Assignment-6

Projections

Use your experimentation on a Unit Cube defined as a polygon with six planar surfaces in different colors. You should experiment with the complete classification of planar geometric projections.

The aim is to experiment with the complete classification of projection (Parallel: Orthographic (and Axonometric: isometric, diametric, trimetric), Cavalier, Cabinet, General and Perspective: one point, two point and three point perspective) studied in the class and your textbook to answer the following questions.

Assessment

How does the image change if you make the plane of projection as the principal planes and the center of projection is at infinity in the direction perpendicular to the plane of projection? How does the image change if you define the plane of projection with a reference point and normal to the plane; and the center of projection is at infinity in the direction perpendicular to the plane of projection?

How does the image change if you define the plane of projection with a reference point and normal to the plane; and the center of projection is at a point i) on any of the axis, ii) or it is in a plane or iii) it is in space.