

Computer Graphics

Transforming Cube

- 1) It makes sense to encapsulate certain functionality within its own structs and headers. There are templates for **pipeline.hpp** (shader program) and **mesh.hpp** (vertices, indices/elements and vertex arrays) up on Moodle.
- 2) Implement the ability to transform a mesh using key or mouse inputs. Here is an example mapping (does not need to be strictly followed of course)
 - a) Translate using W, A, S and D
 - b) Rotate using Q and E
 - c) Scale using LEFT and RIGHT mouse buttons
- 3) Create a 3D cube mesh with differing colors for each vertex/face. Try transforming it to check the validity of all 6 faces. It might stretch oddly when using non-1:1 aspect ratios, so try sizing the window to 720x720.

