

This week we talked about the Rasterization Pipeline & WebGL. In graphics, 3D objects are created using polygons. Polygon's faces are made using triangles. Rasterization is used to turn this geometric shape into pixels on our screen. There are 5 different spaces the pipeline utilizes. Object space, World space, View space, Clip space, and Screen space are in order of when they are used. From Object space to World space is the model transform. From World to View has the View transform and View to Clip does the Clip Matrix. All of these are used in the vertex shader. Clipping is when part of the object is outside of the screen space so it derenders part of the polygon. There is something called culling which derenders whole faces or sides of the object that is not in the view of the camera. The back of the object will get culled because you cannot see it.

Rasterization renders one object at a time so the closest object is what is shown. There are many buffers one is color and one is depth. The depth buffer is also called the Z-buffer. This makes the scene more realistic because it makes the scene have depth and color. Shaders are the final thing we learned this week. There are 2 types of shaders Vertex and Fragment. They run on the GPU during a certain point in the pipeline.

This weeks homework was harder for me because it wasn't just learning new concepts and writing code that does that. I also had to learn new code for this assignment. It was hard trying to find out what exactly should be in the arguments but I think I understand it now.

This week I did not use my partner for help because I decided to do the homework earlier than usual. I did not go to the TA or Professor for help. I should have this week because I couldn't watch the videos before class. When I tried my Laptop was on max volume and I couldn't hear it at all. So I was perplexed while doing the homework.

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