The “Room” Project

**Brief**

You are to create a realtime 3D “room” of any shape and size. You will texture the surfaces of this space with artwork of your own creation. You will light the space with a series of different light sources.

At the very least, your “room” must include the following:
Basic mode of you new space is a “Subtractive” space.
The minimum space is a cube of any size.
The minimum number of user-created materials is 4.
The minimum number of lights is 3.
Do **not** use any of the default materials available within the Unreal Editor.

Naturally it is fine to create more complex shapes for the “room” as well as extra lights and materials.

The “room” can be as experimental and “unreal” as you like, however work towards a basic theme or mood for the overall space. What do you want a person to feel when they enter your room? Awe, wonder, joy, nostalgia, calm, confusion, curious, uncomfortable?

**Suggestions**

The Unreal Editor at a glance appears to be a complex thing, however with knowledge of a couple of the right things to click you can be up and running quickly. As with many modern software applications there are many more tools available than you are ever likely to use, so do not chase the need to know what everything does. Instead play with the basics. Push things around; experiment; make many/make fast until you find an interesting angle for you to refine. The scope of the project is not large, which should allow you to developed a more polished response.

As we like to often rave about, do not get hung up on the “real”. While the default imagery available within the Unreal Editor are glorious detailed renderings of rusted metal and solid looking stone, these are the results of many hours work by teams of professional artists. You will find it immensely more satisfying to allow yourself to throw in any style of art in as a material, and not being trapped into believing all things you create in this virtual space must look “real”. Explore your own aesthetic.

Consider how you use light within the space. A single well-placed/shaped light can often give you much more visual impact than megabytes of texturing. Also consider the relationship between lights and materials. A well-considered material, which works with where the light is coming from, could save you hours of extra modeling and lighting.

Think about scale and the relationship of the viewers height to the space around them. Is the viewer very large, very small or otherwise?

As with other project, do not try to cram too many ideas into this one space. Work towards a single theme or a mood to achieve with extra polish.

If you are familiar and comfortable with the basics, explore the extra options available within the Unreal Editor such as sounds and particles. Consider what a couple of well-designed sounds could add to your “room”.

**Technique**

The primary tool for this project is the Unreal Tournament 3 Editor. This is exclusively PC based software, so you will need to boot up your Mac machine on the Windows partition. The secondary tool will be some sort of pixel manipulation tool (paint program) for preparing materials for import into the Unreal Editor. Adobe Photoshop and others applications are available on the Mac side. Currently Gimp is available on the Windows side.

The process of creating and prepare artwork for becoming materials within the Unreal Editor will be discussed in class. All modeling in 3D and lighting will be done with the tools available within the Unreal Editor.

**PLEASE NOTE** – because of RMIT policy, all RMIT Windows based accounts are “volatile”. This means all data saved to the account during a session – be it to the desktop or documents – will be wiped from the drive when you log out. So it is important that you transfer all your files (that you want to keep) to some external medium (hard drive, server, flash card, DVD).

*There is, by default, individual server space for each student available on the “H:” drive, and this can be mapped to your “My Documents” folder by adjusting the properties of that folder.*

**Aims**

The main purpose of this project is to introduce you editing within realtime game engines. The realtime game engine is a powerful tool for developing immersive, interactive 3D spaces and is still often overlooked by those outside the gaming community. As you will see, it is relatively simple to very quickly create a basic space to move around in. However it also capable of being an extremely complex tool, including the ability to manipulate physics, particles, shaders and gameplay.

Another purpose of this exercise it to often introduce people to 3D modeling for the first time. You will get to have a go on the more complex 3D modeling and animating tools like Maya, however the realtime game editor gives you a much faster visual and interactive response for your efforts. It also gives you a better sense of the overall volumes you are creating, as you can move about, getting many viewpoints instantly.

**Completion Date**

The project is due for completion by **5:00 pm Thursday 7th May**. The format for the deliverables will be discussed in class.