



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

School of Computer Science

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GRAPHICS AND ANIMATION TOOLS LAB

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Project title-:

Crystal Castle

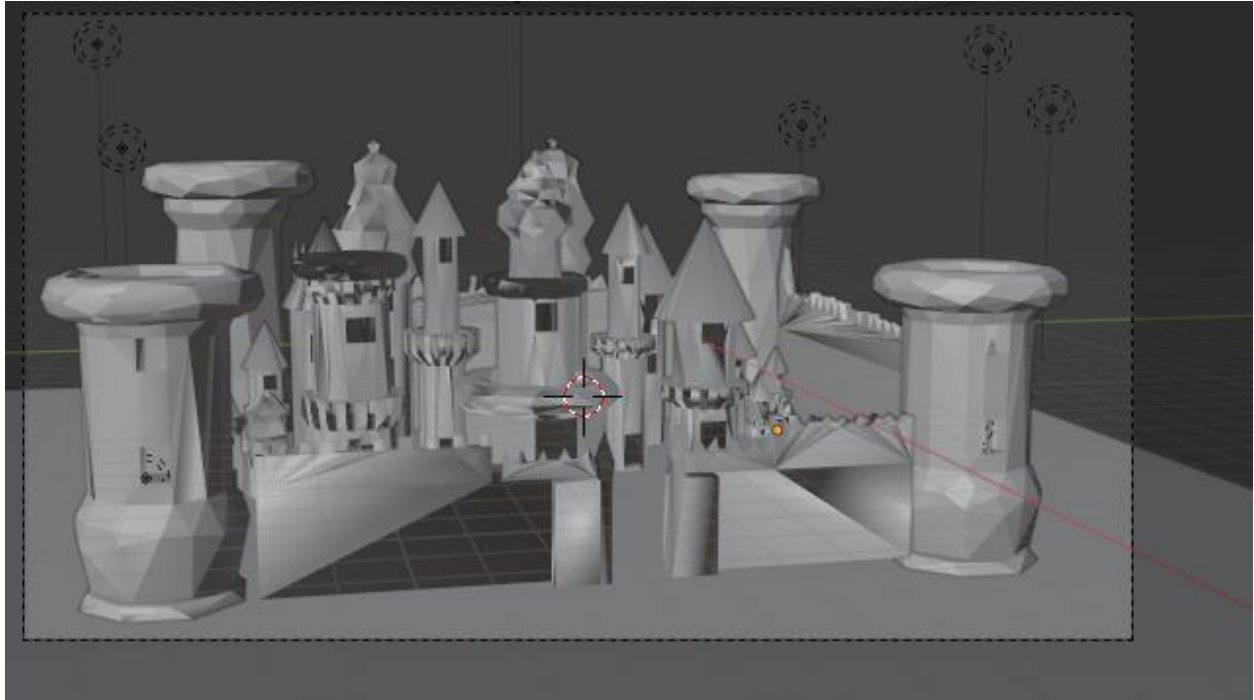
Components of a project-:

Castle

1. Open Blender workspace
2. Then we will make some adjustments in the cube like depth and radius.
3. After making changes in the cylinder, we will select the upper face of cylinder and then extrude it. Then scale it accordingly to give it a shape like the top of a castle.
4. Now add edge loops and then select one face and delete it to make window of castle.
5. To design the castle add torus on top of it to make the castle prettier.
6. Repeat the above steps to make other buildings of castle.

