**3D HOUSE**

Here, we use OpenGL built-in functions of straight lines (GL\_LINES) and quads (GL\_QUADS) to define our own models and built-in functions of translation, rotation and scaling to design our own transformations.

|  |  |
| --- | --- |
| **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 |

|  |  |
| --- | --- |
| **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 |