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 .