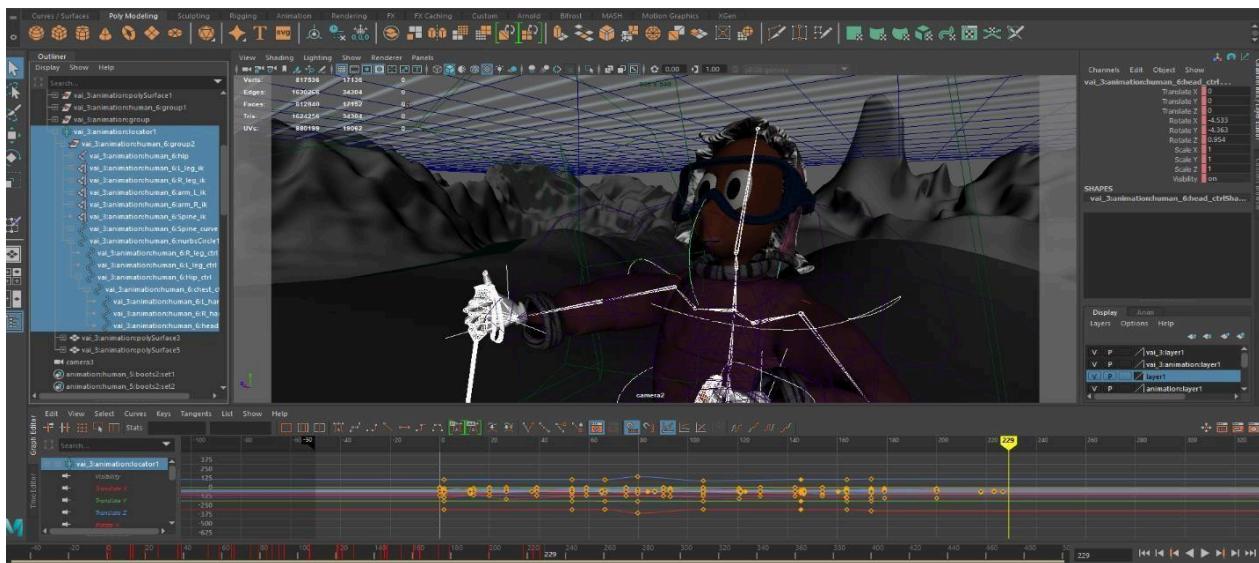


Figure 72. All the keys used in Scene 5-7

Scene 8

Vai can be seen glancing left and right in the shot; a neck controller was keyframed to create this.

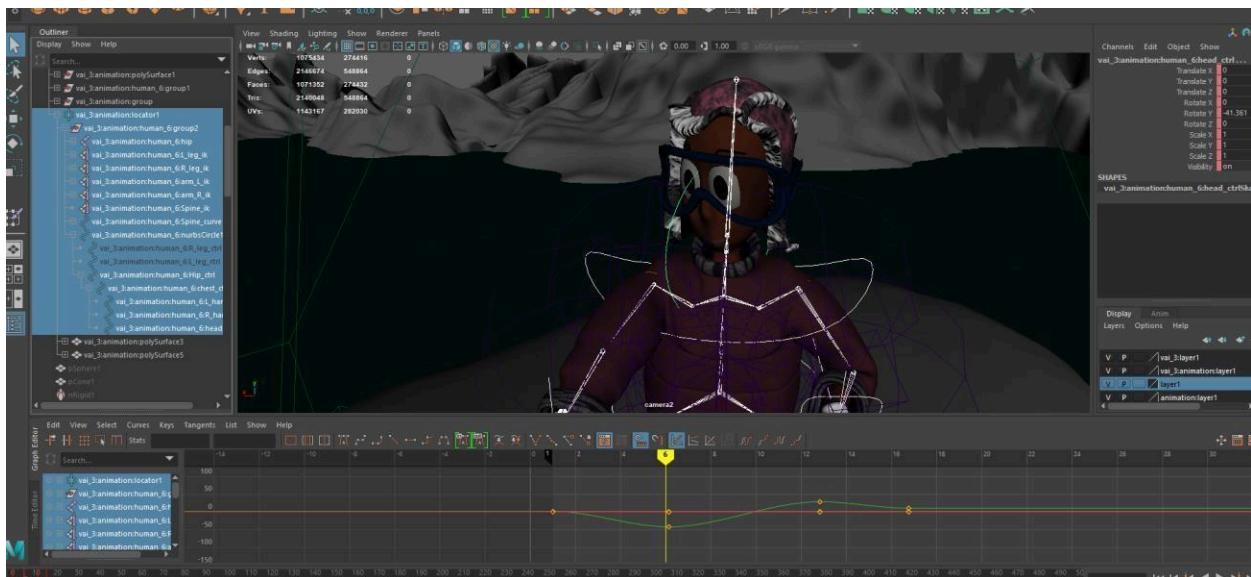


Figure 73. Keyframe used in Scene 8

Scene 9-10

Vai is shown falling with the use of a particle simulation in this shot; the main locator and hand controller were keyframed. The same scene is animated from a different angle in Scene 10.

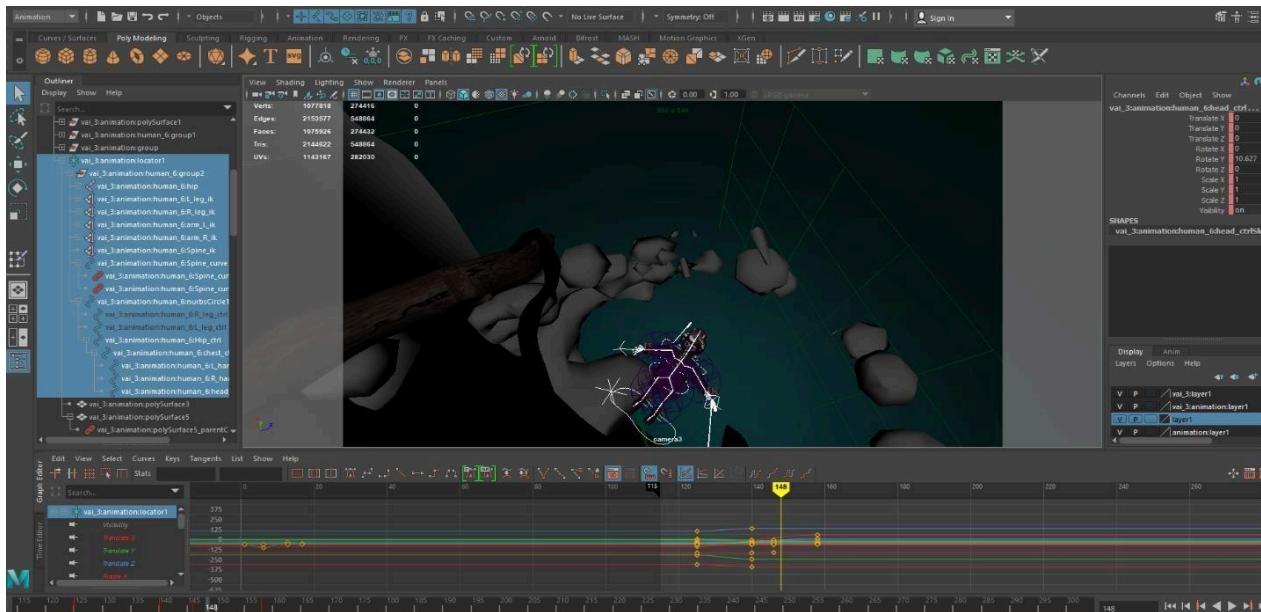


Figure 74. Keyframe used in Scene 9,10

Scene 11

By animating the arms controller and the sticks, Dai swings his arms in the scene where he throws his sticks.



Figure 75. Keyframe used in Scene 11

Scene 12

Both of the cartoon characters in this scene can be seen grabbing Vai in midair. To accomplish this feat, the main locator of both figures as well as the controllers for their hands, limbs, and legs were keyframed.

