CGUE 17 - Submission 1, Robogrip

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Starting the game

robogrip.exe accepts the following start parameters configurations:
If no parameters are given it starts with default values of: 800x600, not fullscreen, framerate 60 and Y axis inverted

- int:width int:height (2 parameters)
  e.g robogrip.exe 400 500 (resolution 400x500)
- int:width int:height int:fullscreen(1|0) (3 parameters)
  e.g robogrip.exe 400 500 1 (goes fullscreen @ 400x500)
- int:width int:height int:fullscreen(1|0) int:framerate (4 parameters)
  e.g robogrip.exe 400 500 1 50.6 (goes fullscreen @ 400x500 @ 50.6 fps)
- int:width int:height int:fullscreen(1|0) int:framerate int:invertYAxis(1|0) (5 parameters)
  e.g robogrip.exe 400 500 1 50.6 1 (goes fullscreen @ 400x500 @ 50.6 fps with Y axis inverted)

Getting through the game

Press and hold left mouse button to "attach" on the left handle and being moved forward faster. After that, press and hold right mouse button to "attach" to the right handle and move forward faster.

"Features" of the game

- Free movable camera: Free movement with "a" and "d" (backward movement and free forward movement are implemented but restricted for gaming purposes)
- Moving objects: Rotating Cube behind player spawn, moving autonomous. Cube behind finish line, moving when clicking left or right mouse button
- Texture Mapping: Yes, all objects in game have it, see below
- Simple lighting and materials
- Controls: "a" strafes left, "d" strafes right, mouse tilts camera as common in 1st person games, left mouse button and right mouse button move forward, see above
- Basic Gameplay: Clicking and holding the left mouse button before next handle on the left side accelerates forward movement. Clicking and holding the right mouse button before next handle on the right side accelerates forward movement. The finish line is a cage which is moveable by the clicking left or right mouse button).

Illuminated Objects (also textured) Textured Objects:

All Objects, except the Sun Cube, are illuminated by a directional light:
- Cube of Death (starting behind the player, automatically rotating)
- Floor
- Finish Cube (Cage in the end)
- Handles (left and right side of the moving path)
- Sun cube not illuminated, only textured
- Pink Sphere not textured, only illuminated

All used libraries are in the folder "external". They are as follows:
- Assimp: http://assimp.sourceforge.net/
- freeImage: http://freeimage.sourceforge.net/
- glew: http://glew.sourceforge.net/
- glfw: http://www.glfw.org/
- glm: https://github.com/g-truc/glm