Brett Stelly

Cameras and Projections

**Orthographic Projection implementation without use of glm**

The orthographic projection implementation gives the camera a rectangular, tunnel vision projection that has no field of view.

I created a function that takes in six floats. The first four floats are for the left, right, top and bottom sides of the camera. The last two floats are for the far and near clip planes. The function’s return type is mat4.

To set up a camera with an orthographic view, you will need to do calculations in the correct indices of the camera’s projectionTransform matrix. When finished with the calculations, return the projectionTransform.

The following picture shows my function with the way to build the orthographic projection matrix:

