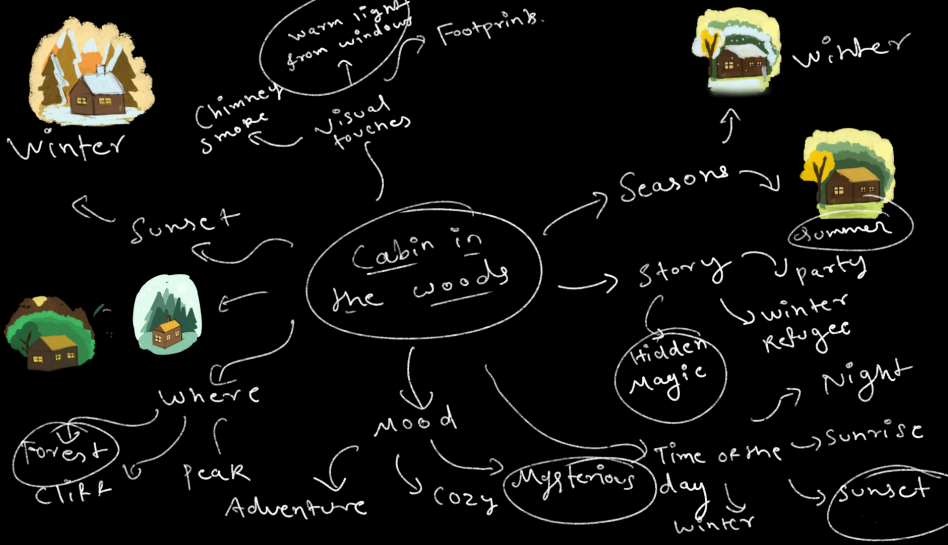




EYES IN THE TIMBER

Cabin in the Woods

By Saahil Sathe



MOODBOARD

A hazy sunset?

Sunset in winter?

Sunset visible through the woods?

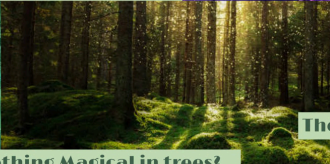
Sunset in Autumn?

Sunset beside a waterbody?

MOODBOARD



Something in the atmosphere?



The Vegetation is magical around the cabin



Something Magical in trees?



