| How the flow shall be |
|--|
| Phase 1: |
| A very simplistic web page |
| Upload heightmap image |
| User can upload any terrain heightmap images of 1024X1024 resolution through file browser. |

Example of a heightmap image: https://goo.gl/images/YPz8Sa

The webpage to create a terrain from the provided heightmap
The final view for the terrain must be implemented exactly as such:
https://threejs.org/examples/#webgl_geometry_terrain

Directly use the same source code provided for this webpage.

All movement controls exactly as implemented in the provided reference webpage.

Only a few changes in controls as opposed to the ones provided in the demo

1. Add another control for camera to move vertically up & down using arrow up and down keys

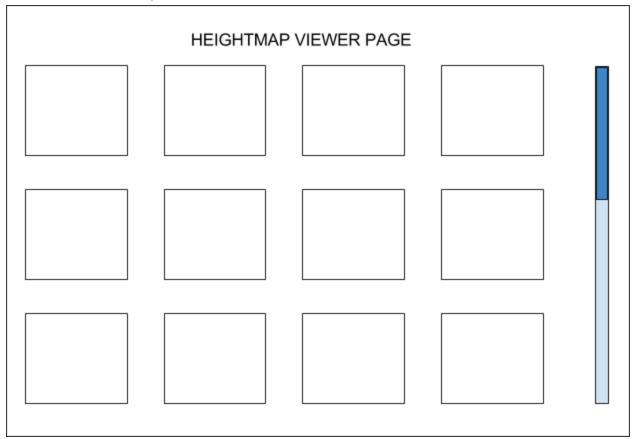
So how the controls will be:

- 1. Mouse move to rotate camera view
- 2. Left click or W for camera to move forward in direction which is being viewed at.
- 3. Right click or S for camera to move backward
- 4. A to move towards left while camera is looking forward.
- 5. D to move towards right while camera is looking forward.
- 6. Up arrow for camera to move up while camera is looking forward.
- 7. down arrow for camera to move down while camera is looking forward.
- 8. Enter key for a bird's eye view. For viewing the terrain from an isometric view from sky.
- Enter key to enter back into first person view.
 (Basically enter key performs a toggle operation between bird's eye view and first person view)

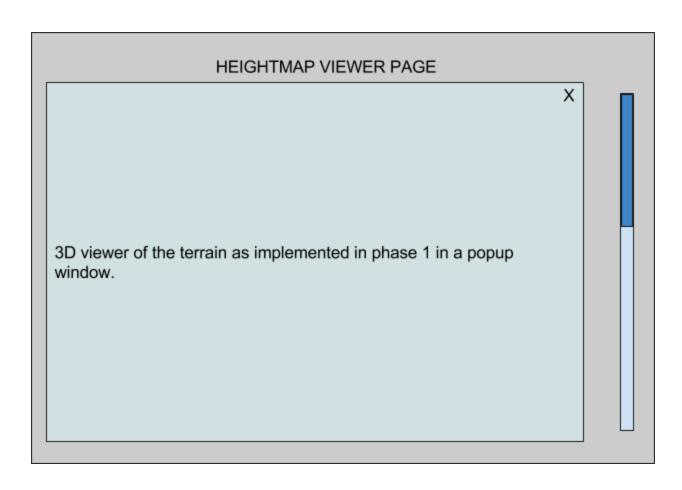
Phase 2:

The same functionality must be implemented on a gallery of images. (User can upload multiple images from file browser)

The UI to be something as such:



Whichever image the user presses on



For this view, even esc key does the work of the X button on top right. To close the 3D view pop-up and go back to heightmap gallery page.

Phase 3

These images to be received from a server. Instead of file browser uploading.

The APIs shall be provided once phase 2 is completed.