



# UPES

## Graphics and Animation Tools

ACADEMIC SESSION 2020-21

B.Tech CSE –Open Source and Open Standards

Sem VII

**PRACTICAL WORK FILE**

EXPERIMENT 6

[\[LINK TO OUTPUT FILES\]](#)

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# EXPERIMENT 6 : 3D Hut Using Blender.

## Objective:

To design a 3D Hut using Blender

## Requirements:

A Ubuntu 18.04 10 running system with 6 GB RAM was used to carry out the experiment.

## Steps to create a 3D Hut

1. Click the shape button on the left panel and then insert a cube, and then also insert a cone shape. These shapes can be moved by dragging the blue, red and green arrows from each side of the shapes.
2. Select both shapes and click on the small spanner on the top right panel, and in edit mode.
3. Select 'subdivide' from the left hand menu, and click it a few times in order to add different sections to the shapes so they can be later modified.
4. Drag the edges of the cone so that it creates corners which match the corners of the cube.
5. Position the cone on top of the cube so that they touch, and then hold the shift button and right click on both shapes, then click 'object' in the bottom left corner, and select 'join'. This should make the object as one.
6. Add Windows and a Door to the House
7. Select the surfaces of some subdivided surfaces where you want your windows to be whilst in edit mode.
8. Then click on 'extrude region' from the left and menu and drag the lever to the left side of your screen with your mouse in order to push a window shape into the side of the cube.
9. Next select the two subdivided sections which lie above each window and subdivide them once more so that there are four.
10. In edit mode, select the edge tool from the bottom panel and then use the 'translate' transformation manipulator to pull in the edges so they appear curved.
11. Go to the scene tab and change the units to metric so that they are in metres and centimetres.
12. Make sure that the house is selected and press 'n' so that you open up the right hand toolbar. You then need to scale the house down by changing the dimensions.

## Steps to Render

1. Add a place object and set it child (with keep transform checked to the 3d Hut Object)
2. Add light and place it in a suitable position
3. Add camera, Press CTRL+ALT+0 (Num) to position it along the view port
4. Click render on top left
5. Save the output image as PNG.

## SNAPSHOTS:



