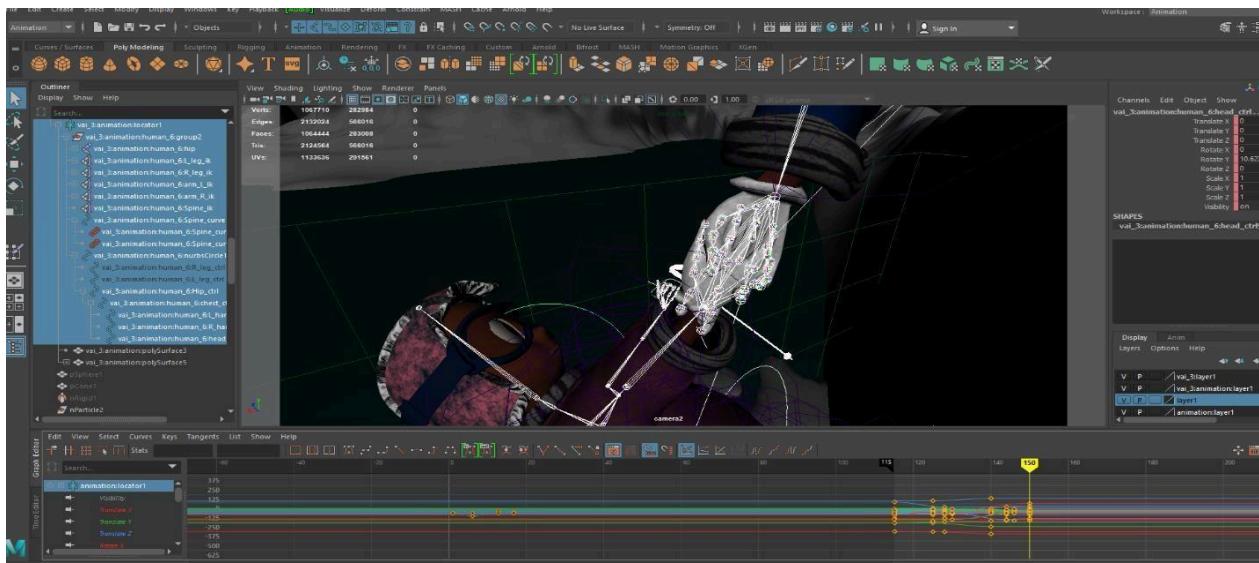


Figure 76. Keyframe used in Scene 12

Scene 13

Both of the individuals are depicted in the scene hanging from a tree. It was accomplished by collecting both characters' primary locators and keyframing that group.

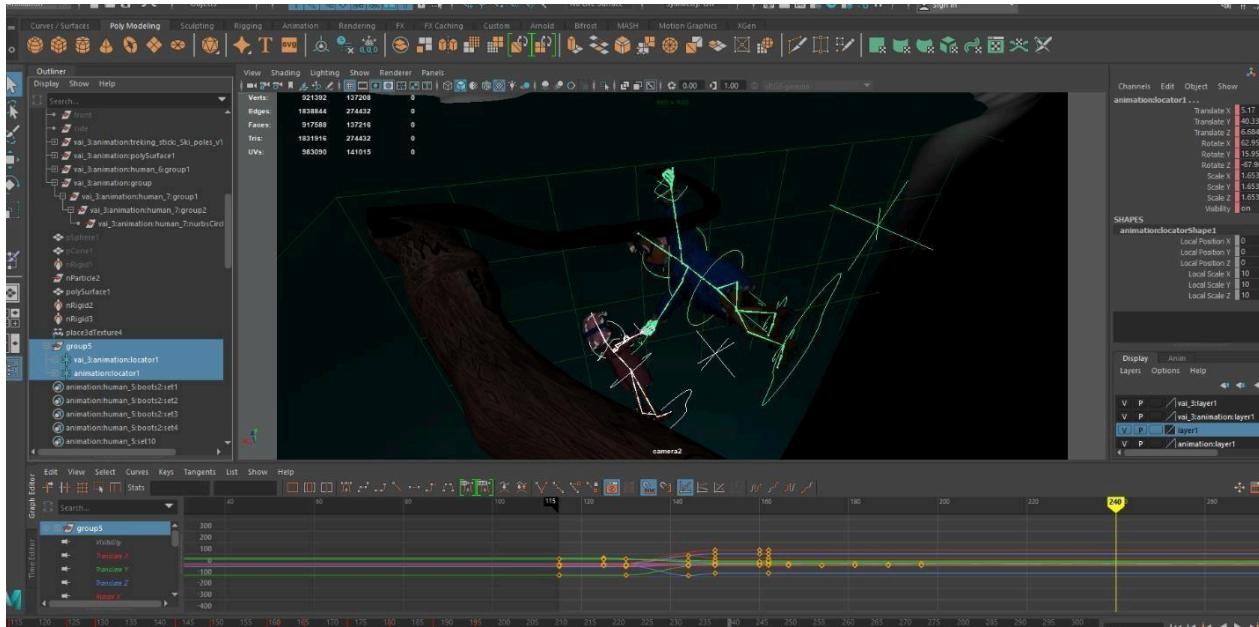


Figure 77. keyframe used in Scene 13

2.2.5 Particle Simulation

In this study, three particle simulations are used: a cloud simulation, a snowfall simulation, and a snow-landslide simulation.

Cloud

It is created by utilizing Maya fluids to spew particles inside a 3D container. By experimenting with the qualities, the ideal condition was attained.

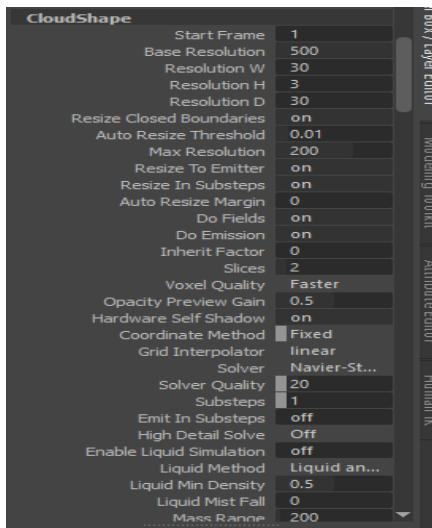


Figure 78. Cloud shape node attributes



Figure 79. Cloud render final

Snowfall Simulation

It was made by tinkering with the attributes value of nparticles and emitting particles from a planar surface.

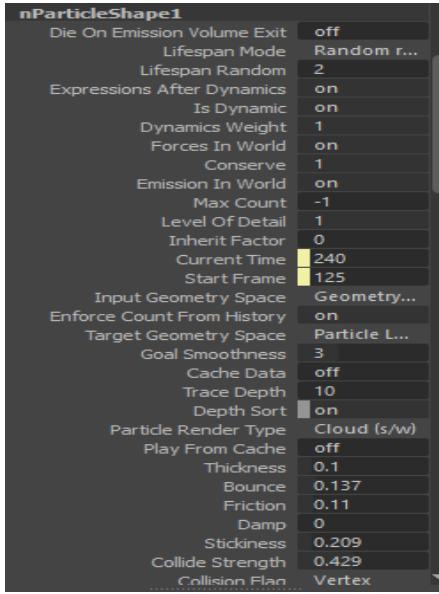


Figure 81. Snowfall simulation particle attributes 1

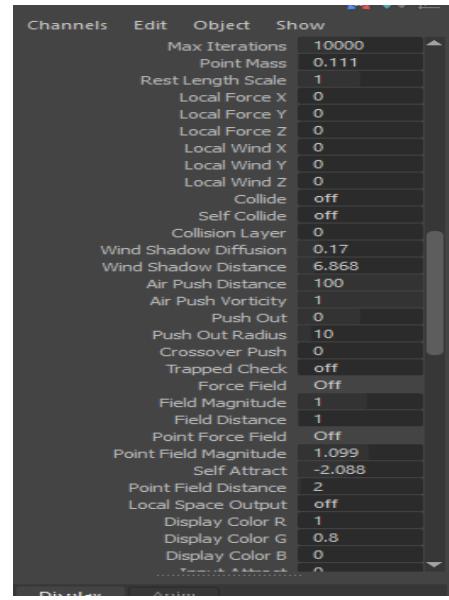


Figure 80. Snowfall simulation particle attributes 2



Figure 82. Snowfall particles final render

Snow landslide

This was produced using a particle simulation that was then converted to polygons. By experimenting with the characteristics, rigid bodies, and field/solvers, the desired result was produced.

