

Lecture 1

Quiz-1

Set-C

1. Explain how the level of detail (LoD) rendering optimizes the rendering process. [6]

1. a. Solution: Rafi - 148

LoD (1/3)

- Rendering speed \leftrightarrow number of triangles being drawn
 - More triangles: more storage.
- It is worthwhile to minimize the number of triangles used to represent a model.
 - *Level of detail or LoD* optimizes the rendering of complex models by varying level of detail
 - If the model is viewed in the distance, fewer triangles needed and vice versa

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[0, 0, 3], [0, 3, 3], [0, 3, 0], [0, 0, 0],  
[3, 0, 3], [3, 3, 3], [3, 3, 0], [3, 0, 0]
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Origin42

1. **Lecture -01**

a) Explain the level-of-detail rendering.

[3]

1. a. Solution: *Already added ...*

1. b) What is a vanishing point? Give an example scenario of multiple vanishing points.

[3]

1. b. Solution: *by 45*

In computer graphics and perspective drawing, a vanishing point is a point in the distance where parallel lines appear to converge or "vanish" when extended. A single vanishing point is often used in one-point perspective, where all parallel lines converge to a single point on the horizon line. Multiple vanishing points are used in two-point and three-point perspective to create a more realistic depiction of three-dimensional space.

Two-Point Perspective: For example, drawing a cityscape with tall buildings. The vertical edges of the buildings converge to one vanishing point on the left and another on the right.

Enigma41

Solution:

Recursive40

Solution: