Comp380

Programming Assignment #3
Due April-25 (Fri.) (before 11:59pm)

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Objective: Understand how to perform transformations in terms of "viewing space".

Developing environment: Usage of Windows OS and Visual Studio (2008 or higher) is mandatory

Requirements:

1) Implement this assignment from the result of PA#2.
2) Provide two key maps, "m" and "v" to differential transformations defined in the modeling space and viewing space.
    a. All the transformations implemented in PA#2 are now performed after you type "m".
    b. If you type "v", all the transformations (which will be described in 3) and 4) in this spec.) are performed in the * viewing space *.
3) Provide translation function along x, y, z directions in the viewing space (15 pts)
    a. The amount of translations is determined by the mouse movement.
    b. If you type "x" or "y", the cow model translates in the * viewing x-y space *; the cow should follow the mouse cursor pointer.
    c. If you type "z", then the cow model translates along the z-direction in the * viewing space *.
4) Rotate the cow around the x-axis in the viewing space when you type "r". The center of the rotation is at the center of the modeling space. (15 pts)
    a. The rotation amount is computed based on the mouse movement.

Deliveries:

1) File format : StudentNumber_PA3.zip (ex. 20149999_PA3.zip)
   - zip file includes "Modified source codes of your solutions", "newly added codes" and "README.txt"
   - README.txt specifies the files you made/changed including brief comments
     (ex. file name :: line number :: what you've modified)

2) Submit your work by sending them to TA, cs380ta@gmail.com

Policies: Everyone must turn in their own assignment. You can collaborate with others, but any work that you turn in should be your own.