BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI
IS F311 Computer Graphics
Second Semester 2020-2021

Assignment 2: 8%

Learning Objective

To learn OpenGL 3D viewing and hierarchical modeling

Problem Statement

Please have a look at the enclosed video of a wall fan. Simulate the same using OpenGL. Kindly note the following features of the desired simulation.

On key press of ‘s’, the fan should start spinning the blades.
On key press of ‘t’, the fan should stop.
In addition to the rotation of the blades, on key press of ‘h’, lateral/horizontal movement of the blades (left-right-left movement as in video) should be implemented,
On pressing ‘u’ (up), ‘d’(down), ‘l’(left) and ‘r’(right), the fan should start moving up, down, left and right respectively on the current wall its located in.
Besides the fan on a wall, you need to construct a room with three of four walls , ceiling, floor and at least an other object.
You should also develop options to view the fan from different perspectives.
On window resize, the aspect ratio needs to be maintained.
On key press of ‘q’, your application should quit.

Submission

Submit your code along with a readme.txt using nalanda, no later than 8.00 PM 27th April, 2021.

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