**Atlantis Unity Sim To Do List**

~~Fix the issue with the elevator cable appearing hollow~~

~~Generate a finer mesh for the sphere directly below the origin so the planet doesn’t look faceted~~

~~The angles of the forking stays are wrong – fix this~~

~~Add droop to the stays~~

~~Correctly position the top and bottom of the elevator cable~~

~~Create a git repot for the project~~

~~Build a GITIgnore from a unity template.~~

~~Add audio (e.g. using Filmstro Pro)~~

~~Get the automated fly-through working properly~~

~~Integrate the code that makes the elevator go up and down~~

Try to get the experience to work on GearVR (i.e. HMD that uses a cell phone)

Add lots of autogenerated habitats to the ring (see Houdini Procedural Generation https://www.youtube.com/watch?v=wjogDKp0mLk).

Add a runway and “marine node” at the bottom of the elevator cable

Show the anchor stations

Add ships with spools on them to show how they pull it up.

Add transit system cars and make them move.

Add a maglev space launch system that the passenger can board and ride into space

Fix issue causing the stay’s lighting to be incorrect

Enter the correct dimensions and mathematically correct curvature to the tethers

Cylinders need to scale better so that they are more visible at a distance

Get the transitioning script to control the TubeRadius to reduce the aliasing effects

Object.GetComponent<Renderer>().material.color.a = (Value from 0.0 to 1.0) (Set the rendering mode to transparent editing mode)

Use Level Of Detail techniques to apply higher resolution textures when close to the planet so that the land and ocean doesn’t look fuzzy (see: <https://www.youtube.com/watch?v=yOC0EKIpNRw> and <https://www.assetstore.unity3d.com/en/#!/content/4160>).

Need five rings (at least when close in)

Need to overcome the max triangle limit for the stays

Add code to show it rising up out of the ocean

Figure out why we can’t script the changing of the camera position

Show a manufacturing facility

Need a function to draw a cylinder at the between two points

Planet needs an altitude atmospheric effect

Add interactive elements (such as pressing elevator buttons to go up)

Make the elevator doors open and close

Glass bottom elevator

Add some planes flying below

Add Aurora Borealis

Add restaurant scene.

Exploratory Simulation

Gamify the Demo/Exploration

Make a game out of it (asteroid is coming to destroy the Earth...?)...

The “city lights” map in the EarthMat may not be working anymore. Confirm and fix.

Add real stars as point light sources as opposed to using a skybox.

Figure out how to move the camera down to the surface of the planet

Need to be able to make imported assets children of the mathematically correctly positioned placeholders

Update the scale of all objects to be life-sized