REFERENCE BOARD



Wooden



Modern but old

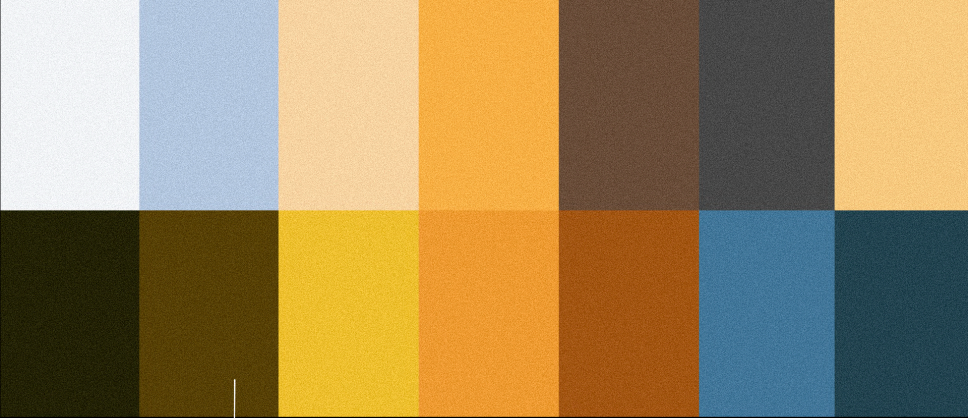


Modern

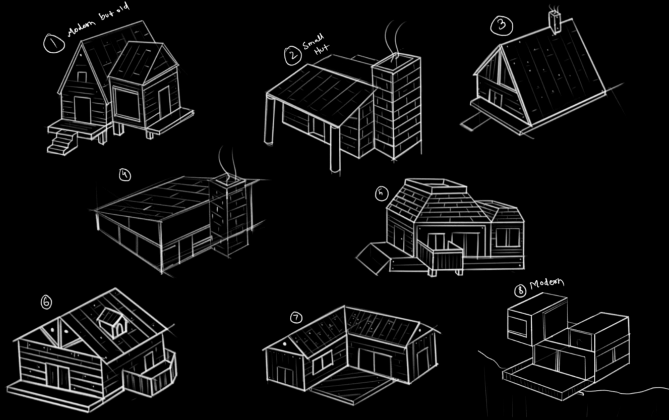


A small hut



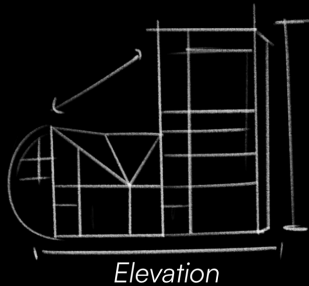
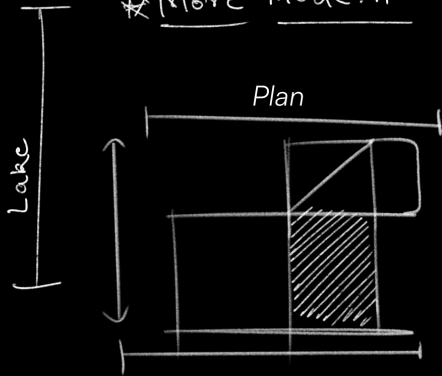


Colour Palette



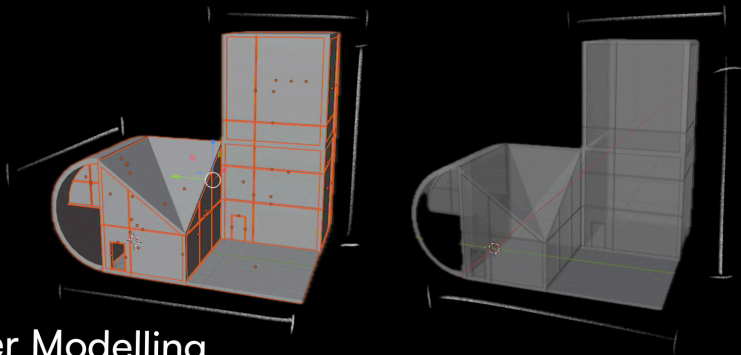
Rough sketches

* More modern



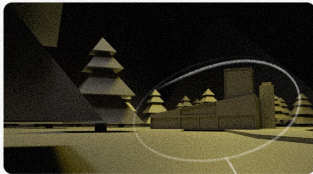
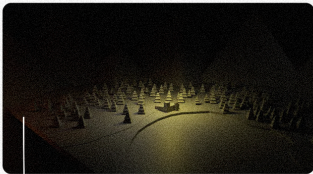
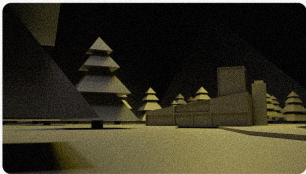
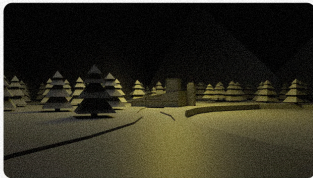
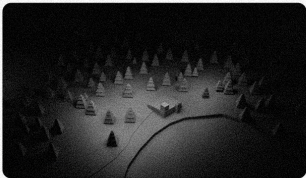
* Combining multiple
rough sketches

Final Design



Blender Modelling

This cabin was fully modelled in Blender, starting with a basic blockout to define the overall shape. I refined the structure using clean topology and added details to create a realistic yet simple design.



Block out of the scene

The blockout was built in Autodesk Maya using a sample cabin as a reference. At this stage, I focused on experimenting with the lighting and evaluating where different elements should be positioned within the scene.

Sample
Cabin



Cabin textured and placed in the environment

I textured the cabin with detailed materials to give it a realistic and worn look, then placed it within the environment to integrate it seamlessly with the landscape. Careful attention to scale, lighting, and surrounding elements ensured the cabin felt like a natural part of the scene, enhancing the overall believability and atmosphere.

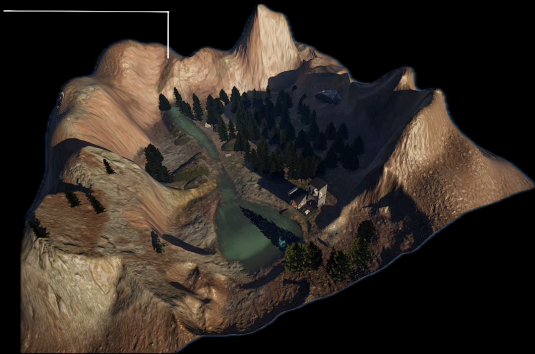
Assets

I incorporated assets from Fab and 3D Warehouse to populate the environment efficiently. These pre-made models helped add variety and detail to the scene, while still allowing me to focus on composition, lighting, and integration to maintain a cohesive and realistic look.



Landscape in unreal

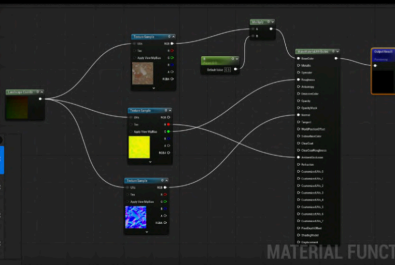
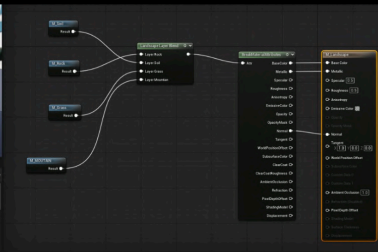
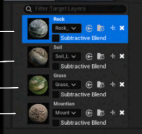
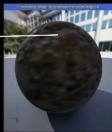
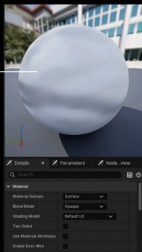
I sculpted the landscape directly in Unreal Engine, shaping the terrain to establish the overall mood and layout of the environment. Using a combination of sculpting brushes, I refined the slopes, pathways, and natural formations to create a believable and visually engaging setting. This stage allowed me to experiment with scale, elevation, and composition, ensuring the terrain supported both the visual style and the gameplay flow of the scene.



Texturing of Landscape in unreal (Painting)

I created a landscape material in Unreal Engine that uses material functions to keep the setup clean and modular. By using a Landscape Layer Blend node, I was able to paint three different textures, such as grass, dirt, and rock, directly onto the terrain. Each texture was driven through its own material function, allowing for easy adjustments and consistent control over parameters like roughness, normals, and tiling. This approach gave me the flexibility to paint natural transitions across the landscape while maintaining an organized and efficient material workflow.

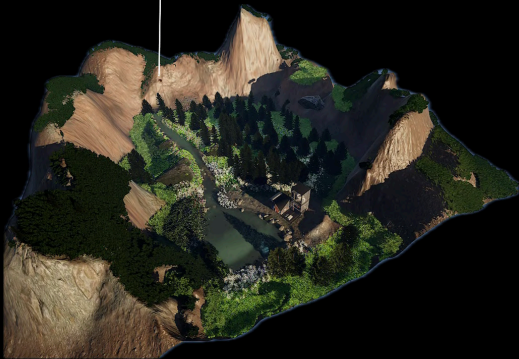
The four textures used



MATERIAL FUNCT

Foliage used in landscape

I used Unreal Engine's foliage tool to populate the landscape with a variety of vegetation, including grass, shrubs, and small trees. By adjusting density, scale variation, and random rotation, I was able to create a more natural and visually rich environment. The foliage system allowed me to quickly paint large areas with organic detail, helping the scene feel more alive and cohesive.



Grass

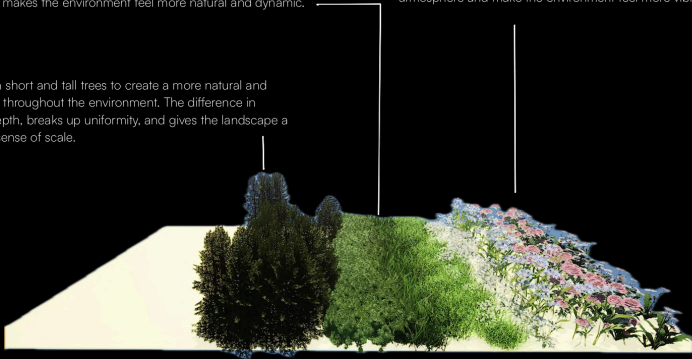
I used a mix of dark and light green grass foliage to add depth and visual variation to the landscape. The contrast between the two tones helps break up flat areas and makes the environment feel more natural and dynamic.

Trees

I included both short and tall trees to create a more natural and varied tree line throughout the environment. The difference in height adds depth, breaks up uniformity, and gives the landscape a more realistic sense of scale.

Flowers

I added a mix of pink, blue, and light-blue flowers to bring subtle color variation and liveliness to the scene. These small pops of color help enhance the natural atmosphere and make the environment feel more vibrant and inviting.

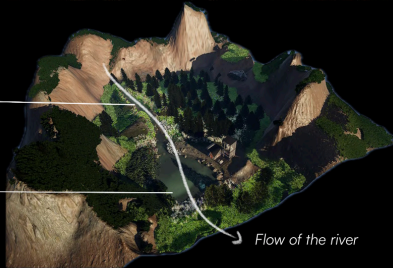


Water System

I implemented Unreal Engine's water system, incorporating a river for the main flowing water and shallow water systems for smaller bodies like ponds and streams. By carefully shaping the terrain and adjusting flow settings, I ensured a natural flow that follows the landscape's contours. This setup creates realistic water movement with dynamic reflections and subtle ripples, enhancing immersion and making the environment feel alive and visually engaging.



