

## Running the code:

1. If you are using VS Code, you can use the 'live server' plugin.  
[ <https://www.freecodecamp.org/news/vscode-live-server-auto-refresh-browser/> ]
2. If you have Python installed locally:
  - a. If Python version 3.X is available: `python3 -m http.server`
  - b. If Python version 2.X is available : `python -m SimpleHTTPServer`
3. If you have a node setup, you can do:
  - a. `npm install --global http-server`
  - b. `Http-server`

## Using the app:

1. There are 2 modes:
  - a. Mode 1: Top view
    - i. A model can be selected by clicking on it. Then, it can be:
      1. Rotated(from  $-\pi$  to  $\pi$ ) about X, Y and Z axis, using the GUI
      2. Translated(form -1 to 1) along X, Y and Z axis, using the GUI
      3. Scaled up and down using "+" and "-" respectively
      4. Animated, by pressing "a" and choosing 2 other points for p1 and p2 via mouse clicks. The mode can be changed while the animation is going on. We can increase and decrease the speed of animation using upArrow and downArrow respectively.
  - b. Mode 2: 3D view
    - i. Choose a rotation axis for the camera(default is set to y-axis). You can do this by pressing "x", "y" or "z" to choose the x, y or z axis respectively.
    - ii. Drag the mouse to rotate the camera about the chosen axis.

## Key Bindings:

Keys	Description
m	Change mode
+	Scale up the selected shape in mode 1
-	Scale down the selected shape mode 1
a	To signal that the selected object is ready to be animated
Up arrow	To speed up the animation
Down arrow	To slow down the animation