

Materials, Lighting and Presentation

Rajeshwaran Ramachandran



Project Overview

Horror Hallway Scene

Creating Horror Hallway scene using Unreal Engine, and lighting technique & camera angles to improve the scene.

- Story telling
- Lighting and Technique
- Camera Angle

Project Focus:

Immersive Horror environment in Abandoned hospital setting



UNREAL
ENGINE



Reference and Inspiration

Evil Within 2

Lighting reference



Experience Points

Environment reference



Scene Analysis



Research Phase

Horror game reference

Analysed composition

UE5 Lighting documentation
Tutorials

- Studied horror game lighting references (*The Evil Within 2*, *Resident Evil* series).
- Analysed composition, colour schemes, and contrast in cinematic horror.
- Explored UE5 lighting documentation and tutorials.

Mood & Atmosphere

Objective:

- Create a Scary and engaging atmosphere
- Direct player attention using light and shadow
- Highlights key props and areas

Camera Angles:

Dutch Angle

Tunnel shot / leading shot

Dual lighting
for contrast

Dark
surroundings
for tension

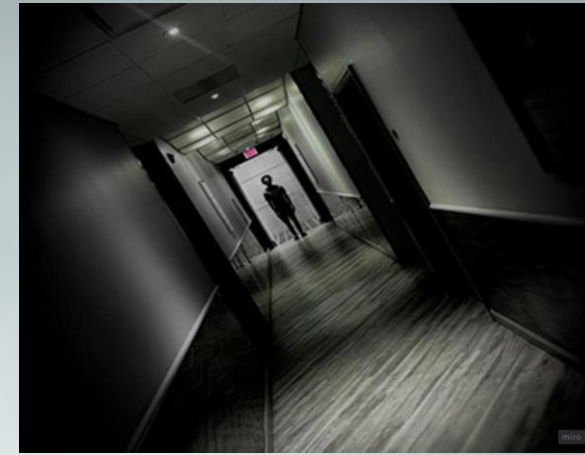
Reflections
to enhance
realism

Scene Composition

Camera Angles: Dutch tilt for unease

Focal Point: key props (wheelchair, stretcher)

