ASSIGNMENT 3: 3DS MAX PROJECT

Due 5pm 5th February, 2017
**MAIN OBJECTIVES**

In this project you will demonstrate

- An understanding of fundamental components of Autodesk 3DS Max
- Modelling 3D geometry and scenes
- Materials modelling
- Lighting and camera set up
- Basic 3D Animation
REQUIREMENTS

Model a scene using 3D studio Max. The scene specifications in the following slides detail some compulsory objects that need to be included (choose one of these scenes).

1. You MUST incorporate ALL of the following key objects somewhere into your scene:
   - A transmissive / refractive object
   - A highly reflective surface
   - A bump-mapped object
   - A texture-mapped object
   - Shadows

2. Create an ANIMATION of a 3D Scene (may be the same scene as above). This should include at least ONE of the following. We will discuss details in class later.
   - Camera animation
   - Movement of objects in a non-linear trajectory
   - Animate some other aspect of the scene e.g. space warp, light or environment property OR physics based animation

Important: you must model key objects yourself. Third party objects (i.e. created by others) are acceptable for background details (and textures) but you must clearly state where you have used such objects and where you got them.
SCENE 1: CHESS

- Model at least 5 pieces of a chess set i.e. king, queen, bishop, knight, rook, pawn

- You do not have to copy the example image and are encouraged to vary the exact look of the pieces.

- The layout of the rest of the scene is completely up to you (a chess board is not a requirement)
SCENE 2: MONOPOLY

Model at least 5 of the standard monopoly pieces: wheelbarrow, ship, sack of money, horse and rider, classic car, locomotive, thimble, howitzer cannon, shoe, dog, iron, top hat.

 Pieces do not have to look identical to the image; in fact you are encouraged to be creative and intentionally vary the look.

The rest of the scene is up to you (a monopoly board is not a requirement)
SCENE 3: SCALEXTRIC

http://www.scalextric.com/

- Incorporate a car/vehicle model and one each of the basic track pieces (i.e. a curved section, and a straight section) from a scalextric set. Also include a small section of assembled track.

- The exact format of the track is at your discretion.

- You do NOT have to recreate the scenes to the right.
SCENE 4: WILDCARD

- The theme of this assignment is 3DStudio Max and Classic Game Pieces (or a modern variant thereof) and the focus is on modelling objects from scratch rather than the scene itself, which is less important.

- The previous scenes have been chosen because they represent a certain level of complexity of models that is believed feasible in the time available.

- If you want to propose a game scene with a clear definition of 3D game pieces, you MUST let me know before you put too much work into it.

- Please take note of the assessment criteria in the next slide.
Marking and Effort

- This assignment is worth 25% of the annual mark
- 60% of the marks will be for satisfying the compulsory requirements. 40% (qualitative marking) will go for complexity of models, materials, and animation, individuality, and overall scene and animation quality. Note: you are expected to spend less than a quarter of the time on the animation component.

Submit through mymodule.tcd.ie:

- a) One rendered image at minimum 1024 x 768 resolution
- b) Your 3DS scene file and any supplementary materials (textures, objects etc.)
- c) A link to an online video of your animation e.g. on youtube/vimeo OR you can just upload the file somewhere (such as your student web space) and provide me a download link. PLEASE DO NOT attempt to upload your video on the Blackboard system as it will not handle large files very well.

- You should not make changes to the youtube/vimeo file after the deadline
- You MUST ensure the video is available until at least August 31st, 2017.

The final deadline is 5pm on 5th of February, 2017

- Late submissions will incur a penalty of 20% for each day late