

CS 148 Final Project Report

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Requirements

The final project requires that we make at least half of the objects in our scene from scratch. Our scene consists of three objects, a shrine (which mimics the Itsukushima Shrine Torii), a boat, and an astronaut figure from the game "Among Us". All of these were made from scratch. To satisfy the UV mapping and texturing requirement, we added textures to the shrine, the boat, and the astronaut which included norm mapping features. For the advanced Blender/Cycles feature, we used volumetrics for the fog in the scene, the Nishita Sky texture, and the ocean geometry generator in Blender to create the water. Moreover, we added noise texture to the clouds, the shrine, and the fog.

Final Image



Sources

We used several advanced features in Blender, some of which were not discussed in class. Thus, our sources are listed below:

- Nishita Sky - Homework 4
- Normal map - Homework 8
- How to make clouds in Blender - <https://www.youtube.com/watch?v=HIEwx5-fS2Q&t=2s>
- How to make water in Blender - <https://www.youtube.com/watch?v=n8PSS5HqC-Q>
- Itsukushima Shrine Torii:
 - Main geometry:
 - <https://www.youtube.com/watch?v=qazmvkdRqv4>
 - <https://www.youtube.com/watch?v=mhQTBDiJlc4>

- Inspiration: https://www.youtube.com/watch?v=N__-Ma_SeWA
- Sunset environment: <https://www.youtube.com/watch?v=FDQSk8kJVmE>
- Boat geometry:
 - <https://www.youtube.com/watch?v=jkXo3fHL67Q>
 - <https://www.youtube.com/watch?v=f5gZAofAtX4>
- “Among Us” Astronaut geometry:
 - <https://www.youtube.com/watch?v=LeoGINB8CHA>
 - Glossy BSDF for the helmet (roughness = 0.015):
https://docs.blender.org/manual/en/latest/render/shader_nodes/shader/glossy.html#:~:text=The%20Glossy%20BSDF%20node%20is,such%20as%20metal%20or%20mirrors.
- Mountain:
 - Geometry: <https://www.youtube.com/watch?v=FjK1ydAf7dY&t=155s>
 - Texture and coloring: <https://www.youtube.com/watch?v=08G4g4ZSAI>
- Mesh add-on:
 - Round cube
 - A.N.T. Landscape
 - <https://www.youtube.com/watch?v=FjK1ydAf7dY&t=155s>

Contributions

We decided to split the workload of the final project into two parts: setting up the environment and setting up the geometry. Max worked on the environmental/scenary aspect: creating the ocean, sky, placement of objects in the scene, and camera placement. Will took the geometry aspect: making the objects and their textures from scratch.

Downloaded Assets

We did not use any downloaded assets in our scene, everything in our scene was made by us from scratch.

Referenced Tutorials

We used several tutorials on YouTube to make our scene. All of these are listed in the *Sources* section above.