VAR-MIRI Q1. 2017-2018
XVR Project

Emeline Got & Nils Burlat

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Scene description

The scene is composed of one temple, which contains three items : a helmet, a roman axe and a fireplace. In front of the temple, you can see two statues of Aphrodite and Cupid. There is also a column composed of two parts, a long main part and a little block above.

In this scene, the user is able to select the item they want. The item selected can also be translatated, rotated and scaled. Notice that a green light can be applied on this selected item.

Three light sources are present in the scene with different property for each. There is the overall light that illuminates the whole scene, the color light that colors the scene with a selected color and the flashlight that can me moved around the scene.

Commands

The different items in the scene can be selected with the following commands:

- N: get the next item
- P: get the previous item
- S: enable or disable the green light on the selected item

The selected item can be moved with the following commands:

- UP/DOWN: translate along the axis
- LEFT/RIGHT: rotate along the axis
- Q/A: increase or decrease scale along the axis

The axis could be selected by pressing X, Y or Z.

At any time, the user can find which axis is selected, the name of the selected item and if the selected item is green-enlightened: there is a reminder on the top-left of the screen.

The commands for the light selection are the following:

- T: to enable or disable the flashlight (it is better to use it when the overall & color lights are disabled)

- C: to enable or disable the color light. We can then change the color with the numbers 1 (blue) / 2 (green) / 3 (purple) / 4 (red)
- O: to enable or disable the overall light. The overall light is disabled when the color light is activated. This light is the one used at the launch of the scene.

How did we realize it?

Two arrays have been created, one contains the meshes (*CVmNewMesh*) of the items and the other contains the objects (*CVmObj*). This allowed us to navigate through the different items in the scene and to apply the transformations on the i^{th} element (*i* is selected with N/P).

We created the three different lights manually.