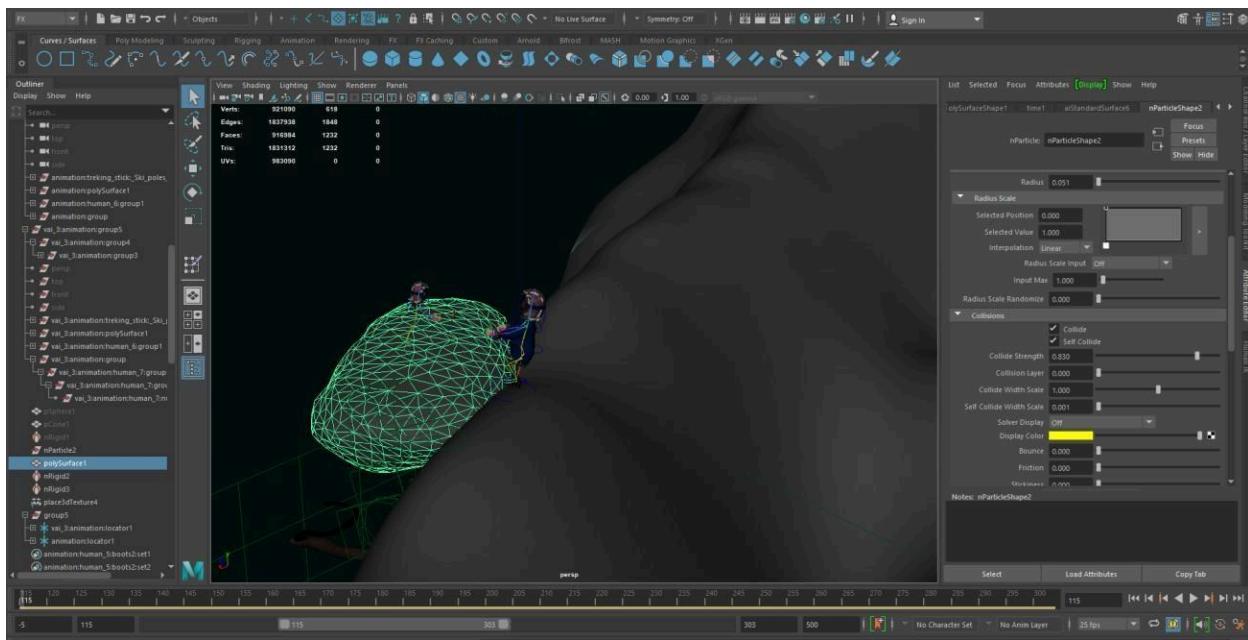


Figure 83. Snow landslide creation

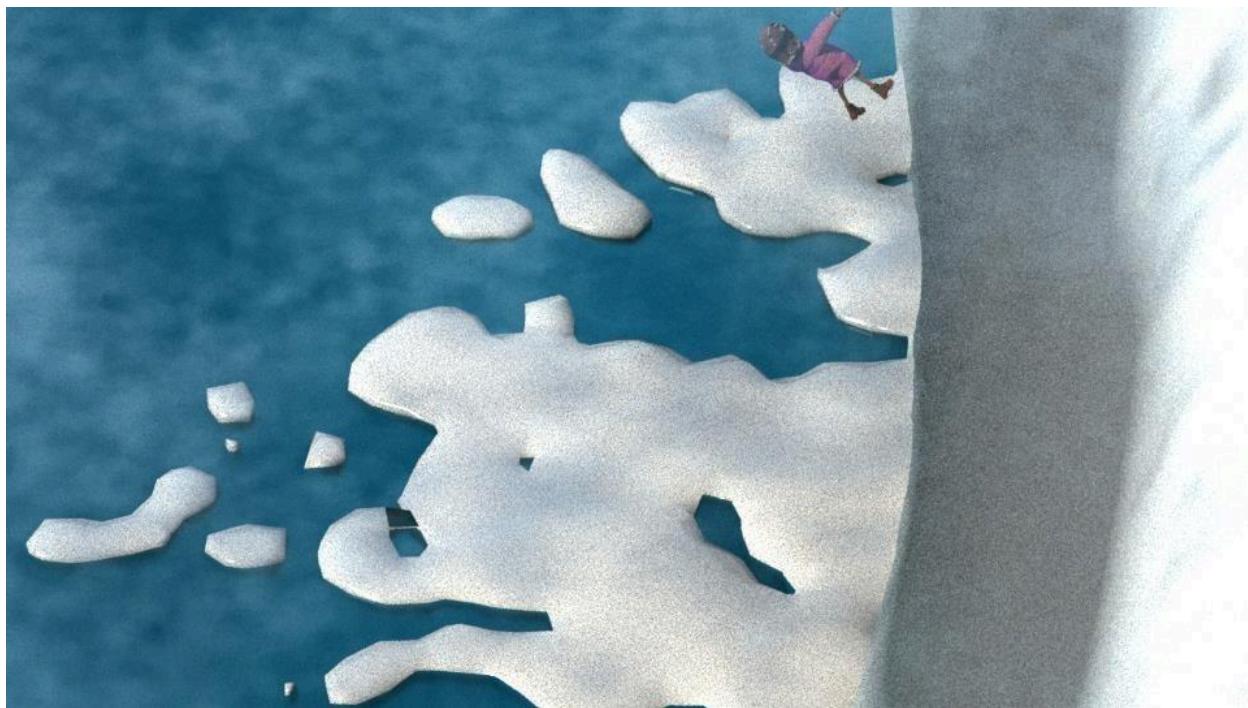


Figure 84. Final Snow landslide simulation

2.2.6 Camera Composition

Animation and camera composition work hand in hand; if the camera is handled appropriately, one animation scene might result in numerous scenes. Similar to real-life shooting, many cameras are put up at various angles to provide a greater perspective of the entire situation. Here, several constant shots and camera animation are used to provide the required results. All camera focal lengths were set at 20 to provide wide-angle views.

