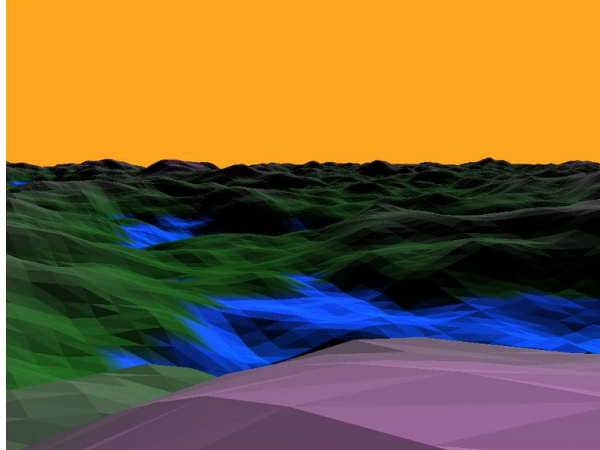


PS4 port proposal

For this project I plan to port my comp220 graphics project pictured below.



The project was written in C++ with SDL and OpenGL in visual studio's 2015, although it compiles easily in visual studios 2017.

I will be looking into using visual studio's cpu & memory monitor alongside Nvidia's profiler for the graphics and an open source alternative suggested by my tutor.

In terms of past optimization before this module, I made heavy use of pointers to stop duplication of objects such as the perlin noise generator and the classes responsible for plucking information from that class and feeding it into the graphics buffer.

I plan to if possible in the time limit add a method of dynamically feeding in vector data using concurrency however to further shorten the now almost non existent load time if I struggle to find other methods. This optimization method may even allow generation of infinite terrain fairly easily thich would allow smaller memory allocation due to only a certain range of data needing to be stored at any given moment.

I'm also sure due to my inexperience with graphics programming there are some general optimizations from the use of opengl that I can make use of.

Part 2

I will attempt to port the game with the use of Sony's Phyre Engine as sony's own graphics communication method for the PS4 may prove too low level for the time I have allocated to spend on this project.

However the use of the Phyre Engine may limit optimizations made in the previous task due to unknown factors such as how easy it would be to generate infinite terrain dynamically and if there are prebuilt shaders available that are many times more visually appealing and optimised than my own.