Digital Asset Development: Assignment 2 Brief

Summary
This document outlines the task for Assignment 2, which is worth 60% of the overall module mark. This is an individual assignment. The deadline for submission of work is the end of **Friday 8th January 2016**. The assignment is intended to test the following learning outcomes:

- ***L2****: Use relevant software tools and techniques to create, manipulate and integrate a range of digital media assets.*
- ***L3****: Demonstrate awareness of how digital media assets are used in specific industry sectors, and prepare assets in a manner suitable for use in relevant projects.*
- ***L4:*** *Demonstrate a systematic approach to the naming and organisation of digital media assets.*

The Brief
You are tasked with creating a 3D level in the Unreal game engine that incorporates a number of specified assets. The level is not expected to constitute a game, and you should use a blank level rather than one of the game templates as a starting point for your development. You may add extra elements to your level beyond those detailed below, but you should ensure you complete the basic requirements before doing so.

Your Unreal project should include:

- A basic level comprising at least three different "rooms" connected by doorways or corridors. The level geometry must include a floor and walls, though ceilings are optional. The level should be built in Unreal using Brushes, and have materials applied to all surfaces. You can make the level more complex by adding staircases, pillars and other items if you wish – this will increase your mark if it is done without error.
- **Room 1 (start):** should be the starting point of the level, and should be empty of all objects other than a light source of some description (for example, a point light, spot light or emissive glow from a wall surface).
- **Room 2 (textured object):** must contain an imported 3D static mesh asset, which can be a geometric primitive (such as a cube) or something more complex. It must incorporate at least three different materials you have designed yourself, each of which must include a texture created in Photoshop and imported into Unreal.
- **Room 3 ("freestyle"):** must include a different asset from that in Room 2. This asset must have some more complex aspect to it: it could be an animated skeletal mesh, a static mesh using some complex material setup (for example, an animated glow effect), or a Blueprint such as a triggerable light. You are encouraged to research different possibilities and come up with something that goes beyond the tutorial exercises.
- Your project must incorporate an imported audio asset in some way. Examples of this might include a sound that plays when the level starts up, a sound used as part of the Room 3 asset, or as a continually looping sound (preferably not too annoying!).

To complete this assignment you will need to use Photoshop, Audacity and Maya (or equivalent software tools) to develop some of your assets.

Your submission will consist of the following deliverables:

- The project folder for your level. All assets in the Content folder should be correctly organised into subfolders and given appropriate names. For example, texture names should relate to the material that the texture belongs to, as well as describing the texture's function (eg. as a normal map). Note that a part of your mark relates to the organisation of your project.
- A folder containing the external assets generated for your project. These would typically include Photoshop files, sound files and 3D assets, all of which should be clearly labelled.
- A short report on your project development. This should discuss your overall level design, the process of developing each of your assets, and any problems you encountered. You should also list any resources used, including any tutorials other than the lab exercises. Your report should be spellchecked and professionally presented.

Resources and Guidance

The module tutorials for weeks 9-11 cover all the aspects of Unreal development that you will need to know in order to fulfil the basic requirement specified above. A large number of further video tutorials are available via the Unreal Engine website (https://wiki.unrealengine.com/Videos). These range from the basic introductory level to quite advanced techniques, so try and focus on the ones that are relevant to you. For specific items of information it may be quicker to use the Unreal manual or other documentation available on the site (https://docs.unrealengine.com/latest/INT/). Other learning resources for Unreal are available via YouTube, web forums, etc.

You are free to use elements of the Unreal Starter Content in your development – as materials for the floor and walls, for example – so long as they are clearly labelled as such in your Content folder. You should also indicate in your report where you have used any resources you did not generate yourself, for example, if you use the skeletal mesh asset from the Week 11 tutorials. The textures for the 3D asset in Room 2 should be prepared by you in Photoshop and imported. The required audio asset should be prepared in Audacity (or similar) and imported.

The following video tutorials are especially relevant to the required tasks:

- *Level creation*: Week 10, tutorial 5
- *Materials editing*: Week 10, tutorial 3 (and others)
- *3D asset import*: Week 11, tutorial 1
- *Model creation and applying materials in Maya*: Week 11, tutorial 4
- *Audio import and triggering*: Week 11, tutorial 3
- *Skeletal mesh setup*: Week 11, tutorial 2
- *Blueprints*: Week 11, tutorial 5

Marks Allocation

The assignment as a whole is worth 60% of the overall module mark. This is divided up as follows:

- 30% for level development, based on fulfilling the requirements specified above for the overall environment and the assets used. This includes a mark for project organisation.
- 10% for the Room 3 asset. This is based on the complexity of the asset, with marks given for going beyond the tutorial material.
- 10% for your external asset development – in other words, for your image textures and audio files.
- 10% for the report.

You are not being marked for the complexity of your imported 3D model. You will gain marks for complex or interesting level design and materials production, texture editing in Photoshop, sound editing/quality of the imported audio, and for being ambitious and innovative in your asset development for Room 3.

Plagiarism - Important!

This is an individual assignment, so you should work on it alone. **Students are expected to be familiar with, and adhere to, the University's guidance on plagiarism which is available via the UWS website. Plagiarism includes both copying someone else's work, and allowing your work to be copied by someone else.**

Assignment Submission

Submission will be via Moodle upload link. You are required to submit a zipped folder structured as follows:

- A folder titled *Project*, containing your Unreal project data.
- A folder titled *Development Assets*, containing the external assets generated for your project as outlined in the *deliverables* section above.
- A folder titled *Report*, containing the report in Word or PDF format.

The deadline for submission is midnight on Friday 8th January. Try not to leave it until the last minute!