COMP4033 Computer Graphics:

Group project – a OpenGL interactive scene

In this project, you are expected to construct a 3D scene in which an actor is walking through (see the demo project) following some pre-defined path. It is expected there are several rooms, with walls, floors and cells. You may also include some settings such as desks, chairs, etc. The floor is textured and the rooms are light up. The users of your program are able to have interactive observation of the scene by using keys or mouse.

You are expected to include at least 3 effects/elements in your scene from the below list:

1) Dynamic texture
2) Animated objects (such as a bouncing ball, or planet models performing relative motion)
3) Particle system
4) Transparent objects
5) Mirror reflections
6) Shadows
7) Light sources visible by the camera
8) Bump mapping
9) Environmental mapping
10) Surface of revolution formed by a curve
11) Fractals
12) Or 1 effect/element not from the above

You are expected to write your code using the provided skeleton program. Please submit all the .cpp, .h files, the final executable file .exe, a text file readme.txt, a video groupnumber.mp4 file in your groupnumber.zip.

Here readme.txt should include a list/table indicating your team members' student number, name, details of individual tasks, and difficulties in doing the tasks and the overall project. You need also explain how to interact with your program, by specifying the keyboard responses, mouse events, etc. Just as the demo video, the .mp4 file is expected to record an interactive navigation in your scene, with the chosen effects selected from the above list.