Assignment 2 (Individual)

Haunted House

Deadline: Monday 19/11 at 11:59 pm

Description:

In this assignment, you are required to implement a 3D haunted house scene. The house should have two rooms and a monster/ ghost/ any character that appears and disappears every certain interval of time **or** on keypress.

Theme:

You are required to choose **any** two rooms of a house to be drawn. For example:

- 1. A living room and a kitchen
- 2. A bedroom and a living room

Modeling:

- Each room should have at least 5 different objects (more than 3 primitives for each object). For example:
 - 1. The living room can have: a chair, a table, pictures hanged on the wall ...etc.
 - 2. The bedroom can have: a bed, a mirror, a closet ...etc.
- Since it's a haunted house, a character must appear out of nowhere then disappears. This character must contain at least 3 primitives.
- Models must appear as realistic as possible (Not just a random arrangement of primitives).
- Every object should be colored. Use the attached file (color).

Animation:

- 1. The rooms are animated along with their objects (trivial animation). **For example:** the rooms can be rotated and the objects are translated (back and forth) or scaled (up and down).
- 2. The colors of the whole scene keep on changing randomly.
- 3. The character should have two different animations.

Controls:

- 1. For each room, the animation can be played or stopped by means of keyboard or mouse.
- 2. There exists a button which changes the colors and another button to reset the colors to their initial values.

Camera:

- 1. There exists a camera that has a view from the top of the scene.
- 2. There exists a camera that has two different side views (left and right).
- 3. The user can alternate between the different camera views using the keyboard.

Bonus (any one of these):

- 1. Complex 3D models.
- 2. Complex animations (using Bezier translation along with a trivial transformation).
- 3. Sound for every action.

Other ideas are encouraged as long as they are original ©

Submission Guidelines:

- → The assignment should be implemented in OpenGL
- → This is an **INDIVIDUAL** assignment. Cheating cases will lead to a **ZERO**. Also, copying the code from the Internet will lead to a **ZERO**.
- → This assignment is worth 7.5%
- → Deadline for the assignment: Monday 19/11 at 11:59 pm
- → Submit your .cpp source file ONLY (Not the whole project or the solution file):
 - Submission email address: graphics.dmet502@gmail.com
 - Email subject: Your tutorial number followed by your id (T-01 37-XXXX)
 - Emails without a subject will not be graded.
- → Submit a video of your assignment through this Form.