

A buffer object to hold vertex data is also called a **Vertex Buffer Object(VBO)**

VAO: Vertex Array Object: descriptor of the vertex data, describes how the vertex are stored in the VBO.

Some Discussion about VAO: <https://stackoverflow.com/questions/11821336/what-are-vertex-array-objects>

Buffer Memory Allocation:

1. Ask WebGL for a buffer
2. Bind the buffer to a binding point
3. Fill the buffer with data

Browser supports WebGL: <https://get.webgl.org>

WebGL tutorial: <https://www.tutorialspoint.com/webgl/index.htm>

One feature of WebGL-Automatic memory management: no need for manual allocation of memory

Frame buffer: portion of graphics memory, hold the scene data.

Vertex Buffer Objects: store vertices data

gl.STATIC_DRAW – Data will be specified once and used many times.

OpenGL Shader Language:

vec2, vec3, vec4
n-component floating point vector
mat2, mat3, mat4
2x2, 3x3, 4x4 float matrix

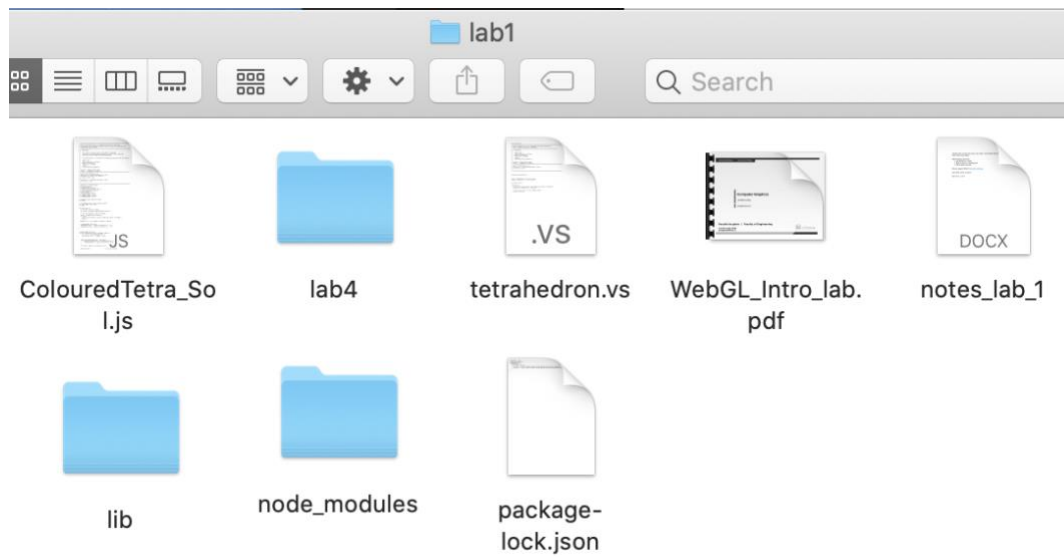
Uniform: read-only

files structure(Note: create a folder named as 'lab1')

go into lab1 folder and install gl-matrix package

npm install --prefix . gl-matrix

http-server . -p port



Note: If there is an error of starting code, like unsupported shader version, just try different browsers or update your browser. (In my case, Safari does not work, but Chrome works). **Must use http-server to run these files in this lab.**

Notepad++: open .vs .fs files