

Java 3D Scene Engine

Ashutosh A. Morwal

September 2012

Dissertation submitted in partial fulfilment for the degree of
Master of Science in Advanced Computing

Computing Science and Mathematics
University of Stirling

Abstract

Developing user friendly graphical user interface (GUI) which will avail developers to create portable scene graphs which can be used in java3D applications or in applets on websites.

Users should be able to-

- Put primitive shapes given by java3D, as well as external models supplied by third parties in to their scene graphs.
- After adding the objects users should be able to move using interactions, or animate objects.
- Adding textures objects.
- Delete added objects.
- Save/Load scene graphs.

The method that was adopted for the development of this application was spiral development model, throughout the development of the software; the source code was revised many times and modified for the improvement, the core design of the software was also changed to make the application substantially faster than it was at the early stages.

So far, the application performs up to the expectations and requirements which were specified at the beginning. Most of the requirements specified have been fulfilled.