

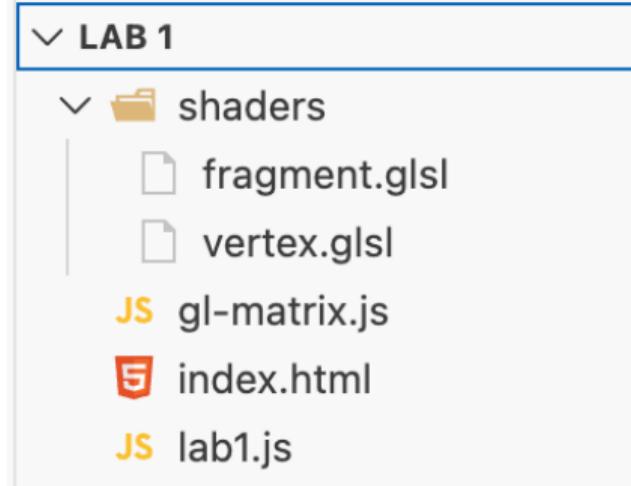
CPE 381 Computer Graphics

Lab 1 2D Transformation

Dr. Taweechai Nuntawisuttiwong



Folder Structure



Instructions

1 Write your own matrix library

- In gl-matrix.js, implement 3x3 matrix operations:
 - Translation matrix
 - Rotation matrix (by angle in radians)
 - Scaling matrix
 - Matrix multiplication function (optional)

2 Transformation control with keyboard input

- Implement translation: arrow keys move the drone along X and Y
- Implement rotation: 'A' and 'D' rotate left and right respectively
- Implement scaling: 'W' to scale up, 'S' to scale down
- Update the transformation matrix and redraw the triangle each time