

1. About the Coursework

For this coursework you are required to design and develop a simple 3D scene.

2. Coursework specification

2.1 General

Assessed on-line during practical sessions in **Week 11** .

The two pieces of coursework for this module will each be marked out of 100 and the two marks will be combined. The two pieces of coursework together constitute 50 percent of the module assessment.

The two-hour examination constitutes the remaining 50 percent.

It is anticipated that the total coursework will take you approximately 30 hours to complete and write up. The first piece should take approximately 20 hours and the second 10 hours.

You should be careful not to spend too much time on coursework to the detriment of your performance in the examination.

You should prepare a brief written report (about two sides of A4) explaining how you used features of X3D in creating your scene and upload this, and a machine-readable listing of your X3D file. If there are parts of your design that you would have liked to have implemented, describe these in your report.

Upload to the module Moodle site by **13:00 on Wednesday 23 April 2014 (Week 11)**; the day before the coursework is assessed online.

2.2 The scene

The aim of the coursework is for you to demonstrate competence in the use of the 3D graphics technology, X3D, in particular, construction of simple 3D objects using X3D primitives and transformations.

REQUIREMENTS:

In order to write this application you will need to think carefully about how to use X3D transformations to structure the objects in the picture.

You are required to construct a model of **the Turing Building** using X3D.

Your building should contain items of furniture in the entrance foyer.

Multiple viewpoints should be defined to show off the distinctive features of your model.

It is not essential in order to be awarded (at least) a pass grade, but it will earn extra credit if you animate opening the front door of the building.

3. Assessment

3.1 Coursework on-line assessment

The purpose of on-line assessment is for you to demonstrate your scene thereby demonstrating what you have learnt about 3D graphics, X3D and transformations.

At the time of on-line assessment your scene should be working. You will demonstrate in a room where your lecture or practical session takes place, on the lecture/practical room machines or your own laptop.

If you are bringing in equipment, leave enough time to get everything set up. It is a good idea to try out your arrangements before the day of assessment.

If you plan to demonstrate your solution using software other than X3D-Edit please inform the module leader at least 48 hours in advance. If you are using different software it would be beneficial if you could do the demonstration using your own laptop.

If there are parts of your design that you would have liked to have implemented, but didn't have the time, be ready to describe them in detail to your assessor. (You should have written about them in your report too.)

A timetable for the on-line assessment will be constructed nearer the day.

3.2 Marking scheme for on-line assessment

Marks will be awarded for:

1. Proficient use of X3D: primitives, transformations, appearance
2. Extra marks for imaginative ideas/usage

4. Computer systems

The X3D-Edit package is available on the university's computers and can be downloaded for use on your own computer. If you prefer, you may construct your scene using an ordinary text editor.

You will need to use X3D to implement your design. X3DEdit is available in the room where your practical session takes place.

X3D code must be created "by hand".

The use of drawing tools that export X3D is prohibited.

5. Useful references

See lecture notes for references to X3D tutorial sites.