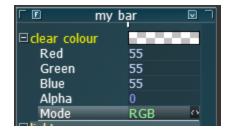
# **Graphics Project**

## **User Interface:**

The user interface in this project is used to modify the colour or the background. Change the direct/ colour and specular of the light source and change the features for the terrain, such as the Scale Multiplier/ Octaves/ Amplitude and Persistence and to re-render the terrain just a simple press of the button R.



#### **Clear Colour:**

The first function on the gui that you are able to change is the colour of the background. You can change each colour between 0-255 but Alpha and Mode will not change anything.



# Light:

The second function on the gui is for the light source. The first part is to change the direction of the light source, which you are able to change manual or just click the arrow and move your mouse around to get a nice dynamic moving light.

The second part changes the lights colour and just like the clear colour each colour can be changed between 0-255.

The final part is the specular power which the higher this value is the more sharper and brighter the objects will become and the lower the value the more the light will spread out.



### **Procedural Generation:**

The last part of the gui is the Procedural Generation which changes the outcome of the terrain for every time you generate it. You can change the Scale Multiplier which will scale a lot of things depending on the numbers you choose. You can also change the Octaves which will smooth out the terrain, Amplitude is a multiplier for the height of the terrain, Persistence keeps the height consistency similar (should only go between 0-1). Pressing R will regenerant the terrain but the terrain only has one seed so if you put in the same numbers the terrain will not change.