Composition: Leading lines through hallway design



Camera
Angles

Focal Point

Composition



Lighting References

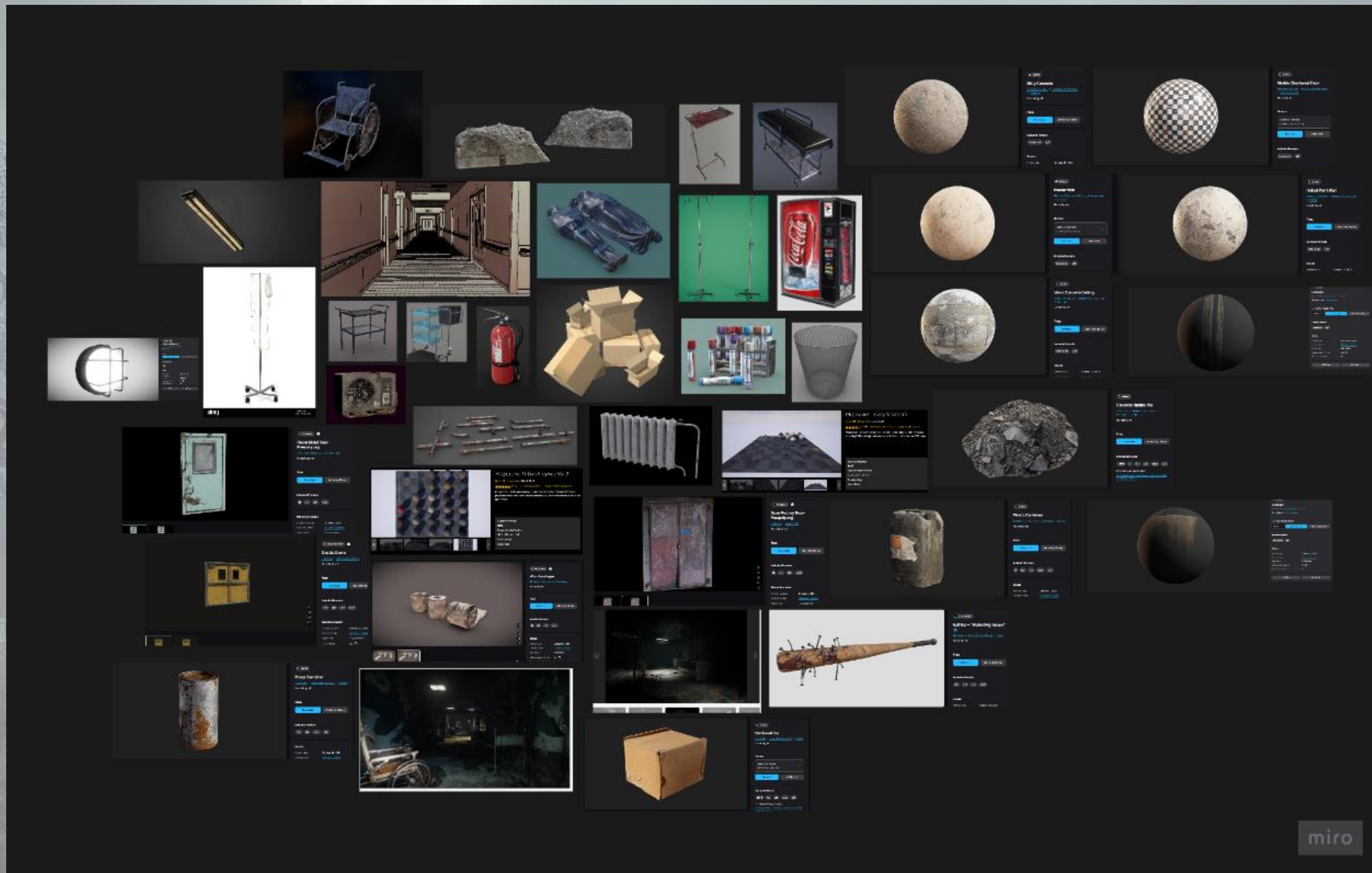


Camera Angles

Dutch angle



Assets Collection



Development process

- Initial block out of the hospital corridor.
- Adding base materials for walls, floors, and props.
- Starting the level design for the scene.
- Implementing the lighting and fog effects

