



- **Introduction**

First, I aim to further improve the refinement and realism of my modeling work, which requires becoming more proficient in software such as Maya and Blender.

Second, I need to explore the creation of stylized materials suitable for games and become more familiar with using tools like Substance 3D Painter.

Third, I look forward to creating vivid visual effects in UE5—such as flowing water—while studying environment building.

Vision1

- Mood Board

1) Summer, a sunny morning

2) the yellowish-green color tone

3) Art Style: Realistic

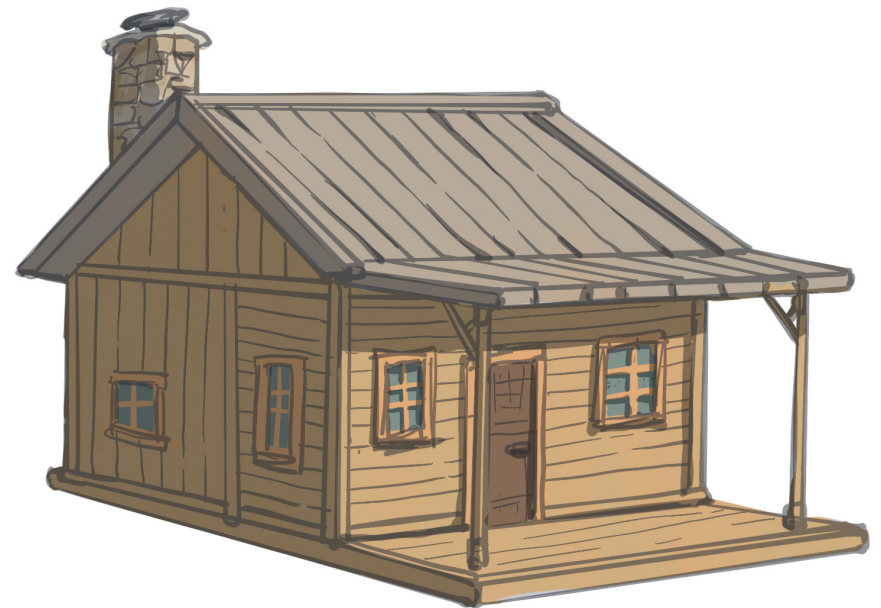
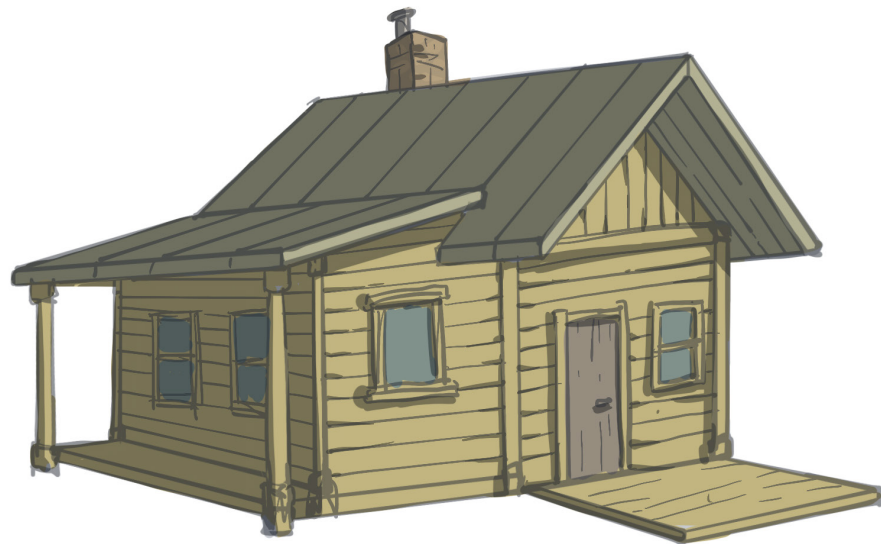
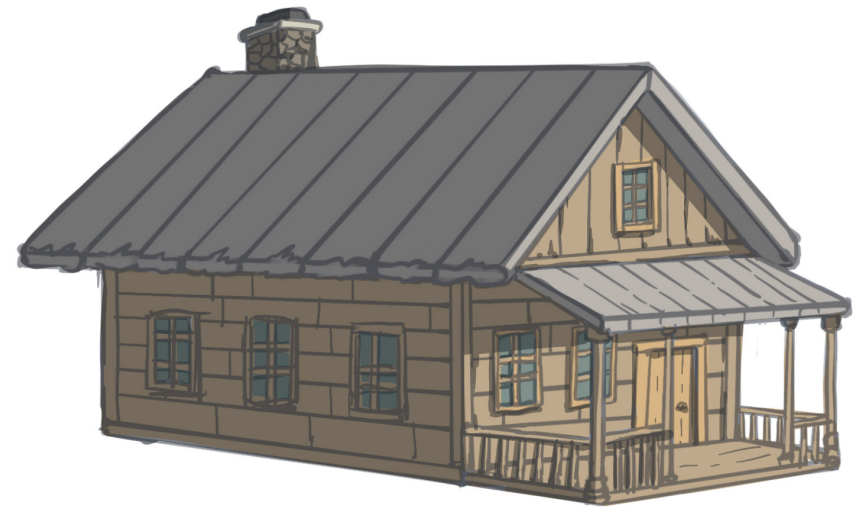
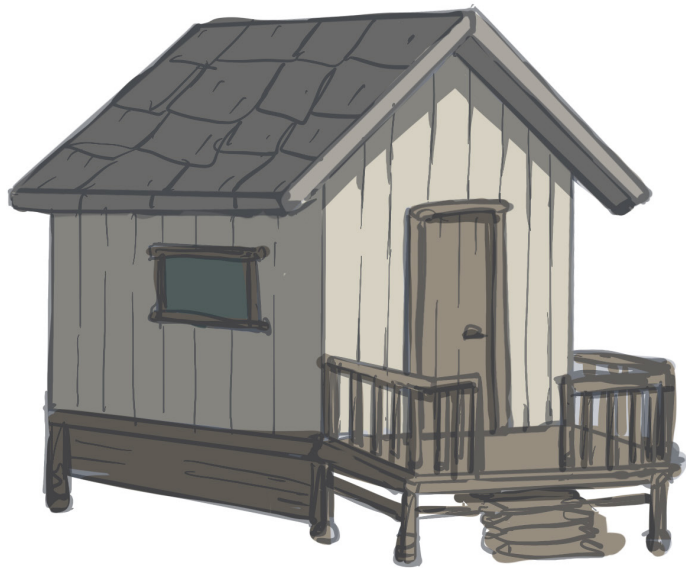