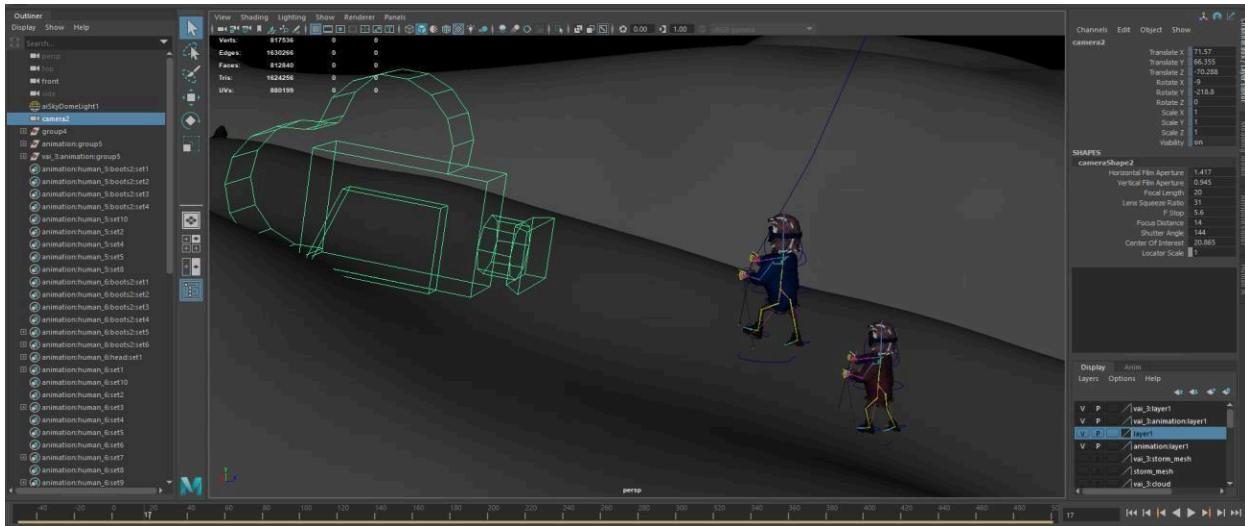


Figure 85. Composition in Scene 1

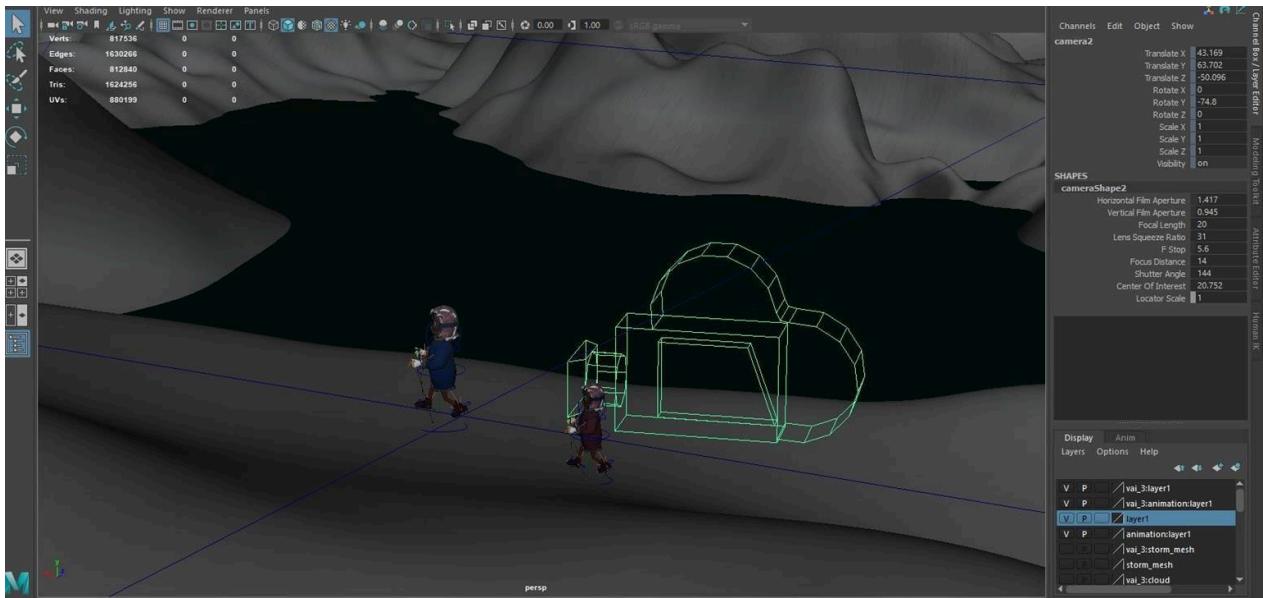


Figure 86. Camera composition and attributes in Scene 2

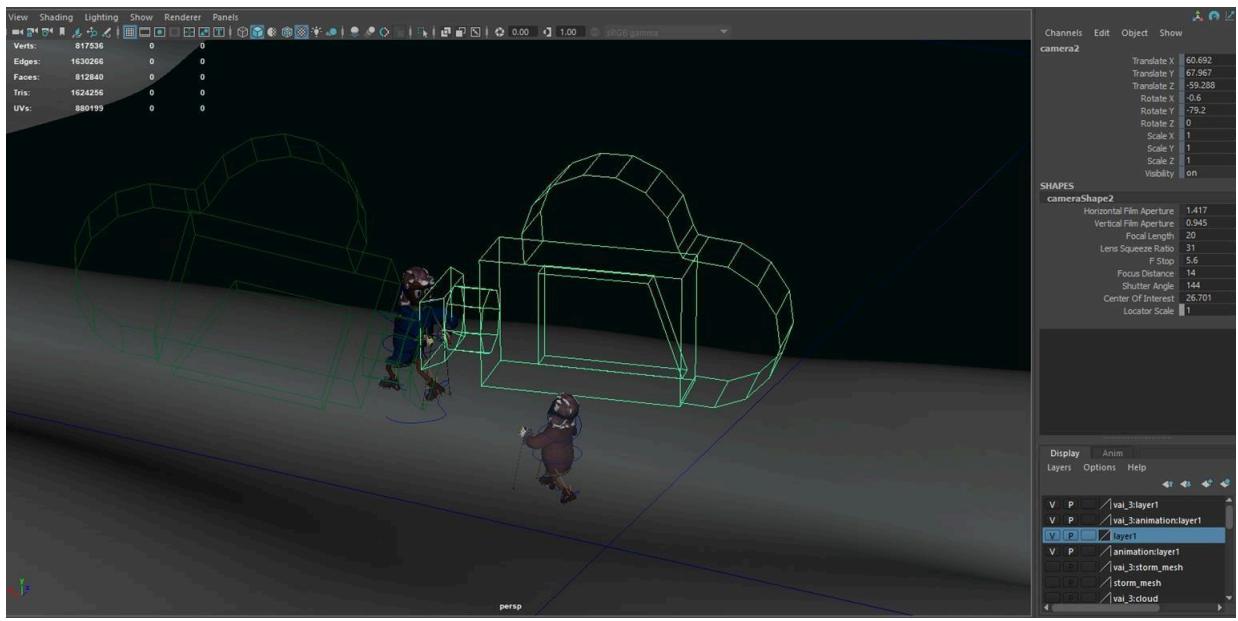


Figure 87. Camera used in Scene 3 and 4

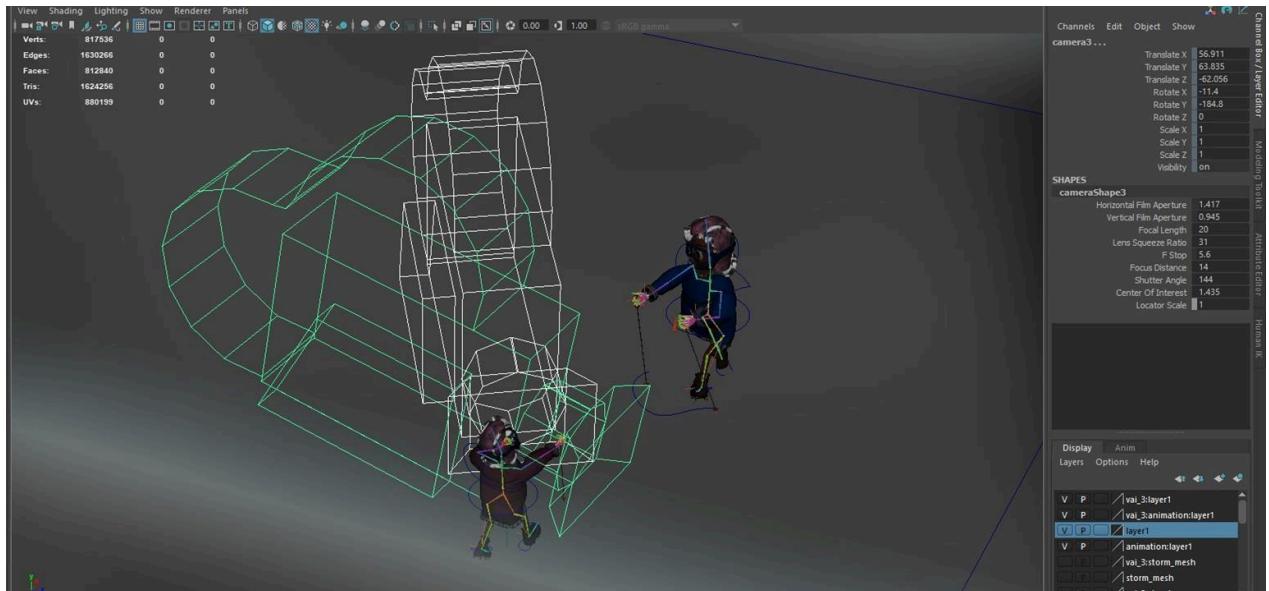


Figure 88. Camera composition of same animation from different angles in scene 5,6,7

