

Assignment 4

Saturday, March 17, 2018

11:34 AM

1. One would need to either store the existing texture coordinates in the same location as before and just ship the newly created vertices, or try to calculate new values to store in the new vertices.
2. $\max \rightarrow 3N$
if every single triangle is parallel on a plane \rightarrow none intersect
but they all intersect with the plane used, then every triangle will be cut into three.
- $\min \rightarrow N$
none of the triangles intersect the plane
3. The valence for V vertices will be the same as before the subdivision, generally; for E vertices, it will be four for boundary vertices, and 8 for interior vertices.
4. 4k, since loop subdivision creates 4 new triangles
5. It causes openings or holes in the object.