TI1805 Project: Raytracer

Better Late Than Never:
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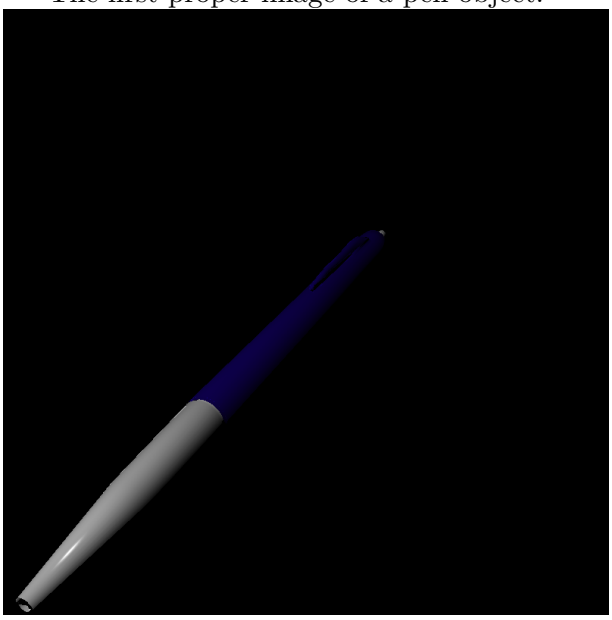
Ray tracing does indeed deliver beautiful images. That is, if it supports enough graphics techniques. We think that our ray tracer delivers beautiful images and, before showing you the proof, we would like to give you a quick list of graphics techniques we have implemented:

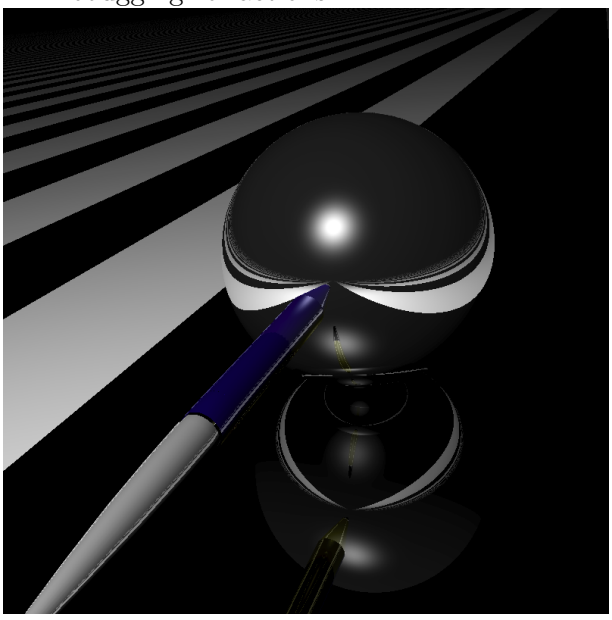
- Shading (Phong illumination model);
- Reflections;
- Refractions (inluding Schlick's approximation);
- Shadows;
- Textures;
- Anti-aliasing (jittered super-sampling);
- Hierarchical bounding box tree;

What follows now are a few images produced by our raytracer. Some show funny results that appeared when testing a new feature and others show proper results.

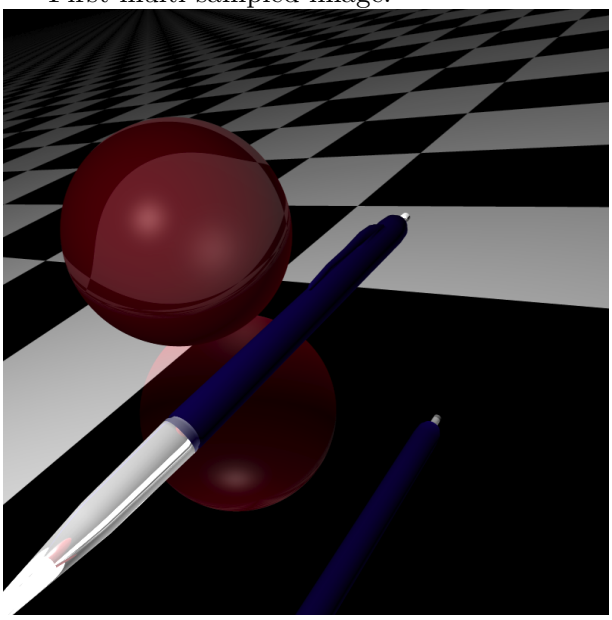
The first proper image of a pen object:



