

3D HOUSE

You can use OpenGL built-in functions of straight lines (GL_LINES) and quads (GL_QUADS) to define your own models and built-in functions of translation, rotation and scaling to design your own transformations. No other built-in model/transformation is allowed.

Execute the sample .exe to check functionalities of each interaction listed below.

To run the .exe, keep glut32.dll in the same folder as the .exe.

User Interaction	Effect
Down Arrow	Camera Moves Backward
Up Arrow	Camera Moves Forward
Right Arrow	Camera Moves Right
Left Arrow	Camera Moves Left
Page Up	Camera Moves Up
Page Down	Camera Moves Down
L (or l)	House Rotates Clockwise
R (or r)	House Rotates Anti-clockwise
U (or u)	House Scales Up (upto twice the original size)
D (or d)	House Scales Down (upto zero size)
9	Rotating Window Opens
0	Rotating Window Closes
Home	Sliding Door Opens
End	Sliding Door Closes
Right Click	Menu Bar Appears
	Sliding Window Slides Up
	Sliding Window Slides Down
	Rotating Door Opens
	Rotating Door Closes
	The House Returns to Original Size
	Exhaust Fan Spins Clockwise
	Exhaust Fan Spins Anti-clockwise

Following tasks are already done in the demo code. Include these in your project.

User Interaction	Effect
1	Camera Rotates Left
2	Camera Rotates Right
3	Camera Looks Up
4	Camera Looks Down
5	Camera Tilts Clockwise
6	Camera Tilts Anti-clockwise



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Box and Tyre Demo

User Interaction	Effect
Down Arrow	Quad Angle Increase
Up Arrow	Quad Angle Decrease
Right Arrow	Box Angle Increase
Left Arrow	Box Angle Decrease
Page Up	Box Scale Factor Increase
Page Down	Box Scale Factor Decrease
Home	Tyre Angle Increase
End	Tyre Angle Decrease
7	Tyre Scale Factor Increase
8	Tyre Scale Factor Decrease