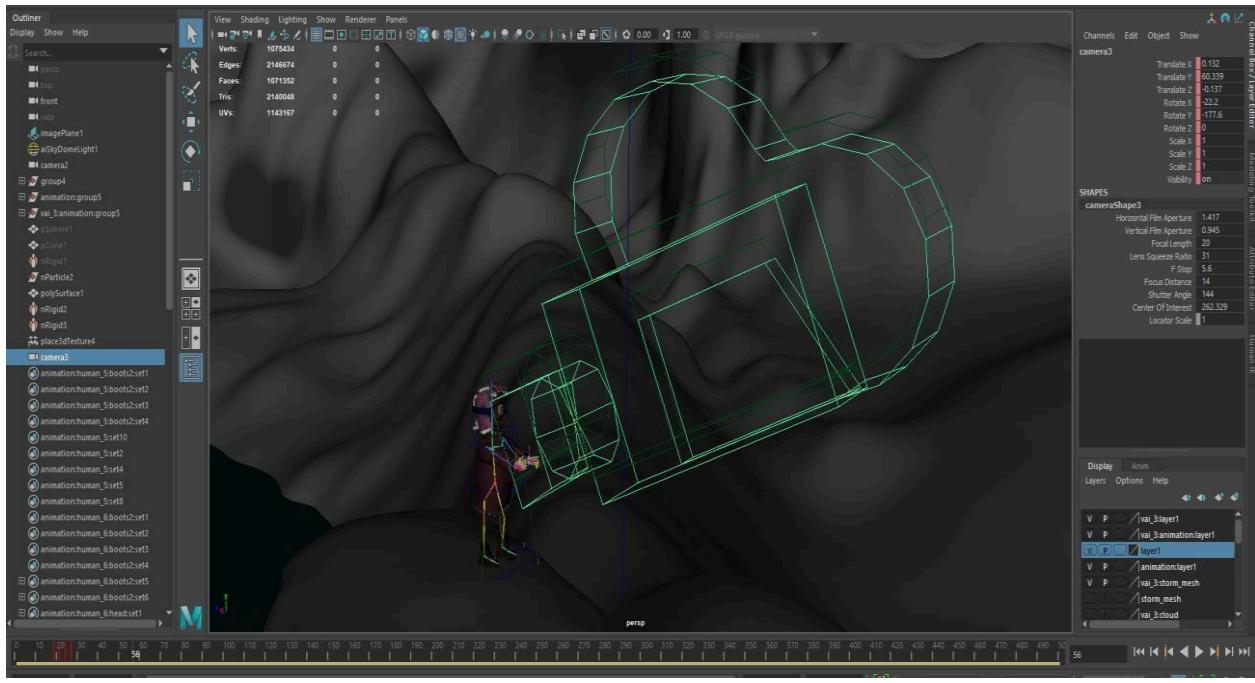


Figure 89. Camera composition and animation in Scene 8

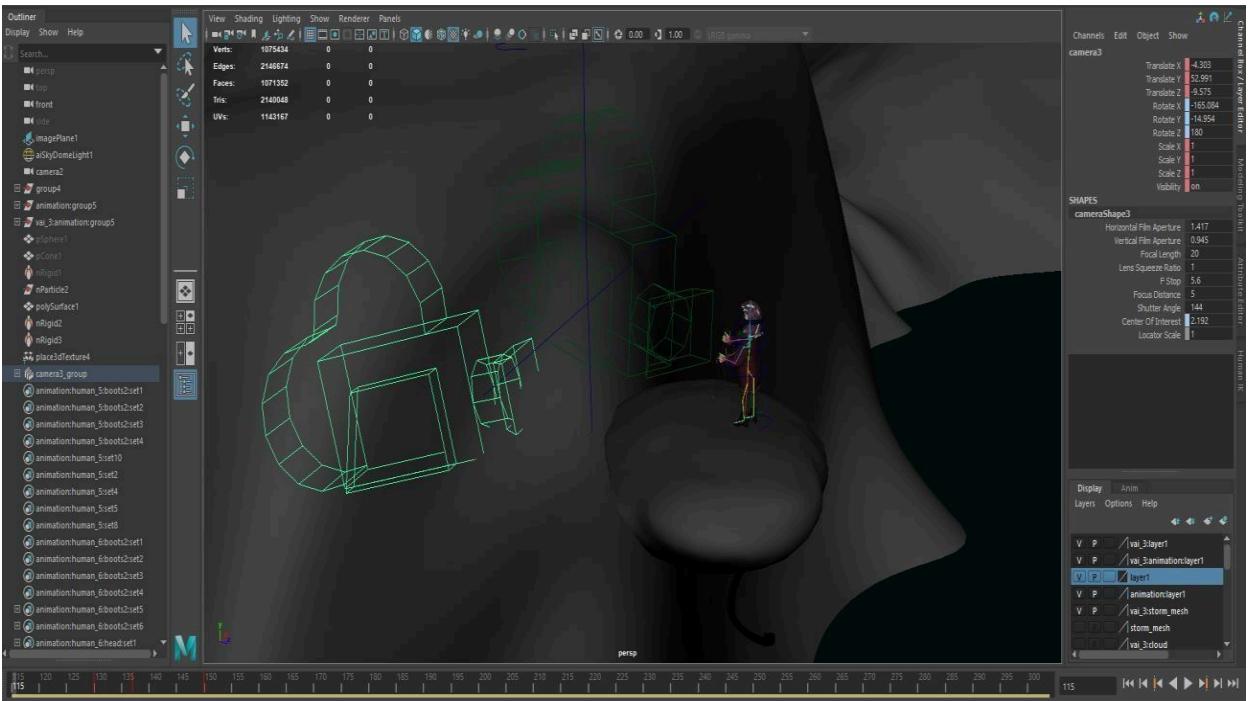


Figure 90. Camera composition and animation in Scene 9,10

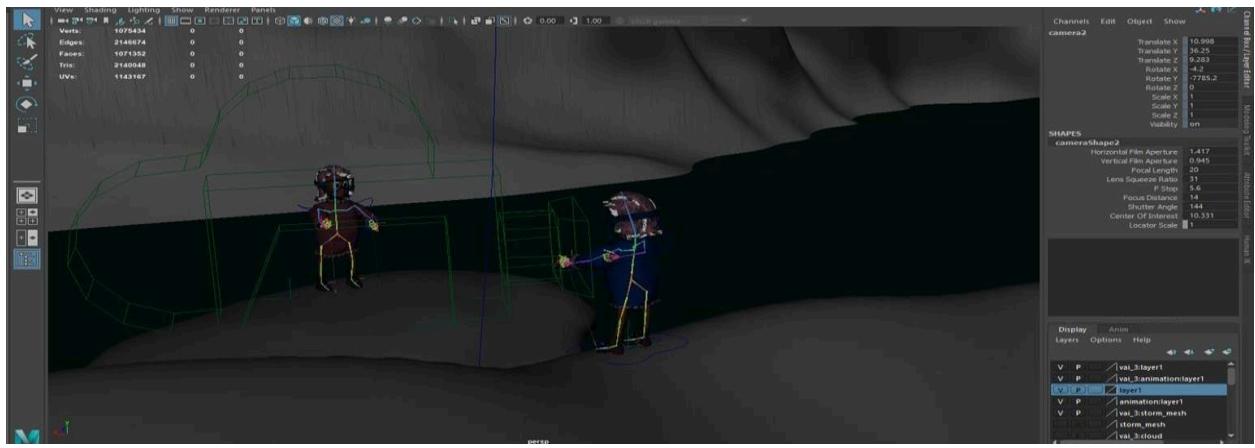


Figure 91. Camera composition and attributes in scene 11

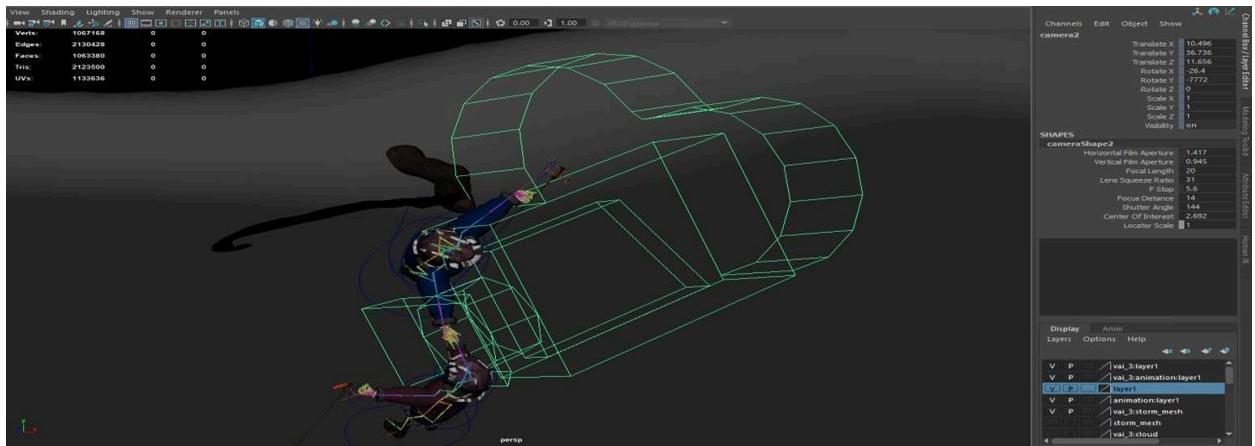


Figure 92. Camera composition in Scene 12

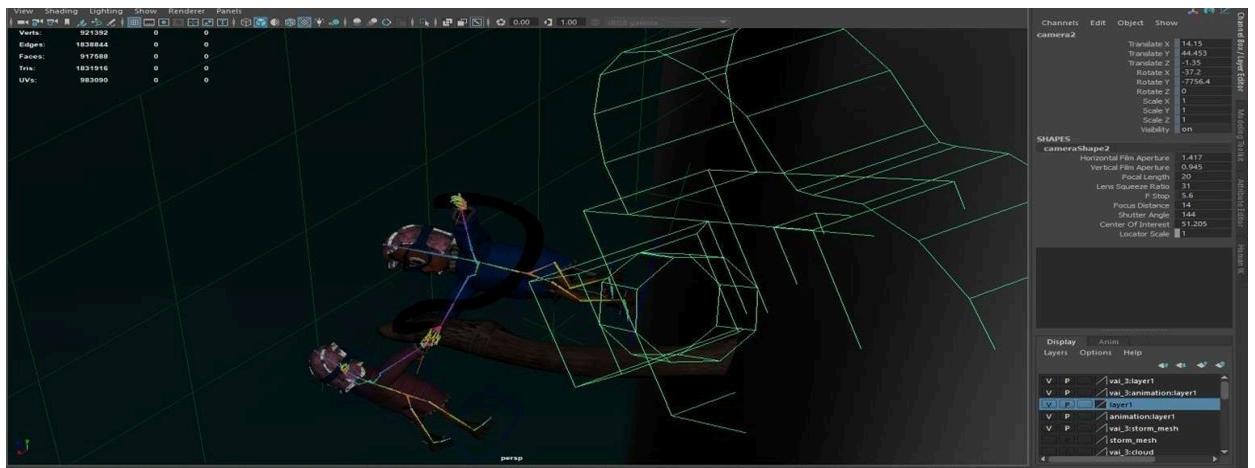


Figure 93. Camera composition in Scene 13

2.2.7 Lighting

The physical sky, which Arnold produced, provided illumination for the entire animation. HDRI lighting was also used in the sky dome, but the real sky provided more control over lighting possibilities. options galore.

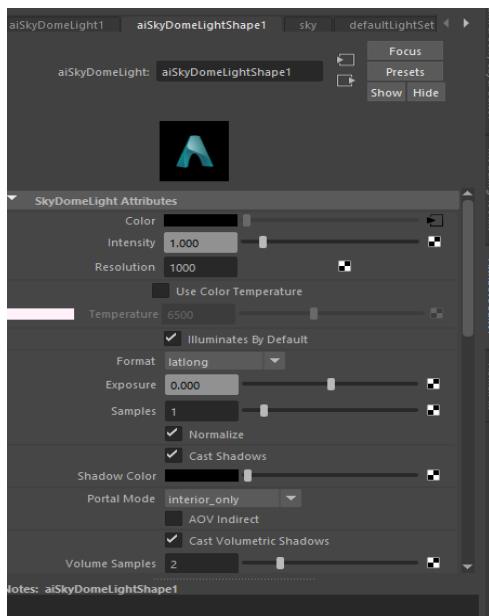


Figure 95. Physical sky attributes 1

