Project Manual
Computer Graphics I, Spring 2018
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This project is implemented in HTML/CSS and Javascript. It does NOT require any sort of build, compilation or installation.
(However, it has to be hosted in a server.)

It requires a web browser which supports WebGL.
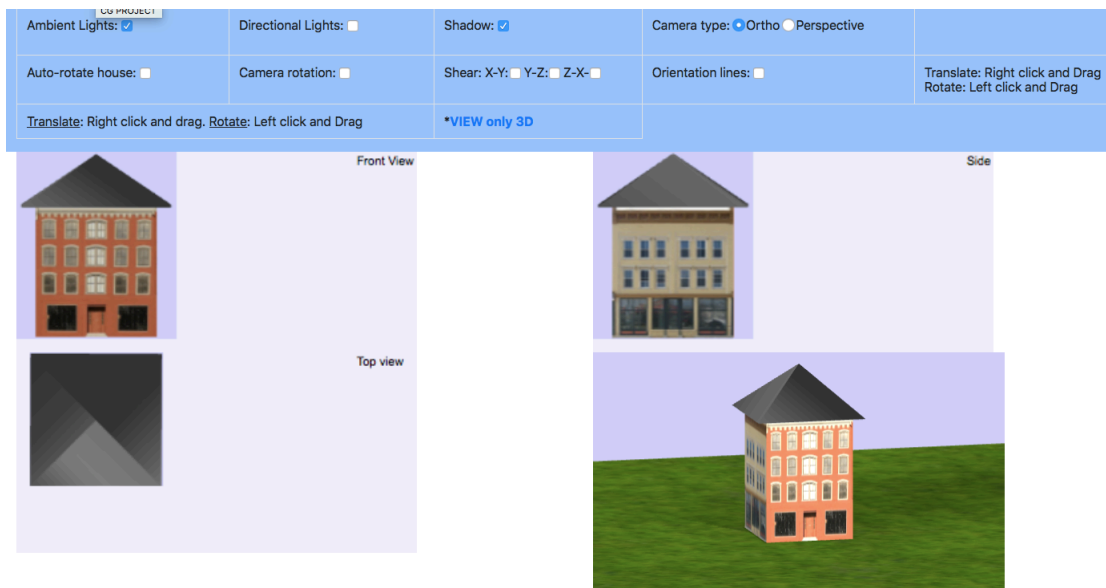
WebGL support can be checked in this link: https://caniuse.com/#feat=webgl
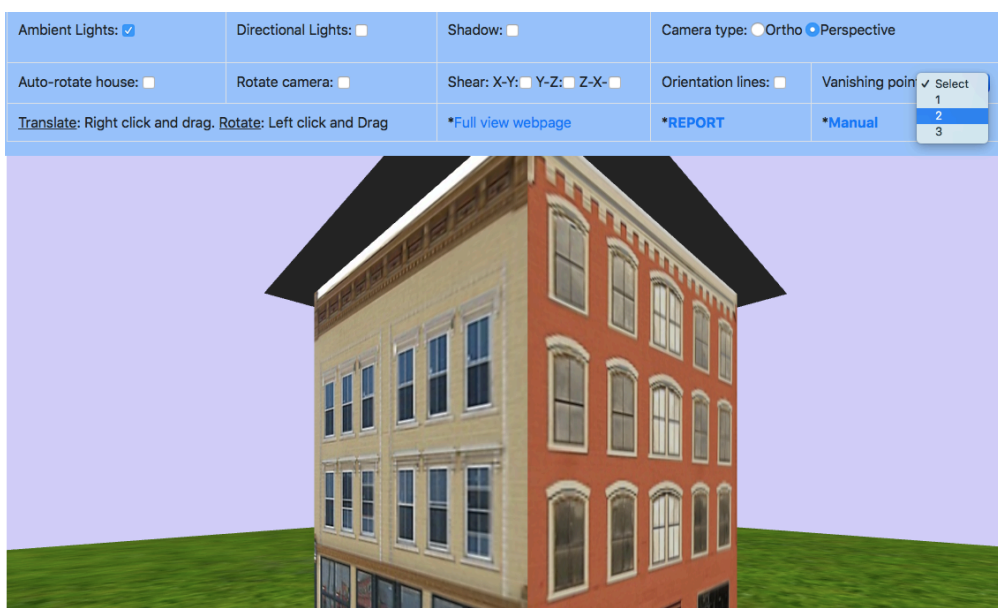

Fig. 1 Screenshot of webpage.

Fig. 2 Screenshot of webpage with one canvas for viewing the house in 3D.

How to Use

CHECKBOXES

       The webpage has two parts, the controls buttons and the canvas. Fig. 1 is the screenshot of the webpage. There are checkboxes, respectively for enabling (or disabling) features:

- Ambient light (Switched on by default)
- Directional light
- Auto-rotate house (rotate only the house structure)
- Shear
  - Along XY, YZ and ZX (can be set individually)
- Orthographic and Perspective camera option (Radio buttons)
- Shadows on/off
- Orientation lines
- Auto rotate camera

MOUSE CONTROLS

- <u>Rotation/Orbit</u>: Left click and drag
- <u>Translation</u>: Right click and drag
- <u>Zoom in/out</u>: Scroll

KEYBOARD CONTROLS

       <u>Translation/Pan</u>: The keyboard arrows (Left, Right, Up, Down) can be used.

SIZE CONTROLS

       Click on the side view or front view canvases to resize along the X or Z axis.