COMPUTER GRAPHICS

Project Report: 3D objects and implementation

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Introduction:

This project aims to implement the 3D objects with the transformations and the projections. In this project I would initially implement the 2D transformations of the objects with top, front and side views. Later I would apply the transformations like Translating, Rotating, Shearing, and Scaling. This would basically give me the idea of 2D and later apply this knowledge to the creation of the 3D objects. For 3D objects additional features like generating the projections, editing and changing the projections, creating the textures or mappings of the objects will be developed further in the assignments. This week I added the textures and perspective camera view.

Implementation:

In this fifth week I added the functionality of the Textures and Camera Display from near and far views. I included all the files in main folder with the name 5.

Camera.html:- This file contains 3d multiple cylinders on the canvas with partitions between and you can view the shadow of the images which are displayed. Here Perspective Camera has been used.

Texture.html: This file contains the code to execute the spheres with the rotation action and Loaded function is used to give the texture .To give the bumps to the texture envMap has been used. You can view different textures with different images added to the same folder week 5.

References:

- 1. https://www.w3schools.com/graphics/
- 2. https://stackoverflow.com/
- 3. https://threejs.org/