

Imaad's Project diary

Below is a summary of what I have done every week leading up to the submission.

Render:

Week 2 :

- Had a group meeting from 4:30 to 5:30 on Wednesday, 18th September 2024. We discussed what objects we would work on and what theme we were going for. Initially we had planned on doing a food related one with a burger, fries and a drink, but after the following class that night, we discussed our theme with Professor Ryad and have currently decided on weapons. At the moment we have 3 weapons, such as a katana, a gun and a bow and arrow planned. I am thinking the theme would be a weapons locker.
- Created the Github Repository, added my group mates and generally structured it according to the requirements in the coursework requirements PDF. Further structuring remains.
- Reseached online tutorials to become familiar with Blender and have lightly started playing with the software.

Week 3 :

- Discussed scene, background, themes and so on.
- Went online to find a good free and readily available background scene that we could use.
- Looked for pictorial inspirations for my object.
- Added sketch of scene and the table in the scene.
- Found online free open-source background for the scene: [Bare Room on BlenderKit](#)
- The theme we decided was a scene set in a medieval set room where a knight picks out weapons on a wooden table before he goes for battle. The room has natural lighting coming in through windows. The weapons currently finalized are melee weapons including an Axe, a Hammer and a Shield.

Week 4 :

- Talked to Professor Ryad about our ideas and he said it was good and doable
- Structured repository and added sketches and pictures of first model
- First model took too long to render so Professor Ryad told me to make my own room instead of using an external free tool. He said I would get more marks for making that as well.

Week 5 :

- Decided on the scene which will be a Viking Weapons Armoury
- Started modelling the axe, started by using a simple cube which was the base of the axe head. Then used loop cuts, scale and extrude to give the cube a more sharp axe like look, then added materials to make the axe shiny using the *Principled BSDF* shader node and changing the metallic and roughness values to make it look a bit shiny. Further I used voronoi textures to create a scratchy look on the axe.
- Added a handle to the axe by using a cylinder and adding loop cuts to adjust the shape and give it a more wooden look to the handle. Applied a color ramp and voronoi textures to give the handle a more natural wooden texture.
- Started working on side objects
- Created the weapons holder as well as the carpet. I made the weapons holder out of 3 elongated and flattened cubes and one cylinder and reused the wooden texture from other objects.
- For the carpets' texture, I just added a simple colour ramp to show gradient, then I added a Particle System in order to show hair or "fur" protruding from the carpet. Then I messed with the physics of the hair to make the hair clump up.
- Made the shed using individual planks across the place using horizontal planks outside and vertical planks inside
- Recorded and edited the explanations videos for the entire group for the Render part of the coursework.

ANIMATION:

Week 6 :

- Imported the axe and carpet from blender to Unreal in .fbx on import I discovered the items were broken and were hollow.
- Fixed issues in the imported objects in Unreal Engine by using two side shading on their respective materials.

- Added the materials and textures to the axe and carpet as well as made them two sided.
- Watched multiple videos of unreal engine to learn animation and sequencer basics

Week 7 :

- Started working on creating the animations for our objects.
- Discussed with the group on how to proceed with the animations, I suggested a few ideas but in the end we decided to go with a modified version of it.
- Created the axe animation – made the axe move around in the shed

Week 8 :

- Finalized our animation for our objects in unreal.
- Recorded and edited the explanation videos for both the final render image and our animation video
- Cleaned up our GitHub repository and added the necessary files.