COMPUTER GRAPHICS

Project Report: 3D objects and implementation

Name: Snehitha Ramasahayam

ID:01714702

Table of Contents

- 1. Introduction
- 2. Implementation
- 3. References

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.

Implementation:

In this fourth week I added the 3D projection of the objects, Cube, Pyramid, Cone. This part is very interesting to work with i.e. with camera projections and rendering of the objects .3js libraries have been used and I tried different camera positions and speed of the all the objects.

I also added the remaining projections like Dimetric, Trimetric, and Isometric. These are developed using the svg in JavaScript. When the web page link is opened this consists of all the respective html files and when clicked the html file you can view the respective projection page. I added the styles with Style1.css and included one background image.

References:

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