



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

School of Computer Science

2020-21

GRAPHICS AND ANIMATION TOOLS LAB

Faculty: Dr. DURGANSH SHARMA

Assistant Professor

Department of Cybernetics.

School of Computer Science, UPES

Submitted By:

Name- Tanvi Aggarwal

Roll no-R100217079

Batch-B3

Semester- 7

Course-B.tech. CSE-OSOS

Sap Id- 500062388

PROJECT TITLE- Sunset Scene

Components of the project-

Mountains-

1. Create a new file in blender and delete the already existing cube
2. We will go to blender preferences, then to add ons and search for landscape and turn it on.
3. Then from mesh, add landscape.
4. Go to choice menu at bottom left and change random seed according to your choice.
5. Then go to modifiers tab, add subdivision surface to make the landscape smooth.
6. To give a look and realistic look, we can add hdr by changing from color to environment texture and add hdr of your choice.
7. Download some roughness, shading and other textures. Then go to shading, then to principal shader and press ctrl+shift+T and select your downloaded textures in sequence to add to landscape.
8. Go to edit mode and selected all edges and press U for uv mapping options and select first option to get the effect. Increase scale to 5 or 6 to increase the effect.
9. Add noise texture, mix shader color ramp, connect fac(noise) to fac(color ramp), then connect color of color ramp to fac of mix shader and lastly connect transparent shader bsdf to mix shader. We are done.

Sun-

1. Add a sphere and place it at right position accordingly by pressing G.
2. Give it material, we can give yellow or orange color to show the sunset color of the sun and assign the material.

Ocean-

1. Add a plane and add the ocean modifier and we can give texture as per your choice.

Road-

1. Add planes and place them like a road.
2. Add image texture with the base asphalt.

Background-

1. Add the image as plane and give the desired image for background.

Building-

1. Add cube and then we will make some adjustments in the cube like length and breadth.
2. After making changes in the cube we will select the upper face of cube and then extrude it. Like this we are going to increase the length of our building.
3. After this add edge loops to make windows of the building.
4. Now add new material on the windows and set roughness to 0 and transmission to 1.
5. Now go to shading part and add various properties like noise texture, bump etc to give realistic effects on windows.
6. Extrude the lower part of the building outwards to make shape of door accordingly.

Lamp-

1. Add a cube, scale it and extrude top face to make body of lamp.
2. Again extrude the upper face and tilt it outwards to give it a shape like lamp.
3. Add emission and give some orange color to make them lightening.

Tree-

1. Click on the edit option and go to preferences and add curve: sapling tree gen.
2. Then go to add, then to mesh, select sapling tree gen from there.
3. from option menu, add leaves. Finally add color to the leaves and branches accordingly.

Car-

1. Add a cube and align the cube in front section of the car, duplicate this cube by pressing "Shift + D" and then place it to form a rough model of car

3. To tweak the shape of model, press Tab to go to edit mode and press 2 to select edge
4. To create headlights of car, we will extrude front face by E. Likewise we will make windshield and mirrors.
5. Again use vertex select and make space for car wheels. Press “Shift + A” and add a circle, scale and extrude it and finally place it on appropriate position.
6. Select inner faces of the circle and extrude it to create rims of the car. We can make some minor adjustments in the shape to make it look more realistic.
7. Create new material with color of your preference or we can provide an image of colors and assign it to the selected object.
8. Reduce roughness and do other adjustments like Similarly set color for tyres, headlights and windshield
9. Render the object in Eevee mode and we are done.

Rendered Image-



Google Drive Link-

https://drive.google.com/drive/u/0/folders/1ZHSSwXogfexYHqITQe7_yTGZDYnGGIfH

