**Transparency & Mirroring**

During the initial stage of developement, it wasn't clear how to implement such features.

Transparency wasn't initially working due to the Z-ordering of the meshes.

As almost everything was working, the mirroring was implemented by using the stencil buffer.

Mirrored shapes are the first to be rendered followed by shadows, then by transparent objects and then solid objects.

Though it correctly works on Linux, it is unfortunetly yet unclear why the stencil buffer isn't working on linux.

The mirroring calculation part happens in mesh's method CalcTransformation(glm::mat4) where, as seen below, the object it’s translated twice above his pivot, it’s scaled by -1 (equivalent of a rotation fo 180°) and then positioned in it’s world coordinates.

