Ex06 - Now You See Me

Info:
Implement a visible surface determination algorithm Z-buffer. As usual you should use a similar functionality and drawing as in the sample application.

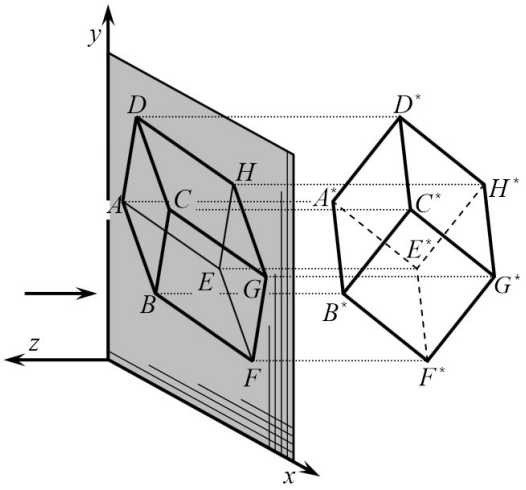

Figure 1: *Example of z-buffer algorithm.*

Pseudo-algorithm (general case):
In general case for simple objects without equations:

1. Go through all scene objects
2. Go through all faces of current object
3. Create a rasterization for each face
4. Create plane equation for the current face
5. For each pixel in rasterization compute z-coordinate.

6. Compare current z-coordinate with z-coordinates in the buffer

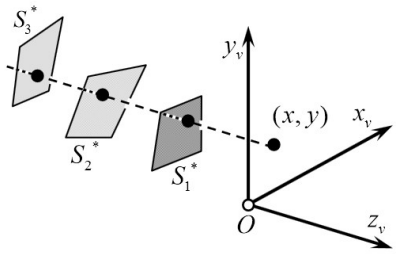

Figure 2: *Compare z-coordinate. Only the pixel with z-coordinate closest to the plane projection will be displayed.*

Pseudo-algorithm (application):

1. Go through all sphere objects
2. Go through all pixels in current sphere
3. Compute z-coordinate of the current pixel
4. Compare current z-coordinate with z-coordinates in the buffer

Bonus Points:

1. Implement Antialiasing (FSAA/SSAA) feature - **1 points**
2. Implement Blur feature - **1 points**

More information during the seminar and / or mail and consultation

Materials:
ZBuffer - `http://flurry.dg.fmph.uniba.sk/webog/SuboryOG/zatko/6.VIDIT2012.pdf`
SSAA / FSAA - `http://www.sccg.sk/~chladek/phd/cg1_2012/cg1_2012_lesson09.pdf`
Blur - `http://www.blackpawn.com/texts/blur/default.html`