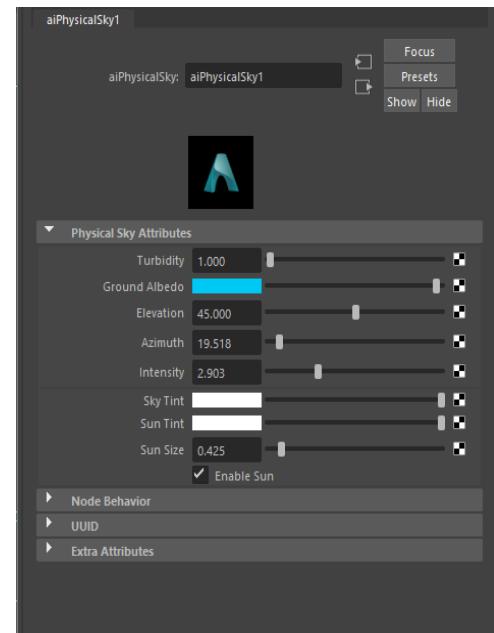


Figure 94. Physical sky attributes 2

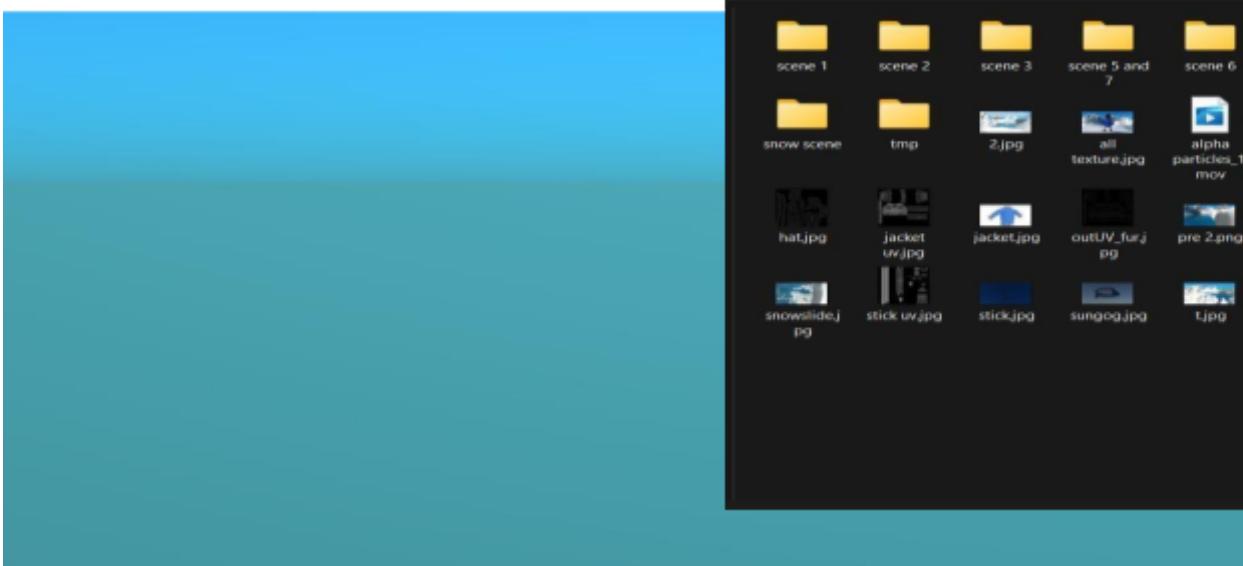


Figure 96. Physical sky render with horizon

2.3. Post-Production

In the post-production stage of the pipeline, everything completed up to this point is gathered and combined to create a project with a respectable appearance. Additional work that was neglected during the production phase is also completed here.

2.3.1 Rendering

The scene that was separately built before is rendered while animation and camera composition are being created. Because the files were so large, the entire picture was rendered at 960X540p. Arnold, the CPU, was used to render the entire scene with anti-aliasing set to a sample rate of 3. PNG files were created and rendered.

