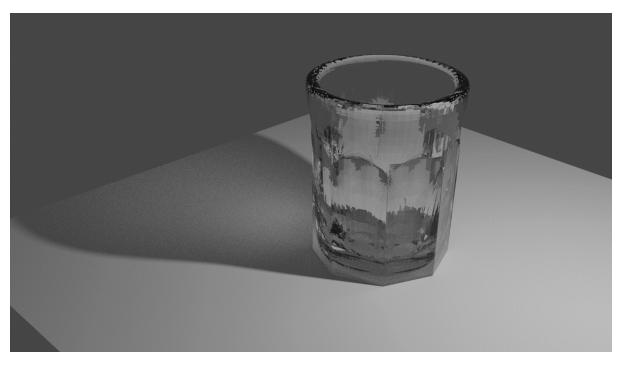
COSC 342 Assignment 1 report – Sean Moir – ID 8475230

Basic glass model

My glass model was based on a cylinder, I set the top face radius to the radius of the top of the glass cup, and set the bottom face radius to the radius of the bottom of the glass, to get the octagonal based I made a loop cut about halfway up the cup and extruded the top face down, bevelled the edges in to form an octagonal shape. To make the interior of the glass, I extruded the cylinder down from the top down to the bottom. To get the details around the bottom, I added an octagon, moved it up to collide with the circle bottom of the glass and then used the knife tool to cut out the circle shape in the octagon.

The material used is the Glass BSDF, I then edited the roughness value to bring the glass material from frosted to clear, I'm pretty happy with the outcome of the material. The transition from octagonal to circular is a bit rough, I could have fixed this up, but did not feel I had the time needed to properly fix this.



Sample Scene

My Sample scene consists of two glasses on a wooden tray, both containing liquids, one of the liquids being a bright red similar to that of a wine, the other fluid being a darker green. I set the fluid to be a transparent material and coloured the fluids the respective colours, the fluids are simply cylinders that are placed inside the glasses interior. I decided to make the second glass more frosted to show off a different material. I also added a straw to one of the glasses to make the scene seem more full, the cylinder is a simple cylinder with each of the end faces deleted, and I set the texture of the straw to that of a barber pool. Tray is using a simple wood texture. The plane that the tray is sitting on a principled BSDF with a

metallic value of 1 and a roughness value of 0.2333.



I'm reasonably happy with the scene, I wanted to show off different colours, transparency and reflectiveness and I think I have achieved that with the different transparency between the two different cups, with one being clear and the other being more translucent and frosted. I added contrast by having to very different colours for the fluids, with one being red and the other being green. As for the reflection I decreased the roughness of the metallic plan surface to show reflection of the tray and the glasses.

Final thoughts

Overall, I think I could have improved the glass model but felt I didn't have the time needed for fixing the transition between the circular and octagonal parts of the glass, as for the scene I am pretty happy with the scene.