IMPLEMENTATION OF SPHERICAL ENVIRONMENT MAPPING ALGORITHM USING OPENGL

By

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STATEMENT BY THE AUTHOR

I Hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, not material which to substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgment is made in this thesis.

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ABSTRACT

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In rendering computer graphic projects, 3D rendering tools such as 3D MAX or MAYA already became a most wanted option. Moreover, through this paper, the author wants to show that rendering a 3D scene is not always need tools. Besides, implementing spherical environment mapping algorithm in rendering a scene is possibly done without immense hindrances.

Functions for creating objects, positioning them in the scene, defining the lightning and material properties, applying the texture mapping and environment mapping are all available in OpenGL library. Subsequently, the task is to utilize those functions to be used in creating the scene.

The point of doing this project is rendering a 3D image that possibly done without using any image rendering tool. In fact, coding an OpenGL application is not that complicated. In short, this could be an alternative way to learn or to render 3D scenery instead of purchasing a pricey rendering tool.

DEDICATION

This thesis is dedicated to Jesus Christ my savior, my family, and friends. To both art and technology that have brightened my entire part of life. To people that have not received a proper education.

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