

STUDY AND IMPLEMENTATION OF 3D COMPUTER GRAPHIC AND DEVELOP A 3D MODELING SYSTEM WITH JAVA 3D API TECHNOLOGY

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ABSTRACT

This project is intended to develop a 3D modeling system by using Java 3D API technology. This project will study on the basic concepts of 3D computer graphic and technology that can be integrated into system, which will include Java 3D API which use scene graph to present 3D objects. The basic function of the system are create/ modify 3D objects and able to view the 3D object in different angle. For convenience, the system will provide the save and load function. The biggest challenge of this project is to provide the function that allow user to modify a existing object and change it to the desired 3D object user wants. Future enhancement will be implementation of texture, lighting and transfer other 3D format files into scene graph for viewing and modification. Throughout the project, the author will be able to master Java 3D API, and develop a 3D modeling system that helps users to create 3D objects.