

Project Manual (Week 4)

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>
The webpage displays a basic cube with with side ratio 1:1:1.25.

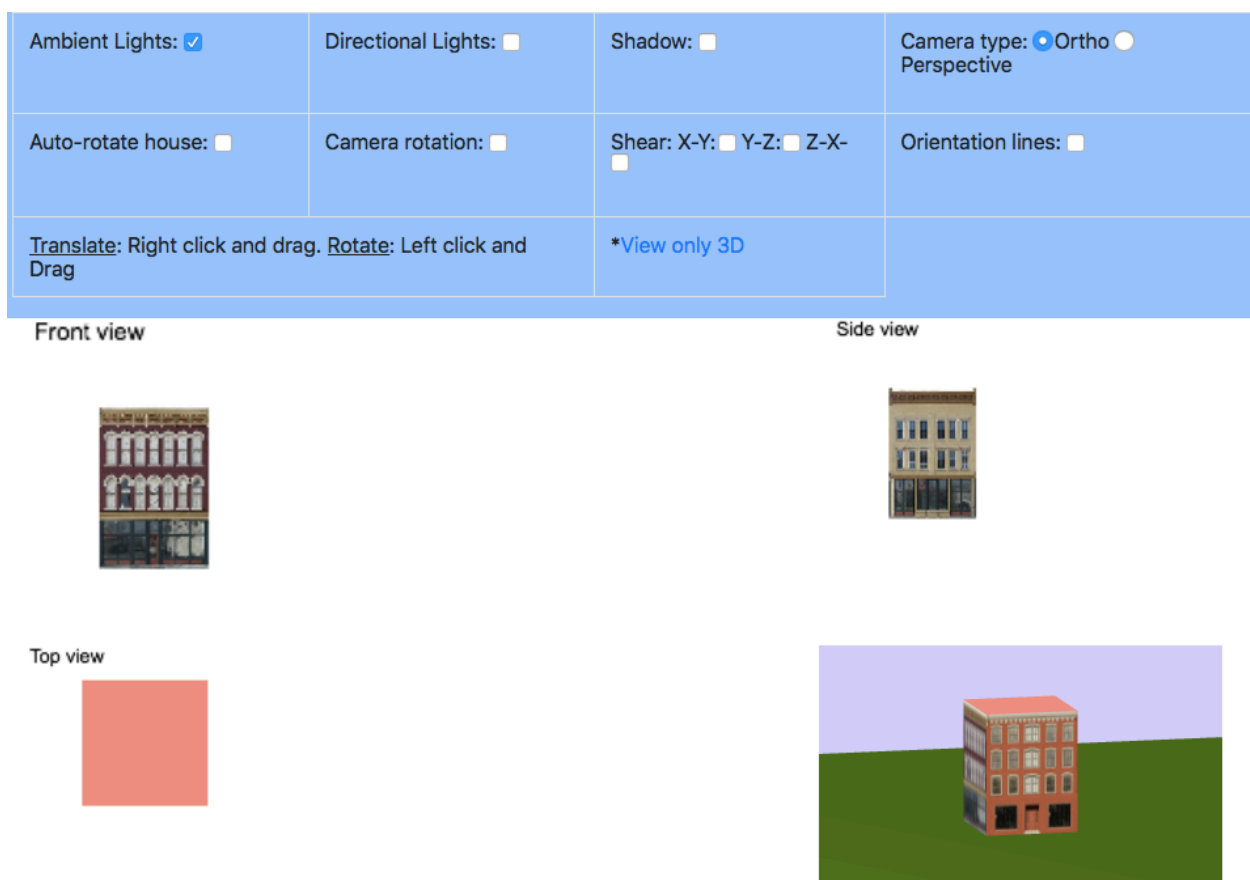


Fig. 1 Screenshot of webpage.

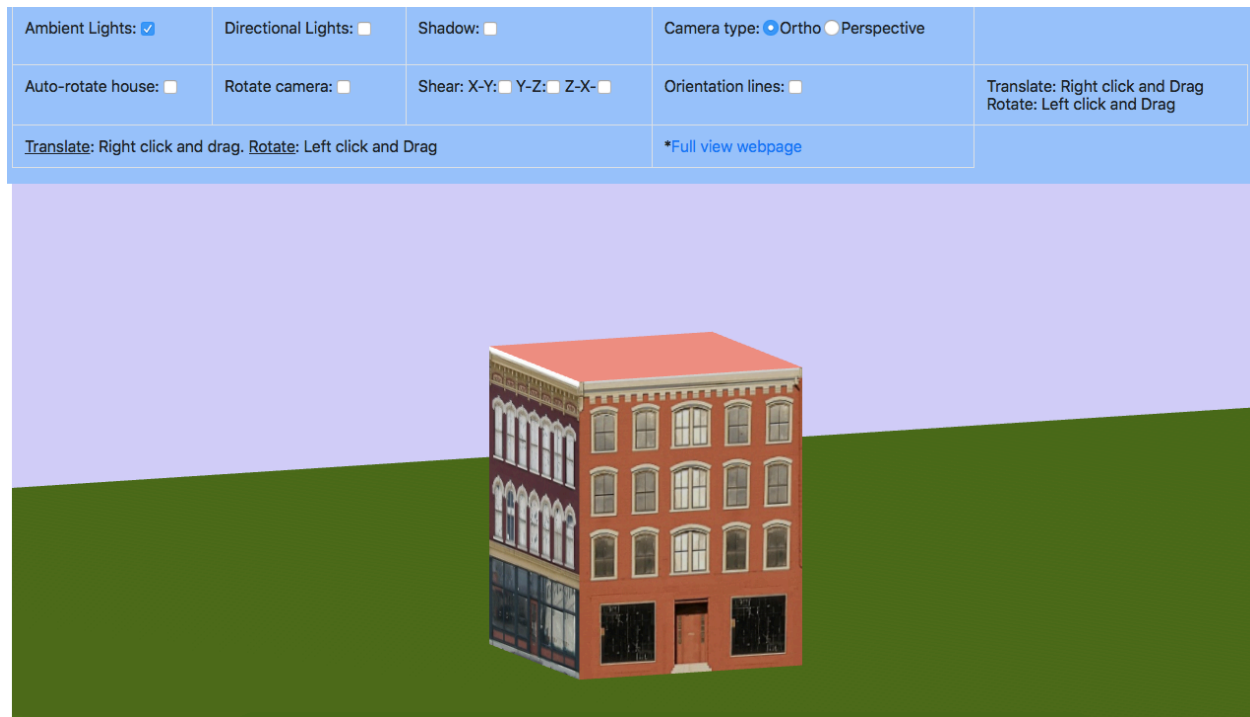


Fig. 2 Screenshot of webpage with one display canvas.

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
- 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

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

KEYBOARD CONTROLS

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