Block out

Materials

Level Design

Lighting & Fog

Progression Screenshots



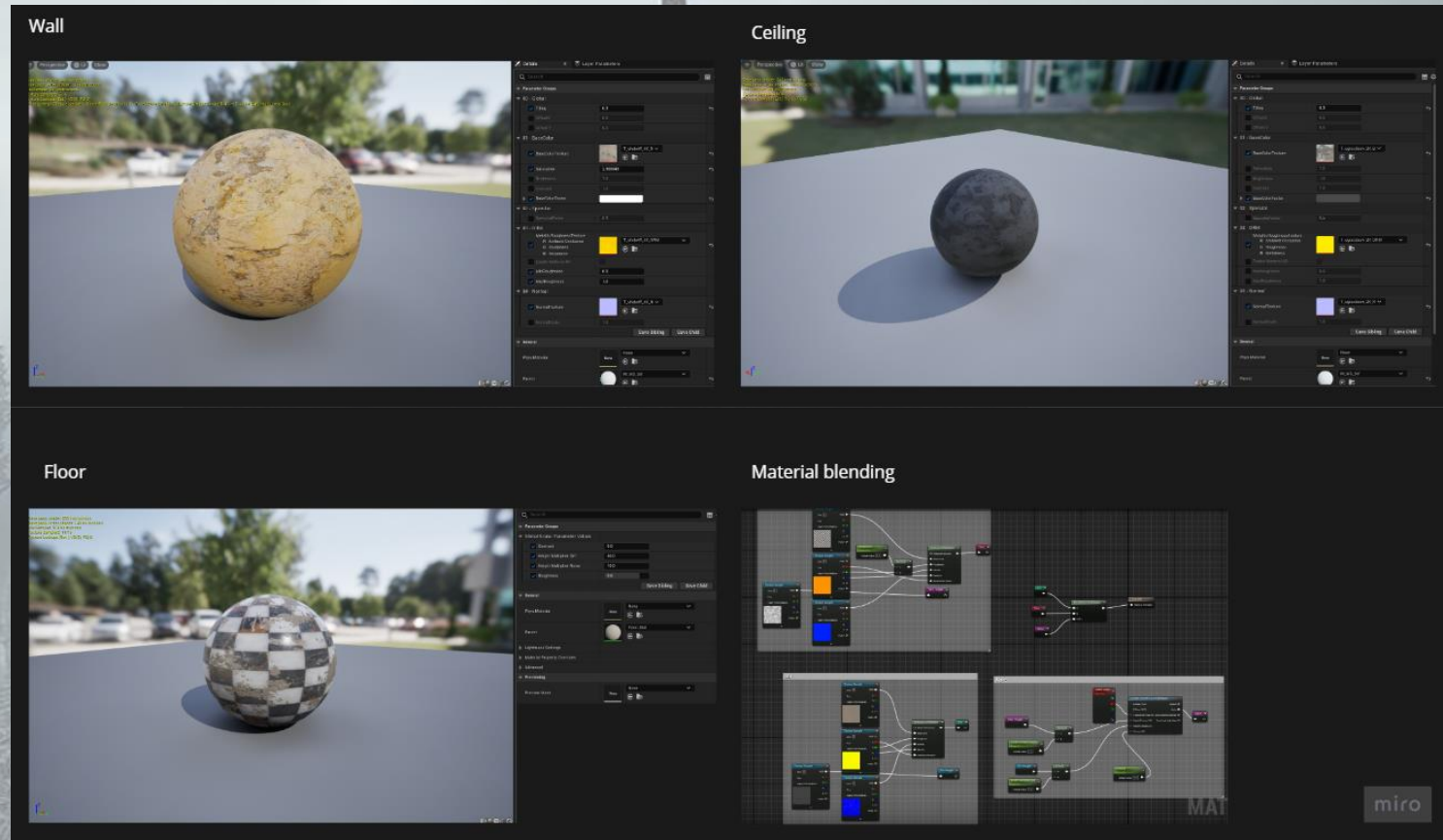
Iterations and Refinements

- Adjusted light intensity, colours, and positioning.
- Tweaked material properties for roughness and reflections.
- Introduced flickering and animated lighting elements.



