

# Global Illumination using Ray Tracing

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# Basic Steps

- Scene Generation
- Raycasting
- Raycasting + shadows
- Raycasting + shadows + reflection
- Raycasting + shadows + reflection + refraction

# Division of Work

- Scene Creation and Ray casting
  - Rajan
- Shadows
  - Rafael
- Reflection
  - Jida
- Refraction
  - You

# Challenges Faced

- Initializing camera parameters
  - Orthographic and Perspective based
- Intersection Tests

# Future Work

- optimizing the algorithm using
  - Kd Trees

**DEMO**

