Star Explanation

My geometry shader is setup to take in a single point input and output a triangle stream with a maximum of six vertices. The six vertices are for each point of my star. With the single point from the mesh of the object I first create a new world matrix based on the vertex position and the cameras position. This will be used in place of the objects world matrix to create the billboard effect.

To create my star I calculate two triangles with the centre of them being the vertex position. The first triangle points upwards and creates three of the stars points, the second triangle points downwards and creates the stars three other points.

Now I for loop through the six created points multiplying them by the new world, view, projection matrix and append them to the triangle stream. I call the restart strip function on the triangle stream after three points so that it draws and connects each triangle separately giving a final look of a six pointed star.

The pixel shader for this effect colors the pixels directly yellow without using a texture.