**Graphics & Animation – Fire camp**

**Orbit Control – free camera control**

**Type of lights that change based on the mode day/night from dat.gui:**

* **Point Light that changes the intensity of the light based on day/night mode. Its coordinates are overlapped with the globe geometry rotating on the sky and producing the shadow on the ground**
* **Ambient Light changes colour blue/black according to day/night mode**
* **Spotlight used during night mode for the fire flame. Not working if rainy outside.**

**Ground boxes 100x220 for creating the ground. Texture is applied on all 4 parts of each box. Wooden boxes just for decoration.**

**Tree mountains created for decoration: produce and receive shadows.**

**Small wooden building that produces and receive shadows. Light, shadowing and shading applied here. It also uses a bump map to give the visual effect of a real building.**

**Flag is created using mesh deformation. It creates the impression of a windy weather.**

**Clouds particles are created, and they rotate constantly on the sky.**

**Rain particles created using a rain texture image. When raining, fire stops and the other way around.**

**Firewoods are created to look on top of each other and wood texture is applied.**

**Forest of trees are randomly created on the ground, each tree getting and receiving shadows.**

**A rusted house is created for decoration. Light, shadowing and shading applied here. It also uses a bump map to give the visual effect of a real house. It also has childs such as windows and door.**

**Globe created and changed texture based on day/night mode. It rotates on the sky like a sun/moon.**

**Deer.obj loaded on the scene, texture being applied.**

**Fire created using GLSL and a Spline. Gives the look of a real fire. Fire switched off when rainy from dat.gui .**

**There are 4 controls in dat.Gui. Day, Night, Activate /Deactivate Fire, Activate/Deactivate Rain.**

**Spotlight is called when it’s night and the fire flame is on.**

**Link :** **http://unn-w20039534.newnumyspace.co.uk/animation/index.html**