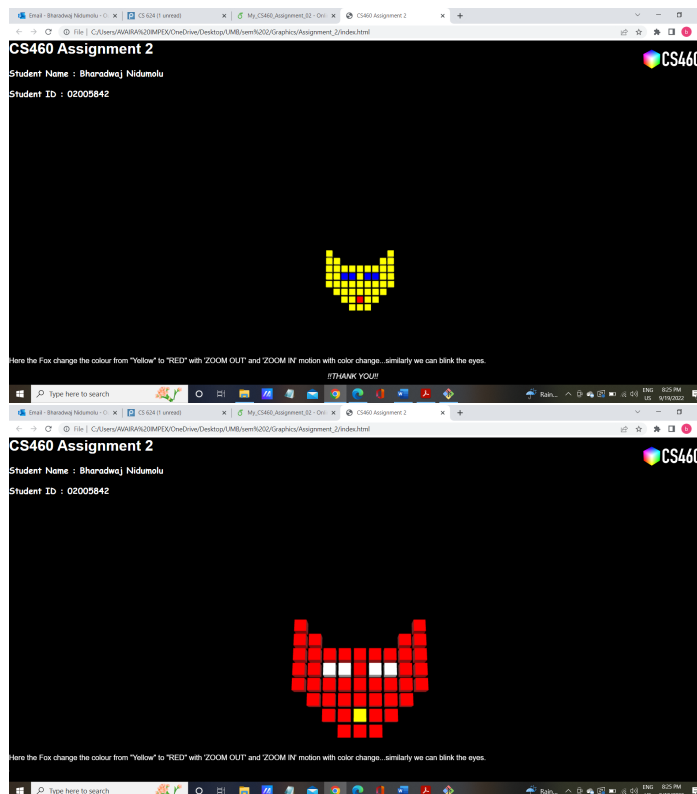# University of Massachusetts Boston

CS460

CS460 Fall 2022
Name: Bharadwaj Nidumolu
Student ID: 02005842
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.

Here the color of the fox change with the interval of one second...Similarly, if we wish to we can also blink the eyes of the fox by changing the color of the specific cube,keeping the color of other cubes constant.

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?

Ans) Though we are doing 3D modelling, but at one glance we can only visible 2D planes. Here in our case Z-plane is constant and therefore by increasing the dimensions of the cube with respective XY-plane keeping the volume of cube of overall grid, we can load the data of pixels in less number of cubes. In otherhands, we can merge the data of 2 or more cube and load in one big cube maintaining the gird volume same.

Question 2 (23 points): Animate the pixel art! We can use the following JavaScript snippet to execute code every second:

```
setInterval(function() {
  // your code
}, 1000);
```

Please write code to animate closing/opening of the fox's eyes or, if you chose the pine tree, make some pixels/cubes light up like a Christmas tree. In both cases, you will need to keep track of certain cubes and then change their color using the snippet above. You can submit this as part of your `02/index.html` file.

link : https://bharadwaj240796.github.io/cs460student/