Open Space Notes (Meeting 6/27/19)

General Information:

Openspaceproject.com

The Open Space application is written in a **compiled language - C++**

The Configuration File is written in an **interpreted scripting language - Lua**

- New software contains the old software, including the menus and other specific features that have not yet been implemented in the new software
- Access to lat and long coordinates will be implemented as well soon

2560 x 1600 is the size of the projection screen

Switching from the Old Version to the New Version:

The new version of Open Space is downloaded from the website and put into an OpenSpace folder

The **girlsclub.html** is the file in that folder that gives us the configuration

The folder is now outside the Open Space folder - meaning the configuration file is now accessible with NEWER versions

Once Open Space is Loaded:

Old menus were similar to old fashioned Windows configuration of folders and options

New menus are at the **bottom left hand corner** that would turn into the new option configuration menus

Controls:

In OpenSpace you are **always locked into a specific item,** moving it, or becoming closer or farther away. There is no free flying around the space. You are flying in relation to another space item.

Zoom Out - Press the right mouse button and pull back on the mousepad
Zoom In - Press the right mouse button and move in on the mousepad
Move Left - Press the left mouse button and move left on the mousepad
Move Right - Pess the right mouse button and move right on the mousepad
Spin - Press the middle mouse button + Control + Shift
Pan Right - Press control and move right on the mousepad
Pan Left - Press control and move left on the mousepad

It is important with the new terrain, that whoever is controlling the planetarium, be able to pan over the earth to see the new content

Changing Planet Layering and Renderings:

This (->) symbol in the notes, represents an action that has to be done in order to follow the directions, either a button you need to press or a command that needs to be done.

-> Scene Menu
-> Current Focus: _____
-> Wrench Icon - Will adjust the properties of what is visible on the planet
- Three options once on the actual "wrench menu", (Properties, Color Layers, Height Layers)
- Green on the Menu signifies whether or not the option is "on"
- Multiple Layers are possible
- Depending on the planet, you can see a variety of properties
-> Control Tilt will allow more depth in the flyover in Earth (mentioned above in Controls)
-> Now that you have activated tilt, in order to move "closer", use right click which will now move it down parallel to see the atmosphere on a sideways angle
-> Also now that you have activated tilt, you can move "across" the earth by using the left click controls (mentioned above in Controls)

Friction Controls:

Friction controls are activated by one of two ways…

Touching the words at the top right of the screen

OR

-> Scene Menu
-> Shortcuts
-> Navigation

Friction controls...

ROTATION: Press F to thereby remove the friction to fly over freely without direct control using the mouse

While doing this, you can use the middle click control to pan around from the point that you are focused on

ZOOM: Press F + Shift to remove friction to fly up or down without direct control

To exit from ROTATION and ZOOM, just toggle again F or F + Shift

How to do Caching for Certain Location:

In the configuration file, at Line 85, you can change specifically for caching…

ModuleConfiguration = {
        GlobeBrowsing = {
                Cache Enabled = true,

After performing this, the program must be restarted, especially for an asset

********** TO BE INCLUDED AND REVISED FOR THIS DOCUMENT **********

(Micah's email regarding the web interface prototype - please add whatever he said in the meeting)

So the prototype web page Dave was mentioning can be found here: http://54.213.201.177/apollo_sites/ (later we will be moving it to ui.openspaceproject.com). This one is meant to work with the "apollo_sites" scene, which you can switch to by changing 'Asset="default"' to 'Asset="apollo_sites"' in the openspace.cfg .

So, this page be default will connect to OpenSpace running on the same computer as you open the browser on. So if you are just running openspace, and you visit that link, it should automatically connect.

I made this page to be an example, so you should do view-source and look at the source code. The whole page is only 170 lines of code, and I didn't use any javascript libraries like React or anything similar so that it would be as straightforward as possible to view how we communicate with openspace.

The example does used our openspace api js file,which you can get from here:https://www.npmjs.com/package/openspace-api-js or directly from the webserver here: http://54.213.201.177/apollo_sites/openspace-api.js I've tried to make everything else in the example as basic as possible so that it will be clear how to communicate with openspace through javascript, however you will be the first person to try to use this example, so I would urge you to reach out to me on slack (or email but I tend to write back faster on slack), if you have questions.

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