SCHOOL OF MATHEMATICAL AND COMPUTER SCIENCES

F24BE2/F29GA2 Graphics & Animation

Java 3D Introductory Notes

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In this module we shall be looking at some of the fundamentals of computer graphics (as covered in F23AE3 or F29AJ1) in more detail but also investigating more advanced topics such as animation.

This module uses Java running under Linux or Windows. Initially we shall be using the Java 2D system which is a core part of Java. Later, however, we shall be using Java 3D which requires some additional APIs. In order to use Java 3D under Linux you will need to add some locations to your *CLASSPATH* environment variable. These are -

/usr/java/jdk1.5.0_08/jre/lib/ext/j3dcore.jar /usr/java/jdk1.5.0_08/jre/lib/ext/j3dutils.jar /usr/java/jdk1.5.0_08/jre/lib/ext/vecmath.jar

Note that you CANNOT run Java 3D on a Linux machine via *Exceed* from a PC running Windows.

You should take copies of materials which I make available to you via the *graphics* subdirectory of my *www* directory –

http://www.macs.hw.ac.uk/~nkt/graphics/

Online documentation for version 1.5.0 of the Java 3D API, which you will probably want to have open when writing your code, is available from *java.net* at -

https://java3d.dev.java.net/

You will be expected to undertake a significant amount of programming in this module. You should do this in a timely manner as and when requested. The work will build up to a final assignment which contributes 20% of the mark for the module. The other 80% of the marks will be derived from an examination at the start of Term 3.