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TP3 Update

Previous design plans:

For my Rubik’s cube solver, I was hoping to be able to OpenCV to scan in a Rubik’s cube that my program would then solve. Instead, I still have the setup mode where the user clicks on the different colors for each face. In TP2, I added an ‘illegal cube’ checker. If the cube entered if legal, then the solver begins. If not, it asks the user to either edit the cube they put in or to try again on a blank cube. In the solve mode, the screen shows a face of the cube, then shows the move that the use needs to make, then display what the face would look like afterwards. In TP2, I added an editor that edits the list so if you are doing multiple moves on one face, it does not show you what the cube looks like before the move because you can go back to how it should have looked after the last most. The user presses the spacebar to iterate through the list of moves and it tells you how many moves you have until you solve it. I added a help button in case someone gets so lost that they need to put the cube in again. I also added the back button, so people can go back and check the last move. There is also now a way to do another cube at the end after you have solved one.

Updates design plans:

I was not able to implement OpenCV because the video recorder kept bugging and I had to force quit whenever I tried to use it, so I decided it wasn’t reasonable for my project. To make up for this. I added a 3D component to the cube which helps with the visualization. I also added a guide to all the turns. If the user does not know what the solver is asking of them, they can click on the turn guide which shoes blank Rubik’s cubes and the section that needs to be moved if highlighted in yellow for each type of turn. The player can then click a button to return to the solve screen which will bring them right back to the last move they were on. I also changed some of the text and the background color to enhance the user experience.