

## Aether CAD Take-Home Instructions

- You can do this on your local or if you can upload it to a public domain for us to see. As long as there is a way for us to view and play with the Three.js scene.
- Please write the code in Vanilla.js.
- You will have a review with us to walk through the code and explain how you went at it.
- We are looking for easy code readability and ability to demonstrate that you can do the task.

### (1) Retrieve an image through API:

- Make an API call to retrieve a background image (of your choice) to use in the Three.js scene.
  - Example: You can use the Google Maps API to get a house 2D satellite image.

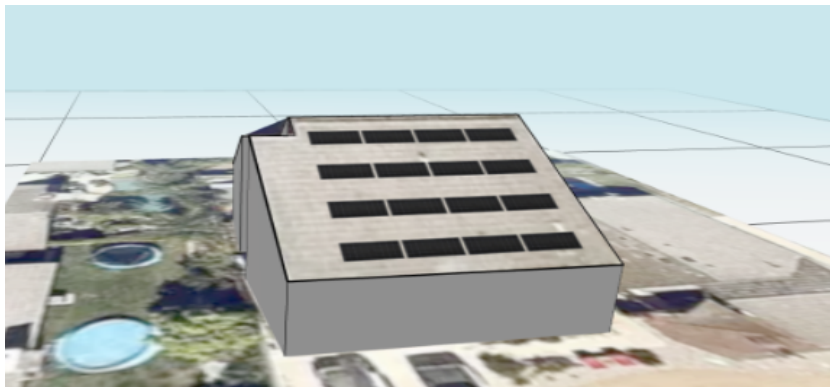
### (2) In Three.js:

#### Scene

- Load a scene with the retrieved image as a background. It should be viewable to the user (not too small).

#### Editing tool

- Allow the user to select a line drawing object
- Once selected, the user should be able to draw a polygon by drawing individual lines. They should be able to close the points.
  - The user would outline the house here.
  - If you go to google earth and select tools -> measurement it should be like this
- Once the polygon is drawn, allow for the user to input the building height
  - This should then raise the whole polygon by that amount, with “walls” going straight down to the ground (see image of the house below to understand what we mean)
  - Allow for the user to also input a “pitch” for the shape (0 degrees being parallel to the ground, 90 degrees being vertical)
  - Do not worry how the overall scene looks, the image below is just here as an example to show what we mean by the “walls” of a raised shape.



Camera: Make sure the user can rotate around the scene.