COMP 410 – Computer Graphics Homework 2 due 02/05/2023 Can Berk Alakır & Furkan Tuna

Important note: This document is on what we did, and how we can get partial grades for the parts we have not completed successfully. Please observe our code further for partial grading.

With our code, we have successfully displayed a Rubik's cube with 9 cubes at each side. The cube can be rotated with the left and down arrow buttons. Each press will rotate the cube until it is stopped either when it reaches 360 degrees, or when the user presses the space button. Our program starts with a rotation animation (our purpose was to keep it as the launch animation of the game). We are able to randomize the colors distributed over the cube every time we run it (code is commented out). We have 2 files that we wrote (main.cpp

Our code displays a cube which can be rotated all at once, however we have done more than that in our code. We are confident in the first part, but for the rest, we would really appreciate any grading for partials for the rest of our unsuccessful attempts. Here are some of the tasks that are not visually shown but are reflected in the code (not all inclusive):

- 1. We assigned index numbers to each small cube from 0 to 26. With each index, we have access to their vertices.
- 2. For each face, we have matched the face numbers with the cubes initially on those sides. By this, we aimed to keep track of the indexes of the cubes for each side after any number of rotations.
- 3. We tried to implement a picking method. We created 3 functions for picking, displaying, and updating the cube positions. We tried to do it with mouse input, but we were unsuccessful.
- 4. We tried to implement a Local and Global Model View which would keep all the model views per small cube and the view of the greater cube.

We would really appreciate any partial grade for our work for the second part of the assignment (after displaying the cube).

Thank you.