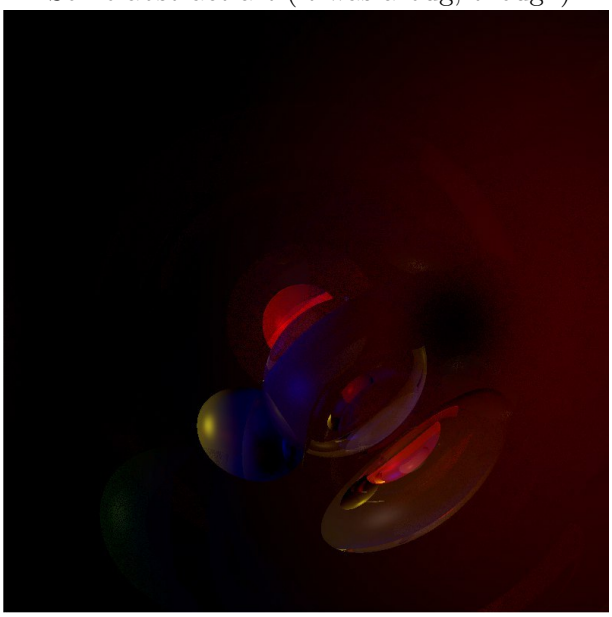
Debugging refractions:



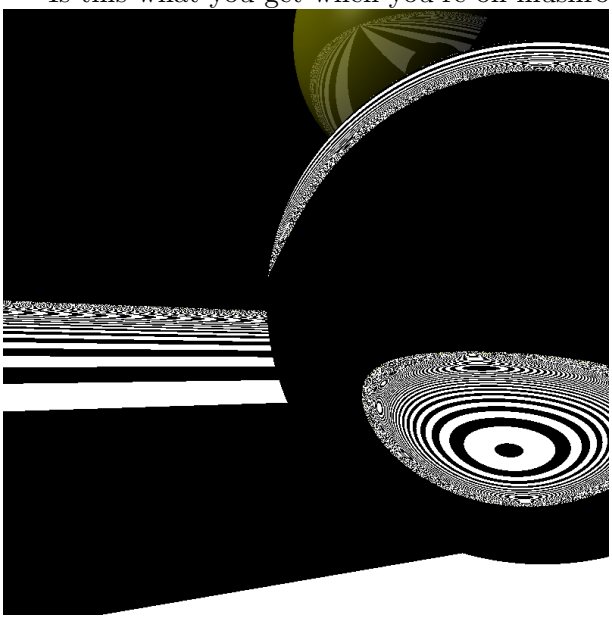
First multi-sampled image:



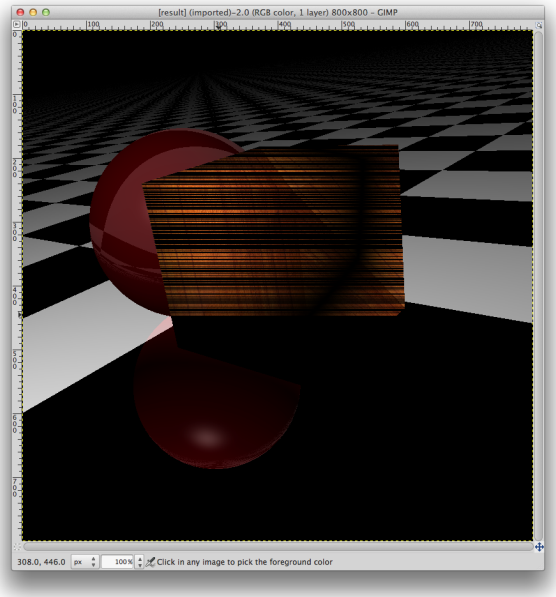
Some abstract art (it was a bug, though):



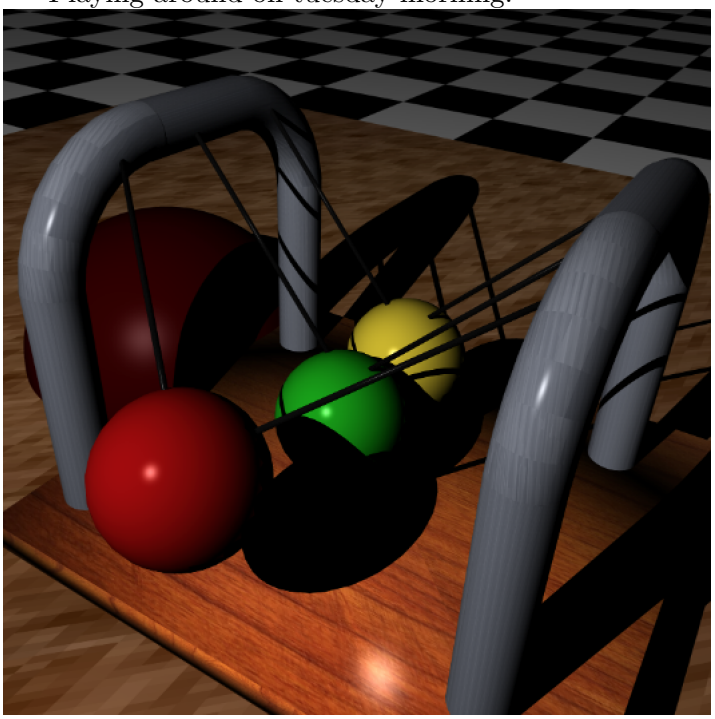
Is this what you get when you're on mushrooms?



A first go at textures:



Playing around on tuesday morning:



Testing multiple shadows: