CS460 Fall 2021
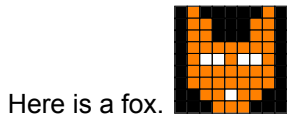**Name:** Jay Burkhardt
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Due Date: 09/20/2021
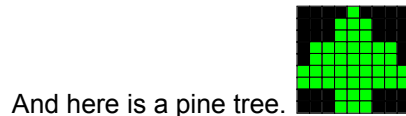
Assignment 2: XTK Cube / Pixel Art

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

Here is an empty grid of 9x9 pixels:

If we set pixels to different colors, we can create pixel art.

Here is a fox.　　　　And here is a pine tree.

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.
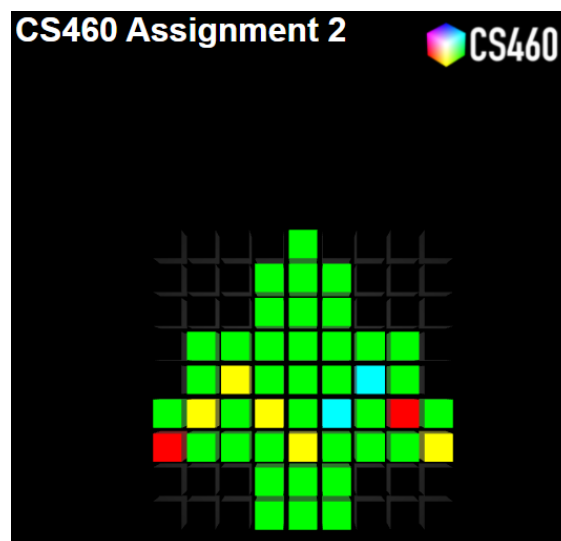
Bonus (33 points):

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?

You could divide the 9x9 grid into sections by combining similar cubes into larger objects. For example, you could create (assuming the default value of 20px for length) a 40 by 60 box which could take the place of six cubes, or a 60 by 60 box for the upper right and left corners of the tree.

Question 2 (23 points): Animate the pixel art!

You can view my animated pixel art at this url

`https://jpb93.github.io/cs460student/02/`