University of Petroleum and Energy Studies

School of Computer Science

Department of Cybernetics



GRAPHICS AND ANIMATION TOOLS LAB FILE

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Course: B. Tech.

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Experiment 8: Design of Car Model using Blender.

We need to create a Car model in this experiment.

- 1. Clear your default interface of blender which includes deletion of the cube.
- 2. Go to the mesh and select the image option and set a picture of the car as a background image in blender.
- 3. Go to mesh and select a cube and cut this cube in half and now you can use a mirror modifier to complete the other half of our car design. With the help of a mirror modifier, you can design one side of the car and another half will follow accordingly. Also do check clipping mode in mirror modifier.
- 4. Now extrude the cube in the form of a rectangular bar which will act as a body for our car and do follow the background picture you used in step-2.
- 5. Now give the cube the almost exact shape of the central portion of the image.
- 6. Now go to face select mode and select the upper portion of the cube and extrude it a little bit to give it the shape of the roof of our car. And extrude from the slide to give it a little slant for a more realistic view.
- 7. Now to design the wheels of our car, go to shapes and partitions and put them across our car body and give them a good circular shape in form of a wheel. Select all the sides except the area consisting of wheels. Now go to the top view and extrude the whole body sidewise, which will give you a good shape of the body with space for wheels.
- 8. Now move all the edges a little bit inwards to give a more realistic view to the car. And now move the front view of the car in the middle slightly to give it space for headlights.

- 9. Now look at your background picture and extrude from all sides where you need to provide a great real view accordingly.
- 10. Now go to the central portion of the wheel area and go to mesh and select a circle and go to circle setting and change it to 16 vertices and now hit R-90 and select the circle and extrude along x axis to give a real view for the thickness of the tyres.
- 11. Hit E and scale it down to give the rims of tyre a great real view. Now press and scale the tyres a little bit outward to give a slight bulge to it. Now select the alternate of 16 vertices and give it a slight extrude and design for a real nice-looking view for tyres.
- 12. Duplicate the same tyre by pressing, press L and press D to duplicate the tyre and press G and Y to move the front tyre to the back side and fix it in the centre.
- 13. Add rearview mirrors by extruding the surface of the car side wise and move it towards the driver and tilt it a bit down.
- 14. Now for the colouring part, go into the edit mode again, and select the faces you want for one colour, and click the + button in the materials section
- 15. This will apply the colour to all faces, next click on another face, click the + button, and click Assign, this will give the selected face the new material.

Google Drive link

https://drive.google.com/drive/folders/1cQdmrX4_aaWvVLW5Dk9flVoyZRRaFJX8?usp=sharing

Output



