

CS488 Assignment 3

Daniel Burstyn (dmbursty) (20206120)

Oct 28, 2009

Manual

1 Head Joint

In order to prevent the head from being inside the body, I have joint nodes store their rotation amounts (which they have to do anyways to enforce min/max), and upon `walk_gl`, I use `glRotated` to actually do those rotations instead of modifying `m_trans` directly.

2 Picking

When a primitive is picked, the scene is traversed to find the first joint node parent of that primitive. Then, all of that joint's children are picked. This is so that if a user clicks on the puppet's nose, the head and eyes will also be picked.

A picked primitive's colour will change to green. To avoid confusion, the puppet I submitted has no green primitives.

3 Undo Stack

When a user presses either `mouse2` or `mouse3`, an undo "scope" is started. That scope is terminated at the point where the user releases **both** `mouse2` and `mouse3`. If the user does the following actions: press mouse 2, drag, press mouse 3, drag, release mouse2, drag, release mouse3, then only one item will be added to the undo stack.

If the user clicks and does not move the mouse, then the undo stack is left unchanged.