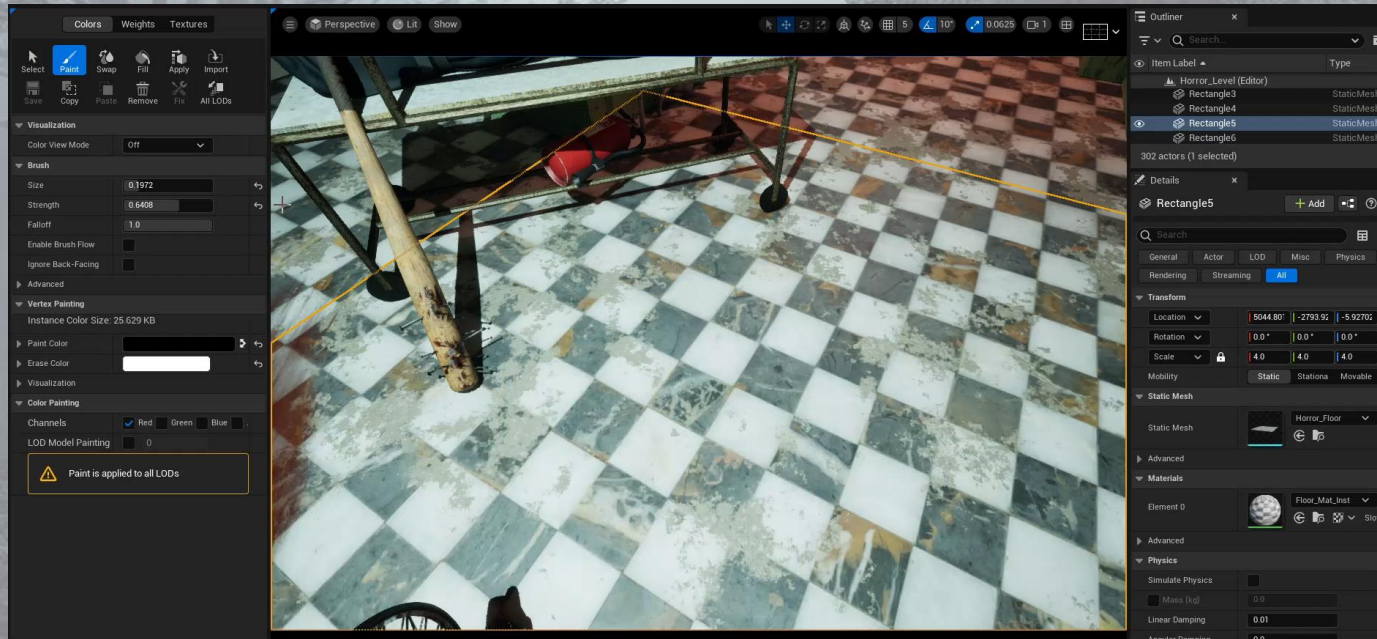
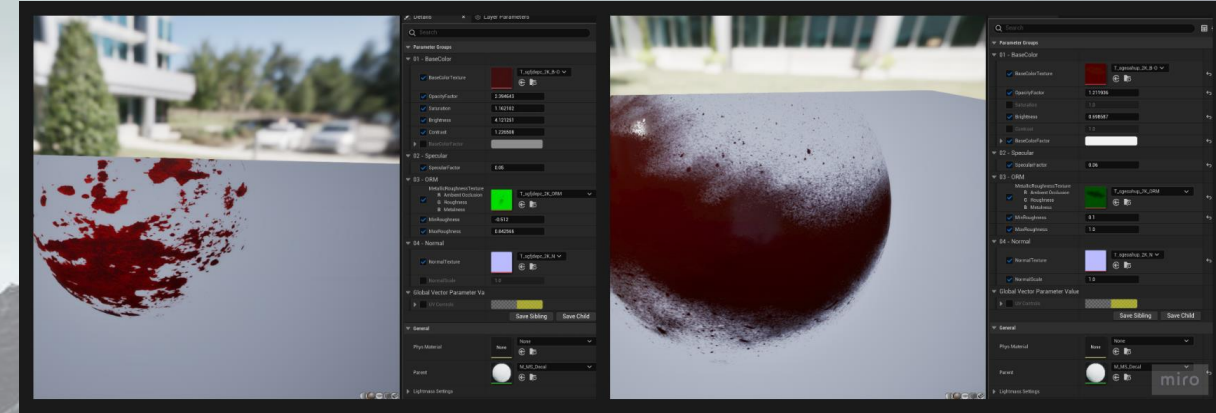
Material Techniques

Materials used for the scene



Material techniques

- Used Material Blending for grime and dirt.
- Vertex Painting to dirt to surfaces.
- Blood decals materials used on floor and wall



Material Techniques

Post processing effects:

Colour grading

Shadows, Midtones, and Highlights

Without post process



With post process



With Fog



Without Fog



Block out – Final scene

Blockout



Final Output



Breakdown



Comparison



Final Renders



Conclusion

Learning Outcomes &
Future improvements



Render Video





Thank you, souls