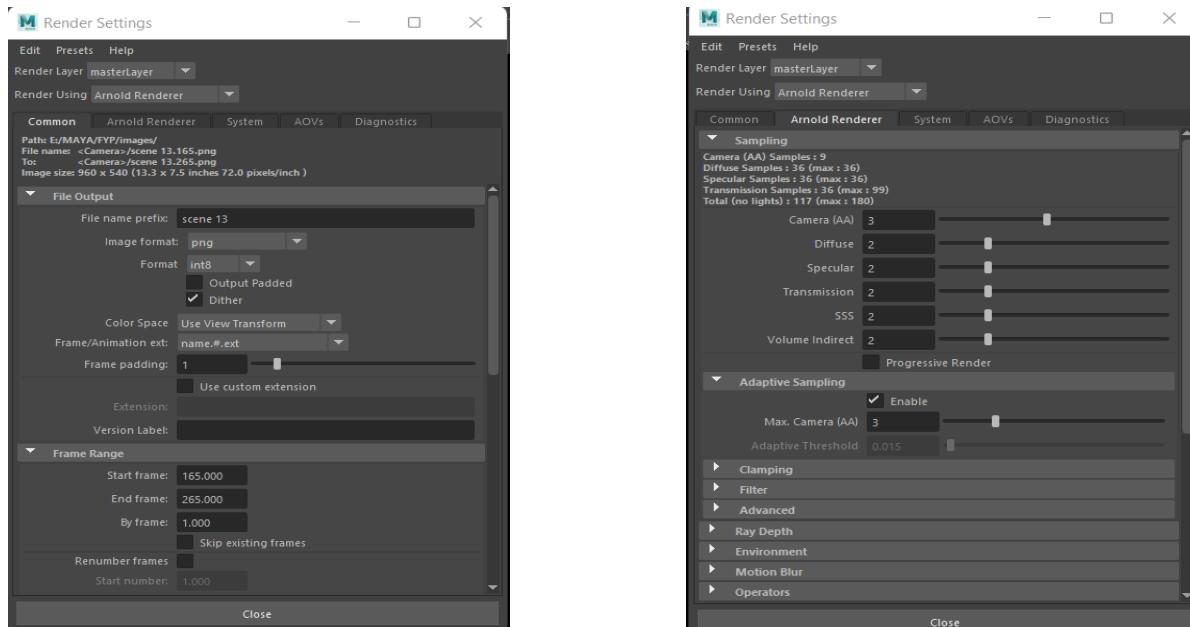


Figure 98. Render settings 1

Figure 99. All render files inside of MAYA source file

2.3.2 Logo Animation

Because the scene contains the entire motivation behind this project's completion, Logo Animation had to be created for it. In After Effects, it was completed.

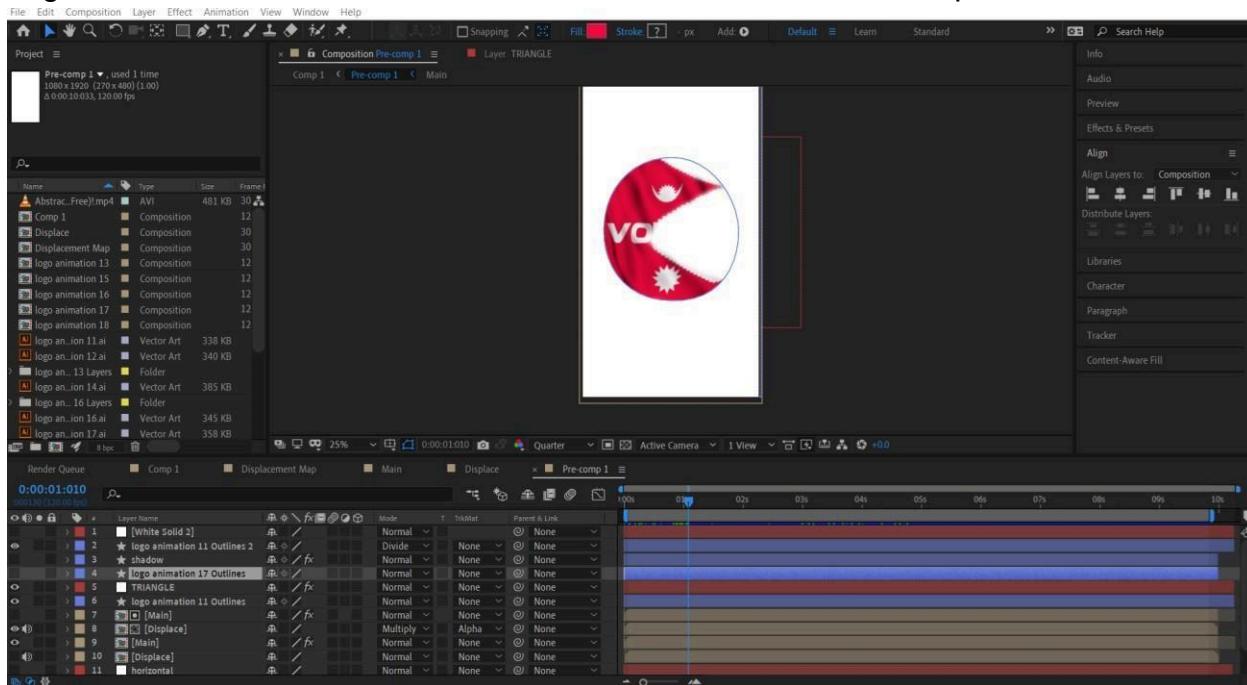


Figure 100. Logo animation in after effects 1

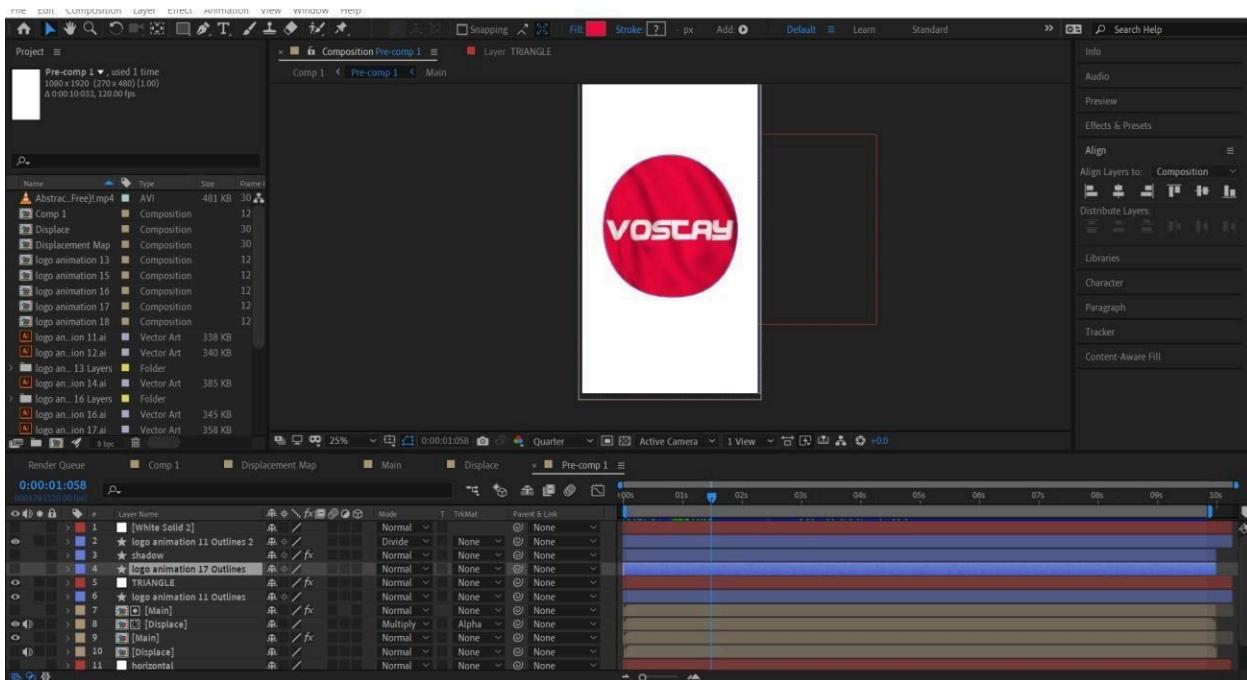


Figure 101. Logo animation in after effects 2

2.3.3 Final Output

All of the rendered files have now been imported into Adobe Premier Pro where they have been edited and combined in accordance with the scenes. Additionally, royalty-free sounds were added. The output was then brought back into After Effects for one last round of tweaking before being rendered at H.264 CODEC @ 960x540p.

