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Cameras and Projections

**Perspective Projection implementation without use of glm**

The perspective projection implementation uses a field-of-view and aspect ratio to give the camera a 3-D view by distorting the space to fit the clip space.

I created a function that takes in four floats for the field of view, aspect ratio, near clip plane, and far clip plane. The function’s return type is mat4.

To set up a camera with a perspective 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 perspective view matrix:

