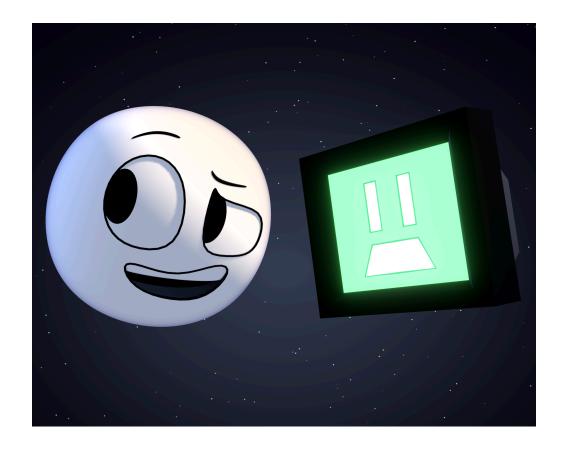
Hey! A lot of people were asking for more details about the boolean mouth, so here they are.

First, I wanted to show that this method works for lots of things, including a character's eyes, and more low-poly type characters too.



The first guy's eyes are just a flat plane that the booleans reveal, and the irises are just circles that are shrinkwrapped to that plane. That's essentially how my Jax model works.

The screen guy's face is nothing special, it's just the usual boolean but without a Subdiv modifier, and without an inner mouth. The only thing you might want is a bone for each corner of the mouth, and then one bone in between each of those bones to control each flat edge of the parts of the face. You'd do that by adding Child Of bone constraints to the corner bones, instead of just parenting. Although, in this specific case you wouldn't really need to make it a boolean, just a plane shrinkwrapped to the screen, unless you really wanted the outlines around the face parts.

Anyway on to the other stuff:

- 1. One thing I skipped in the video was adding Edge Creases to various parts of the bool to make it sharp. You do this by just selecting an edge, going to the Item tab on the right popout menu, and going to Mean Crease. 1 = perfectly sharp. You don't have to do this technically, you can also just add more edge loops, as long as you remember to set the weights right when rigging.
- 2. As per @yo_im_mat in the comments of the Youtube short, if you're in Blender 4.5+ you can actually use the Manifold selection in the Boolean Modifier instead of Float, which should be just as fast but more reliable. I just learned it could be used for that, so I don't know if there are any drawbacks, but it seems like it works enough.
- 3. One thing I cut out was about shading styles. If you set the MouthBool to Shade Smooth, you can see it makes a weird broken effect on the head. This is because it's trying to pass the Shade Smooth data to those parts of the mouth, but since booleans create such weird geometry, it does not look good at all. You can try to get a good effect out of Shade Auto Smooth and editing the shading angle, but since the inner part of the mouth is so rarely seen in any major detail I'd say just use Shade Flat since it's perfectly reliable.
- 4. The teeth I used are just a basic cube extruded into a horseshoe shape, it's nothing special. Also, in terms of rigging the teeth and a tongue, nothing changes compared to how you'd normally do it. I just use one bone each of the top and bottom teeth, and a chain of like 3 or 4 bones for the tongue. Same goes for the eyes as mentioned above, I usually just make shape keys for each direction of movement, and the size of the iris, then set up drivers for all that. It's not really the same, but you can get an idea of how all that works in my 2D eyes tutorial. I am planning on making a full character modelling & rigging tutorial for beginners eventually, but that's a ways out, so if you need help on little things just ask. There are plenty of other tutorials on this stuff though.
- 5. Don't forget to make a new HeadFake if you ever edit anything on the base head. If you don't, you might see that the lips will start floating away from the face. I often make the boolean when I first make the model, but then make a new one after I do any shape keys on the head, or after rigging.
- 6. As with most cool things you can do in Blender, this doesn't translate to game engines at all. You're going to have to look elsewhere for that info since I don't have many plans on dealing with game engines, I just want to animate inside of Blender.

I'll add more stuff if anyone asks for it, or if I think of anything. If you're having a specific issue, don't forget to go to my <u>Discord server from my Linktree</u> where there's a

Technical Help channel. Even if it's not a glitch or issue, and you just want some basic help, I'll still respond.

I might end up making more shorts on smaller parts of my models/rigs if people are interested. If you see anything special in my models and want to know how it's done, I'll gladly say so. Although, writing tutorials like this too is way easier so I might just do that instead lol