Vision2

- Reference Cabin



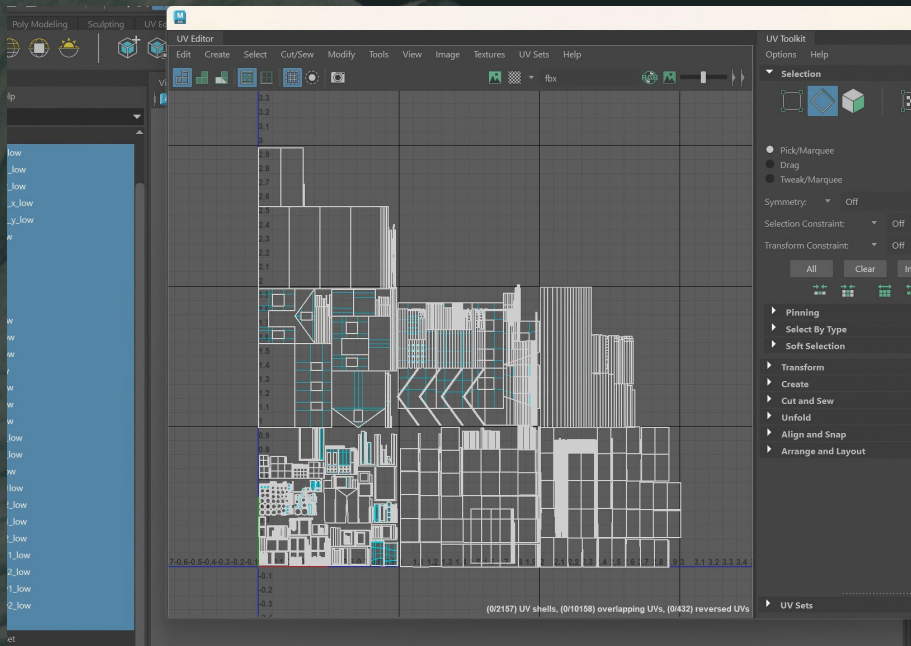
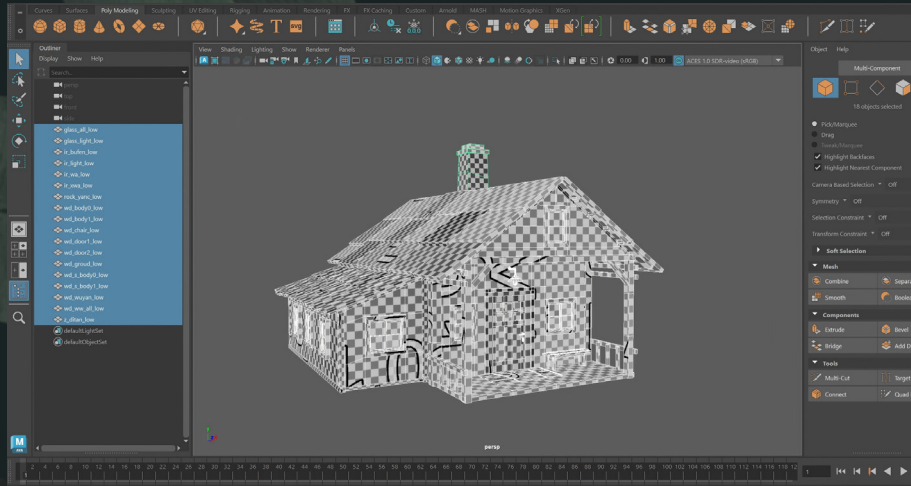
- My sketch design of the cabin



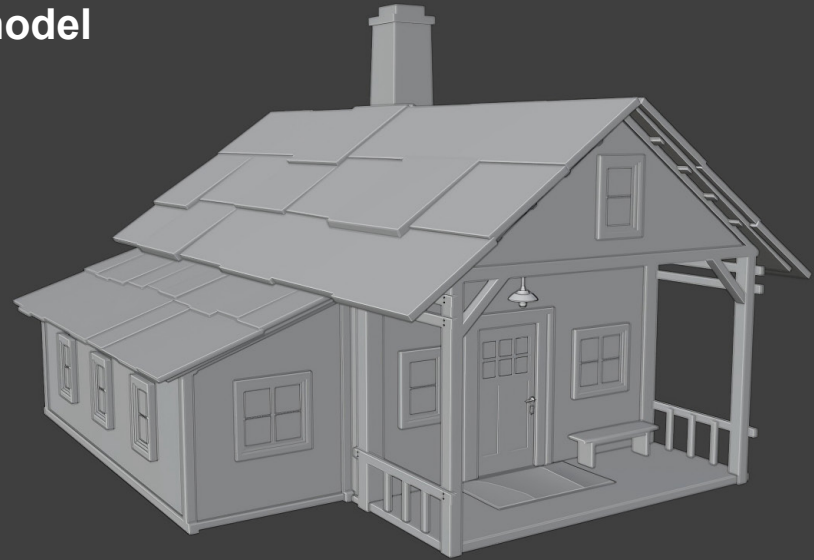
Outcome

Modeling

