

Lab 19

In this lab, we will start with code that is based on the Key for Lab 18, and replace the checkerboard pattern texture with a digital image.

Note the difference between running:

<https://icsites.juniata.edu/faculty/kruse/cs330/TextbookCode/Labs/Lab19TextureImageKEY.html>

and running locally:

<file:///W:/cs330/TextbookCode/Labs/Lab19TextureImageKEY.html>

As we mentioned in class, most browsers won't render an image locally, but it will work if the page is loaded from a server.

Also, note that a lot of the code is like what is in 07/textureCube1.html.

First, make sure you have an image to load. `tiger.png` is provided in the directory.

There are just a few more modifications. First, update the html to read in the image:

```
<img id = "texImage" src = "tiger.png" hidden></img>
```

Then, change the `configureTexture` function:

```
function configureTexture( image ) {
    texture = gl.createTexture();
    gl.bindTexture(gl.TEXTURE_2D, texture);
    gl.texImage2D(gl.TEXTURE_2D, 0, gl.RGB,
        gl.RGB, gl.UNSIGNED_BYTE, image);
    gl.generateMipmap(gl.TEXTURE_2D);
    gl.texParameteri(gl.TEXTURE_2D, gl.TEXTURE_MIN_FILTER,
        gl.NEAREST_MIPMAP_LINEAR);
    gl.texParameteri(gl.TEXTURE_2D, gl.TEXTURE_MAG_FILTER,
        gl.NEAREST);
    gl.uniform1i(gl.getUniformLocation(program, "uTextureMap"), 0);
}
```

Finally, use the following code to access the uploaded image file and send it to `configureTexture`:

```
var image = document.getElementById("texImage");
configureTexture(image);
```