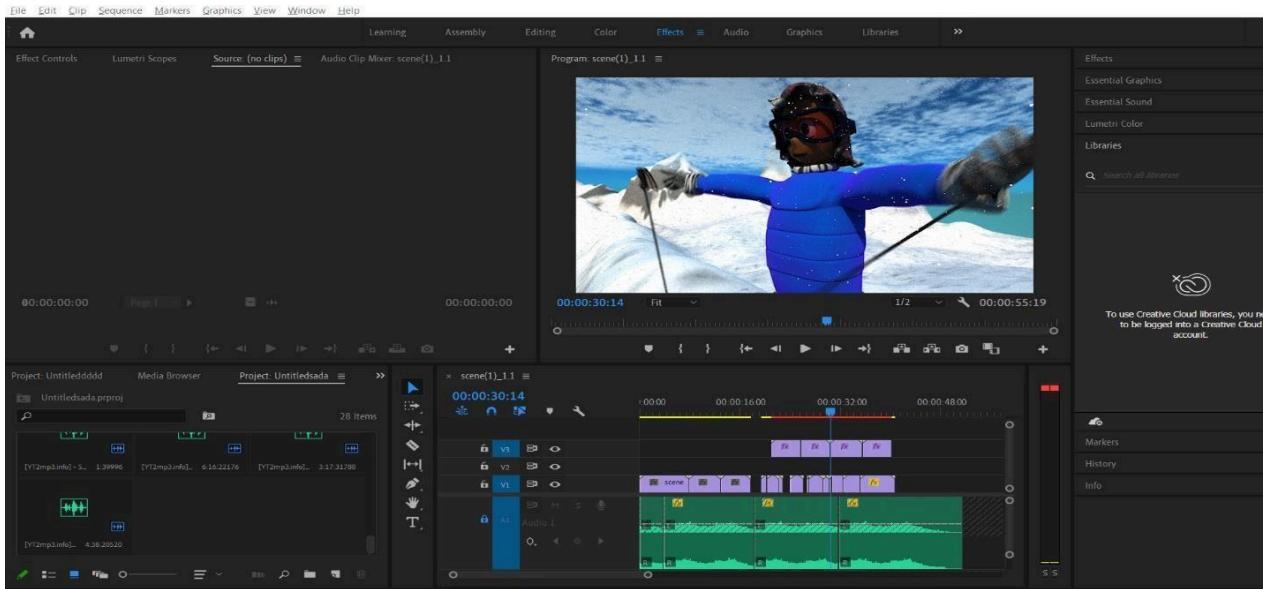


Figure 102. Compiling and adding sound at Premiere Pro

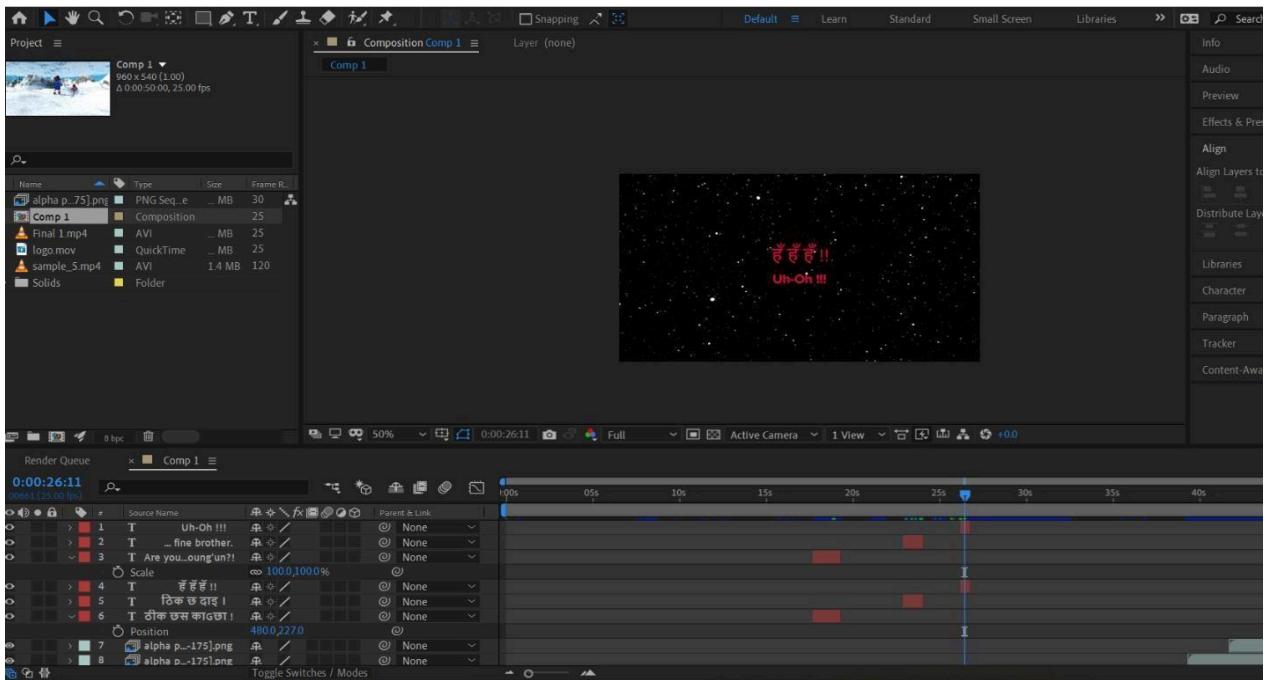


Figure 103. Final touch in After Effects

2.4. Distribution and Marketing

Distribution and marketing are two critical components of any business strategy, playing essential roles in achieving success and reaching target audiences.

Distribution: Distribution refers to the process of delivering products or services from the manufacturer or supplier to the end customer. It encompasses various channels, including wholesalers, retailers, e-commerce platforms, and direct sales. The importance of distribution lies in:

Accessibility: Effective distribution ensures that products or services are readily available to customers when and where they need them. This accessibility enhances customer satisfaction and loyalty.

Reach: Distribution channels enable businesses to expand their geographic reach, tapping into new markets and demographics. This expansion can lead to increased sales and revenue streams.

Efficiency: Streamlined distribution processes improve operational efficiency and reduce costs associated with inventory management, transportation, and storage.

Competitive Advantage: A well-designed distribution strategy can provide a competitive edge by offering faster delivery, better product availability, or superior customer service compared to competitors.

Marketing: Marketing involves identifying, understanding, and satisfying customer needs and wants through the creation and exchange of value. It encompasses various activities, including market research, advertising, branding, promotion, and customer relationship management. The importance of marketing lies in:

Awareness: Marketing efforts raise awareness of products or services among target audiences, increasing visibility and recognition in the marketplace.

Differentiation: Effective marketing helps businesses differentiate their offerings from competitors, highlighting unique features, benefits, or value propositions that appeal to customers.

Customer Engagement: Marketing facilitates meaningful interactions with customers, fostering relationships and building brand loyalty over time.

Sales Generation: Marketing initiatives drive sales by generating leads, nurturing prospects, and converting them into customers through persuasive messaging and compelling offers.

Market Insights: Marketing activities provide valuable insights into consumer behavior, market trends, and competitor strategies, enabling businesses to make informed decisions and adapt their approach to meet changing demands.

In summary, distribution and marketing are integral components of business strategy, working together to ensure products or services are effectively delivered to customers and promoted to drive demand and generate revenue. A well-executed distribution and marketing strategy can contribute significantly to the success and growth of a business in today's competitive marketplace.

3. CONCLUSION

The Digital Media Project is finished after four months of planning, worrying, time management, and execution. This initiative served as a window into the real world of the multimedia industry, handling the creation of digital media from A to Z for us. I want to thank my supervisors, whose constant direction made this simpler, my customer, who trusted me with this project, and my family and friends, who have been very supportive of my work.

YouTube Video: <https://youtu.be/1uLxNA3whLQ>

Drive Link: