

Weeks - page numbers



Visits, exhibitions, talks, game jams & outside aligned university activities

Total amount of hours spend across the production module : 486

Soda Can



4





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Cigarette Storage

3D TERM 2 Production - Wk 1





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3D TERM 2 Production - Wk 2 – Sculpting



3D TERM 2 Production - Wk 2 – Sculpting





than sweep meshing it like I did for the bow previously. I started by doing some strokes on the bone and realized that I'm not getting the depth that I wanted. So, I investigated methods other people make ropes for their models. I found out that they would use curve brushes in Zbrush. I found a rope brush and tried it out. I started by having multiple of these around and they would have been separate. Shortly realizing that there is a faster way where I could simply wrap it around the mesh and draw it on the end and keep pulling it around imitating how you would if you were to wrap something in real life. In the end I realized that this needs more prep work so that it would be easier to retopologies later meaning I will have to take the model to maya and use cylinders once again. In the end I think it will be best to remove the rope for now until I grasp the scale of it more.





3D TERM 2 Production - Wk 3 – Sculpting



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3D TERM 2 Production - Wk 3 – Sculpting

Detective Board









[1]

Here I'm making a low poly for my high poly Detective board log. I was able to achieve this quickly by importing a cylinder over the log making the high poly live and using multi cut to snap onto the shape of the high poly wrapping around it. To make the front faces easier I decided to get a cylinder next to my model so that I could easily follow and copy the topology.

3D TERM 2 Production - Wk 3 – Sculpting













Testing which topology is most optimal and what the most efficient way to retopologies is. This asset was sculpted in Zbrush and brought into maya to create a low poly for future texturing.

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Here I started to bring in some of the updated models to try figure out the scale. I also wanted to try add some detail to each model by crushing or bending things so that they are less perfect and so that they all would fit the environment better. To do this I added a lattice to my can which would then allow me to deform the object slightly. I will do this for items such as the cigarette or the cards to have the items fit the environment.









Watched a tutorial here on key things to consider when texturing. I then went and watched other videos on his channel as I found that he explains things in detail and can give quick and useful tips on certain things that would otherwise take a long period of time to complete. Here he covered UDIM'S and texel density. He also provided a link to a useful website I link below going in detail about texels.

https://www.beyondextent.com/deep-dives/deepdive-texeldensity





















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https://youtu.be/0AFkmctISD8?si=UgUqOHEAQITNeJN0

Followed this tutorial to create my own maple leaf shape that I could then use on the floor of my environment to create a "carpet" elevation. When I had the base of it, I decided that the video doesn't have the inner detail the way I wanted and though what if I used the mask I made and got chat gpt to generate over it. The color and height map it made, and it allowed me to easily integrate it into my level with opacity.













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3D TERM 2 Production - Wk 6 – Substance Designer Materials









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Web

3D TERM 2 Production - Wk 6 – Substance Designer Materials





Here I made a tree texture I was looking back at references from art station to see what trees look like in Hogwarts legacy.

https://www.artstation.co m/artwork/L4gDOI



3D TERM 2 Production - Wk 7 – Unreal Assembly/ Petcha Kucha



During this Pecha Kucha was told to change the wood as the style of it didn't fit and was to stylized. Was also told to look out for how I texture my can and to be more impactful with the placement of the grunge. This mean I would have to go back and change these things to later have a more fitting design for both. I also received some feedback from people online to reduce my cans topology, so I went back and made sure to optimize it more.



Bryan Shee • 2nd Environment/ Prop Art Intern @ Bitfire Games 3d **`

I think the textures and environments are really cool! However, for games, I think the soda cans' topology might be a bit too dense. Especially the top region

Like · 🖰 1 | Reply · 1 reply

Wanessa Kowalczyk Author 3d ···· Aspiring Student Leader. Bringing Fresh Ideas and Enth...

Bryan Shee thank you for the feedback will certainly implement it !

Like · 🕐 1 🛛 Reply

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I re-topologized the same conker to different levels and then cut the inside out and replaced it. I had to target weld the vertices to achieve this. Since it's static this won't cause any problems, and the poly count was optimized better to then be baked. It now has 5217 poly count compared to 1,572,864.

Simulation





https://cloudofoz.com/verlet-test/

Here I found a random page that shows web simulation and thought it would be interesting to just play with the settings and see if I could find a way to replicate this. Unfortunately, only found that it's a simulation and not a 3D web I could create for myself.





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Improved design of my log as my Pecha Kucha feedback. Here I think it's a lot less stylized mainly because of the more detailed cut.



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Retexturing

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3 weeks ago

Hello Vanessa!

This is a fascinating question. I began working on Hogwarts Legacy at the start of the project in 2017. The artistic style evolved throughout development and underwent several changes. Initially, we drew inspiration from Dishonored and the original Harry Potter films, but we aimed to incorporate a more 19th-century and a fairy-tale atmosphere. A lot of attention was paid to the shapes, everything is a bit uneven, roughly made, twisted and bent.

In my personal opinion, this is a realistic fantasy style.

I cannot show wireframes or the texturing process. However, you can use the Creator Kit to get any models and textures from the game, and also add your own. There are many videos on YouTube on how to use it. https://store.epicgames.com/en-US/p/hogwarts-legacy--creator-kit

If you have any questions, please feel free to ask. I would be happy to help.

🕨 Flag as spam

Hi Vanessa!

I apologize for the late response.

You should start with references for the desired style, such as screenshots and models from the game. And you have to start at the model stage. For example, when creating Hogwarts, we intentionally made certain elements slightly crooked and twisted. During the sculpting phase, we focused on enhancing expressiveness in specific details, such as the knots on the trees, which we then emphasized further in the textures. While the textures are quite realistic, they also incorporate a touch of stylization with more pronounced details, patterns, and colors.

> This was very insightful since it allowed me to look at models more closely straight from the game.

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https://youtu.be/fSbBsXbjxPo?si=at2mkkG-40ouXuHg

This tutorial was extremely helpful when it came to lighting and setting up the unreal scenes. A very comprehensive guide to setting up around 80% of the lighting in a very efficient way. He speaks about the importance of albedo and how reflective surfaces react with different spotlights. He also discussed harsh and soft surfaces and the sharpness of the shadow and how its caused. Lastly used different shades of the balls as an example of harsh brightness and contrast.





Chrome - Albedo/Base Color: 0.9 - Metalness: 1 being reflected in the scene I recommend • Roughness: 0 - 0.05

having these in your scene







After doing research I tried to set up my own scene in unreal and play around with different lighting effects and how to get god rays. However, for a better depiction of how light would look like I had to get a better wall shape. I know have a better understanding and goal in mind.











Here I restarted the scene, added a quickly sculpted sphere and added some emissive to try emulate fire and glow shrooms that I will add later. This allowed me to then get a better idea of how lighting would affect the scene.



















At this stage I was having huge doubts about composition and how I would light certain areas especially the inside of the can. I felt frustrated with the composition and here I tested using Boolean in unreal and poly cut on my can to see if I can let light in from the back. The can then could act like a door for the entrance. However, I was still not satisfied with this as it didn't make sense to me. I reached out to my peers and asked what they would do about the composition. One idea that struck with me was lighting the inside with mushrooms and the green would act as a secondary color. This idea stuck with me since it also make sense for mushrooms to grow on the inside of damp dark places. This was a big environmental direction that was simple to implement and helped my change the right side of my environment which I was struggling liking before. I will vertex paint small puddle to suggest a recent rain falling through the hole.















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After rigging my character, I had to pose him. Once I had the pose I wanted, I realized areas would fold in on each other and so I had to learn wet painting to make the bends smoother. I re imported my conker to help me position him in a sitting position.



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Xgen

3D TERM 2 Production - Wk 13- Additional Assets











Some paper assets I made to fill the scene I once again used chat GPT to generate some pngs that I can put onto the top of my textures.



3D TERM 2 Production - Wk 13- Feedback











I had scaling issues constantly going back and forth making sure things are the right size. Here I came across the realization that the cap is very similar in size to the poker chip after taking real life examples. This would make the seat way to big and wouldn't act as a stool proportionate to a table. There were 3 ways I could combat this.

- 1) Shorten the legs
- Add an extra Poker chip 2)
- 3) Remove the legs

Shortening didn't look good as there now wasn't enough space for the rope. Adding extra poker chip also didn't give the height I wanted. So, I though what if I split the mesh in unreal modeling tools and decide to lattice deform it into a bend and repurpose the legs in another way. I will continue to play around with these options and see if I can have variations.

3D TERM 2 Production - Wk 13- Feedback







After Feedback I was told to at least add the shape of the cave even if it's a simple shape just to get an idea of the lighting would look like. This model was made in maya and because I wasn't satisfied with the shape I wanted to change it. This made me realized that going back and forth with maya or Zbrush to make the landscape is not efficient enough for me so I decided to learn how to model in unreal instead so that I can make changes real time. Therefore, if I make changes to my models positioning which I have been moving around a lot I can easily accompany my land with it.

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Cave

3D TERM 2 Production - Wk 13- Unreal Modelling





I discovered modelling in Unreal which was something new I had to learn as well but was very helpful in modelling my landscape and tweaking things in the future. It allowed me to sculpt on items or lattice displace them within the engine and split items by mesh if I wanted to separate things. This was very helpful as it allowed me to sculpt the inside of the hideout with ease and if anything changed, I could adjust it quickly. Since my custom material is set to world aligned textures it helps with placing the textures nicely onto the mesh since it's a projection. I will also implement this onto things like rocks.

Cave Shape

🔶 Stage

Fire



3D TERM 2 Production - Wk 15- Master Material



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V Tiling (S)	10.0	¢
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Rotation (S)	0.0	

Using the textures from my substance designer dirt I made a master material so that I could tile my material and change it in unreal. This allowed me to learn how to make master materials and apply this knowledge to things like my paper where I would want to create different shades of it. I also realized how many useless categories I made that for the dirt material aren't necessary. However, I now know for the remaining materials which categories I will add and which don't provide value. I will apply this knowledge into making paper/ foil by simply changing the contrast and albedo values allowing me to not have to retexture in painter.



3D TERM 2 Production - Wk 15 – Additional Assets







Here I generated the logo so there is no copyright issues. I done the same for the coke design. The texturing is the same, but the aluminum is red in the other cap. That one is called coca-crawler.

3D TERM 2 Production - Wk 15 - Additional Assets

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3D TERM 2 Production - Wk 15 - Additional Assets

Glowing Mushrooms



3D TERM 2 Production - Wk 15- Additional Assets

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The retopology of this was arguably more annoying than the character. Counting roughly 46 finger like sections retopologising this was a nightmare.

3D TERM 2 Production - Wk 15 – Additional Assets



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3D TERM 2 Production - Wk 15 – Polishing




























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