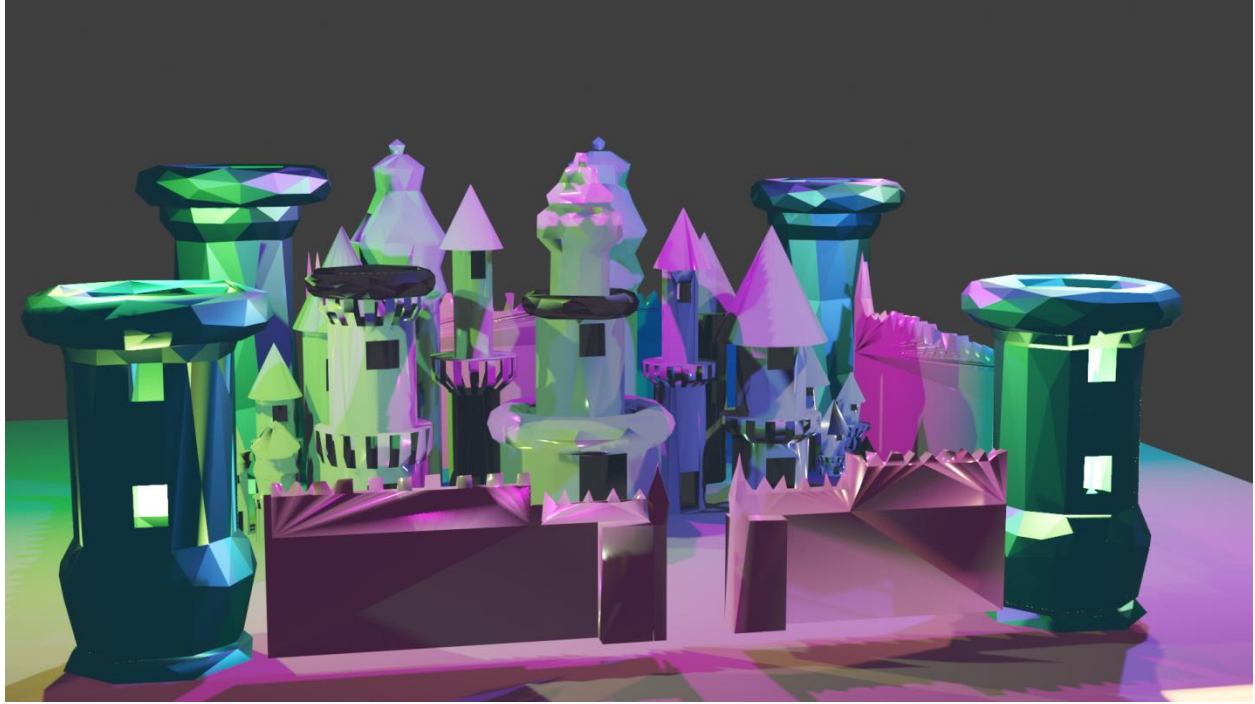
Walls

1. Open Blender workspace.
2. Now scale the existing cube accordingly to give it a shape of wall.
3. Add loop cuts to it and then use tools like extrude and scale to make cones on top of the wall.
4. Press Shift + D to duplicate the wall and set it all around the castle.



Crystal Effect

1. Add decimate modifier.
2. Now change the value of ratio in this accordingly.
3. Add light all around the castle and set its power accordingly.
4. Add material to it and set transmission to 1 and roughness accordingly.
5. Now add bevel modifier and segments value to 10. Now right click on the mouse and select shade smooth.
6. Go to the shading tab . Set metallic to 1 .
7. Add colorRamp and connect to principled BSDF.
8. Connect gradient texture to colorRamp and change the color in the color ramp accordingly.
9. Connect mapping to gradient texture. Then connect mapping to texture coordinate.
10. Change the values of x, y and z of gradient texture properties accordingly.
11. Repeat the above steps to add crystal effect to whole castle accordingly.



Night Sky effect

1. Go to shading tab and select world
2. Then connect colorRamp to background.
3. Now connect Noise texture to color Ramp.
4. Adjust the value of color in color ramp accordingly.



Mountains-:

1. Open blender and remove the cube and camera that's already there.
2. Add a plane and then go to edit mode and subdivide it.
3. Add displace modifier to it.
4. Assign the cloud texture.
5. After doing the above step we will add an UV sphere and adjust it to the center of the plane and then we will open it in edit mode and select all the vertex and add them as a vertex group.
6. After the above step we will add a vertex weight proximity modifier and then we will make a adjustments that if we move sphere then we will able to control the plane and then we will combine all the vertex of the sphere and make them one point so that one single point control the plane.
7. Then add image texture to it.

Moon-:

1. Add sphere at the right position.
2. Now go to shading tab and then add image texture to give real effect of moon.
3. Connect another image texture to bump property .Adjust the value of strength and distance accordingly.



Google Drive Link-:

https://drive.google.com/drive/folders/1dnay2xA6YVEuYx7fGzvT_3FsHUGNvZq8?usp=sharing