Lake



Flow of the river

Niagara System (Fireflies)

I used Unreal Engine's Niagara system to create a firefly effect throughout the scene. The particle system allowed me to control movement, glow intensity, and randomness, giving the fireflies a natural, floating behavior. This subtle addition adds life and a magical atmosphere to the environment, enhancing its overall visual appeal.





I used a fountain emitter setup to control the upward and random floating motion of the particles. This allowed the fireflies to move naturally through the scene, with gentle glows and subtle variations, adding a magical and lively atmosphere to the environment.



Main lighting

I used sunset lighting to create a warm and atmospheric mood in the scene. The soft, golden hues and long shadows enhance depth and highlight the landscape's features, giving the environment a serene and visually appealing ambiance.



I enhanced the lighting by incorporating a Godrays effect using light shafts, which added dramatic beams of sunlight filtering through the environment. To emphasize the impact, I also created a midday shot where the intensity of the Godrays is more pronounced, highlighting the depth and atmosphere of the scene.

Camera Placement

For the camera setup, I carefully arranged objects in the foreground and background to establish depth and enhance the composition. I used focus effects combined with a subtle blue tint to create a sense of atmosphere and guide the viewer's attention through the scene. This approach added a cinematic quality, emphasizing the scale and mood of the environment while making key elements stand out naturally.





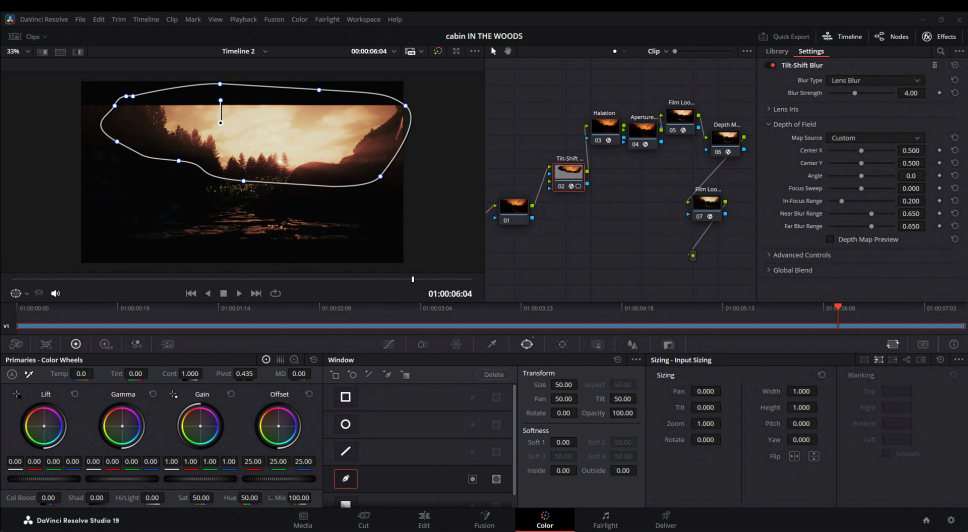
Nuke Composition

I used Nuke for compositing to add an eye glow effect, enhancing the visual impact of the character or scene. By carefully layering and adjusting the glow, I was able to create a subtle yet striking effect that draws attention and adds a cinematic quality to the final render.



Colour Grading

I applied a cinematic look to the scene by combining careful composition, lighting, and color grading. Subtle adjustments to contrast, saturation, and color tones helped create a polished, film-like atmosphere, enhancing the mood and making the environment feel more immersive and visually striking.



Soft skills

Throughout this project, I developed and strengthened several soft skills, especially in how I planned, communicated, and adapted my work. I learned to manage my time more effectively, solve unexpected challenges, and stay flexible when refining ideas. These experiences helped me grow creatively and professionally, giving me more confidence when handling complex tasks and collaborating with others.

Key soft skills I improved:

- **Time management**
- **Problem-solving**
- **Adaptability**
- **Workflow planning**
- **Attention to detail**



Hard skills

Throughout this project, I deepened my understanding of Unreal Engine and 3D workflows. I learned how different systems—such as materials, lighting, foliage, and Niagara—work together to create a cohesive environment. I also became more comfortable with sculpting landscapes, optimizing assets, and improving scene composition. These experiences strengthened my overall 3D foundation and boosted my confidence in building visually rich environments.

What I learned about Unreal and 3D:

- **Creating and blending landscape materials**
- **Using the foliage system for natural vegetation**
- **Working with the water system for rivers and shallow water**
- **Setting up Niagara effects like fireflies and fountains**
- **Improving lighting setups, including sunset lighting and Godrays**
- **Enhancing scenes with camera depth, focus, and composition**
- **Integrating assets efficiently from external libraries**
- **Texturing, placing, and optimizing 3D models**
- **Overall environment building and scene planning**





Thank you!