Simulating Illumination

in mixed reality

A cross reality application

Project idea

- Switching between Mixed Reality and Virtual Reality
- Place light sources in Mixed Reality and see Effects in Virtual Reality
- Manipulate time of day in Virtual Reality





Tech changes

- Lecture: MRTK3 + OpenXR
- Ours: Meta XR + Oculus XR



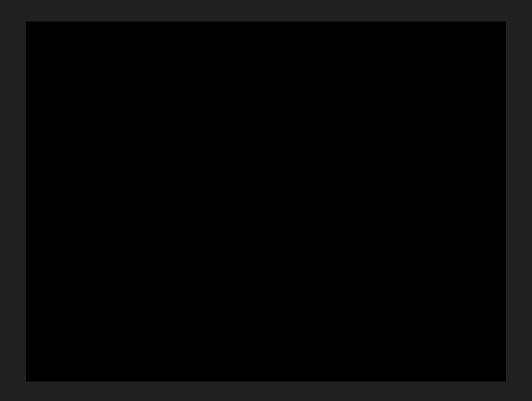


Current progress

- Quest 3 room scanning
- VR/MR switch
- Light placement



Demo



Upcoming steps

- Locomotion (VR)
- More furniture meshes
- Day/Night switch (VR)

Obstacles

- Incompatibilities of personal laptops and Meta Quest 3
 - Can't even simulate on Linux
- Limited device access
- Orientation of Objects in Scene
- Representing windows
- Time changing in unity