Home Work – COMP392 – 002

Due: March 5th , 2018, before class.

As discussed in class, the homework for Monday, March 5th 2018 consists in:

. creating a scene with the usual items (**1 pts**):

. camera,

. horizontal plane,

. ambient light,

. spot light,

. point light

. as well as:

. a regular tetrahedron using Custom Geometry (tetrahedron with all the sides equal)

(**5 pts**).

Hint: For this, you just need to modify the excerpt from the class work whereby the vertices array is specified (the faces array doesn’t need updating).

Please also follow the following:

. Name the solution html file **HomeWork\_COMP392***\_<fn\_ln>.***html** (where you should substitute your first name, last name for <fn\_ln> as usual in class works) (**0.5 pts**).

. For all the objects above set up a dat.GUI folder with respective parameters for quick experiments. As a minimum have a color attribute for each item. For the tetrahedron have also position, scale, rotation attributes as well as visible and wireframe boolean attributes. (**2 pts**)

. Refactor the tetrahedron creation in its own function and use it to populate a rectangular area of the plane with tetrahedrons in random positions, rotations and scales (as we have done in class with rectangular polyhedron “buildings”) (**1.5 pts**)

Total: **10 pts**.