University of Massachusetts Boston



CS460 Fall 2022

Name: Robert Kevin Emmanuel

Student ID: 01932711 **Due Date**: 09/19/2022

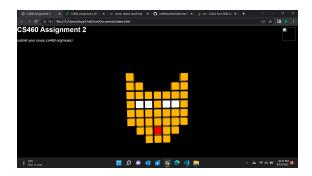
Assignment 2: XTK Cube / Pixel Art

We will create pixel art - and then use XTK to render it in 3D, fully interactive and web-based.

To create 3D pixel art, we can use colored X. cube objects instead of pixels.

Please choose one, either the fox or the pine tree, and then create a 3D version using XTK (http://goXTK.com). Start with the index.html from https://cs460.org/shortcuts/04/ and save it in directory 02/ in your github fork.

This starter code creates one cube with XTK. For this assignment, you will need to modify the code to create many cubes: one cube for each pixel. Remember, you can set, for example, the color green for a cube c using c.color=[0,1,0]. Please replace the screenshot below with your version. Also, please commit this PDF and your final code to your Github fork and submit a pull request.



https://robertkevin96.github.io/cs460student/02/index.html

Bonus (33 points):
Question 1 (10 points): If we would not care about the gap between cubes/pixels, how could we reduce the number of X.cube objects in the scene?
we can consider all the pixels which is in same color and consider them as a single major pixel. In such a way pixels can be reduced.
Question 2 (23 points): Animate the pixel art! We can use the following JavaScript snippet to execute code every second:
https://robertkevin96.github.io/cs460student/02/index.html