



# Dublin City University

## School of Electronic Engineering

### Module EE563

#### Graphics and Visualisation

#### Semester 2, 2014

## Assignment 1

**\*\* Due:** Week 8, Wednesday April 2nd 2014 @ 10am \*\*

All project software will be developed using the Java Developers Kit and Java 3D API (see module website for information about how these packages can be obtained).

### Deliverables:

You are required to create a custom 3D scene that demonstrates the following aspects of Java 3D:

- Scene graph design
  - Group nodes
  - Shape nodes
  - Environment nodes
- Custom geometry
- Lighting
- Texture mapping
- Action
- Interaction

Sample applications would include:

- Penalty shootout game
- 3D modelling of architecture
- Flight simulator

### Assessment:

The assignment is worth 10% of your final result. The marks will be broken down into Design, Implementation/Coding and Documentation.

- **Design** - the overall design and features of your system including the design of the scene graph.
- **Implementation/Coding** - is the implementation of your design, the quality of your code and the operation of your realised scene.
- **Documentation** - refers to the final report and the commented code. The final report should describe your scene graph design, application features and interesting code segments.

### Instructions:

- You should submit an electronic version of your assignment via moodle:
  - Your report should be in Word for Windows (.doc) or PDF (.pdf) format.
  - Your code should also be submitted with your assignment.
  - The report and code should be placed in one winzip (.zip) or gnuzip (.gz) file and this file should be uploaded via the moodle submission page for the assignment. A direct link to this page can be found on the ee563 website.