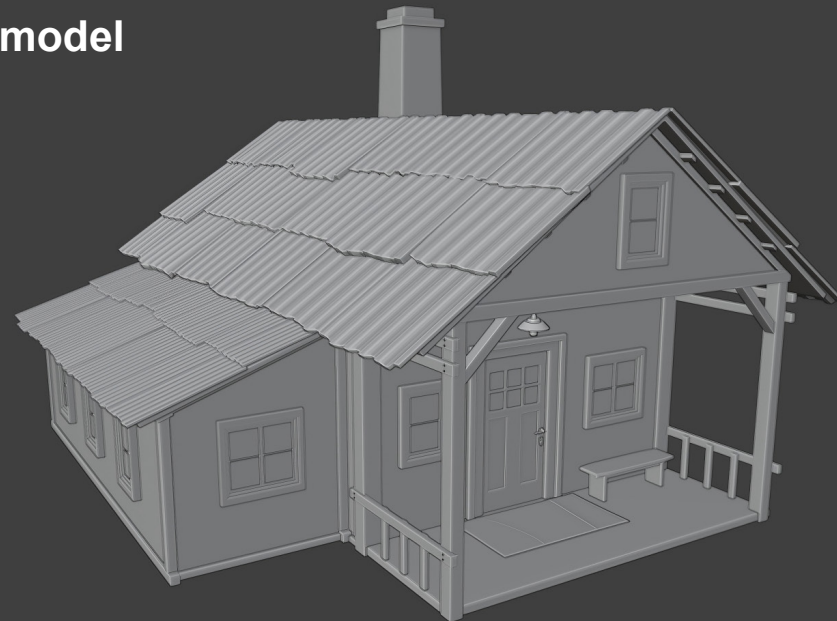
UV



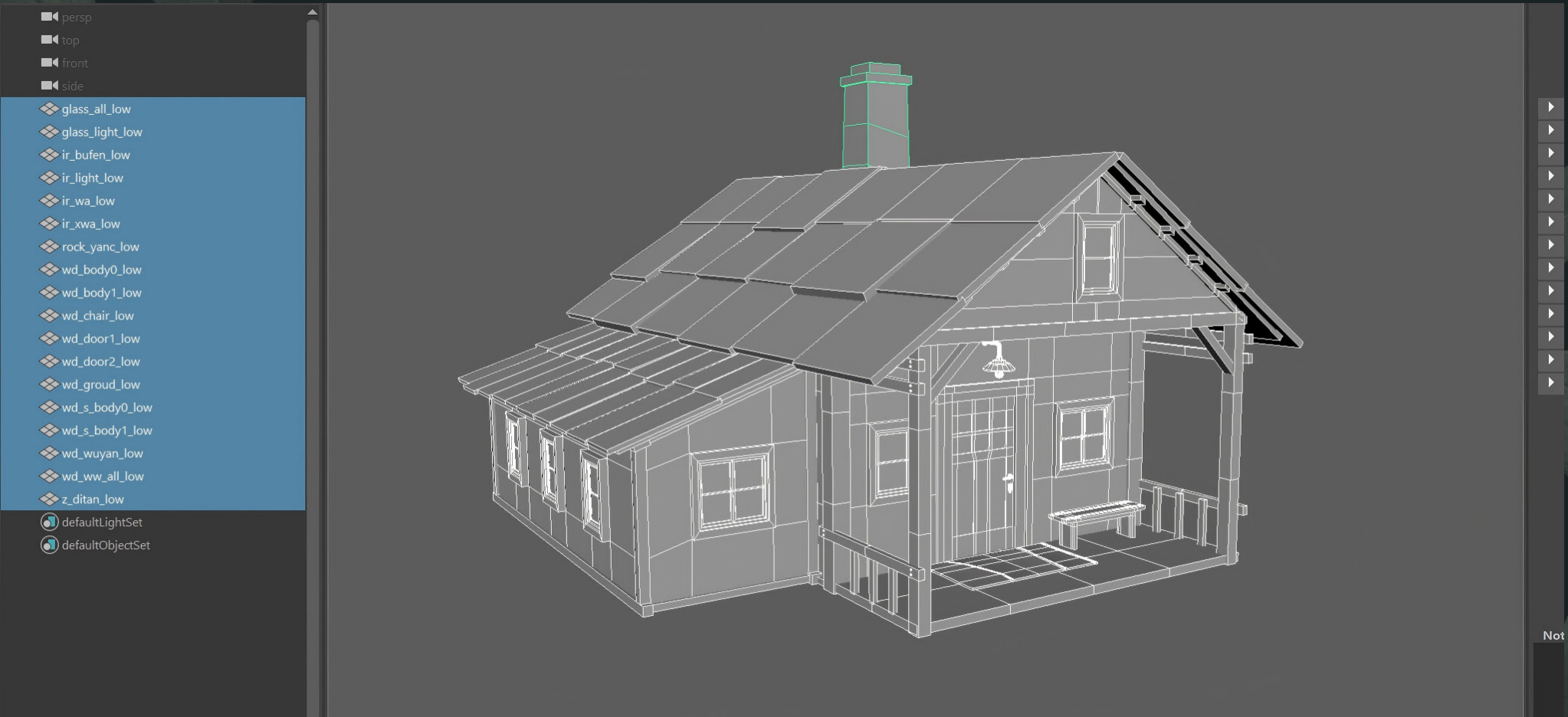
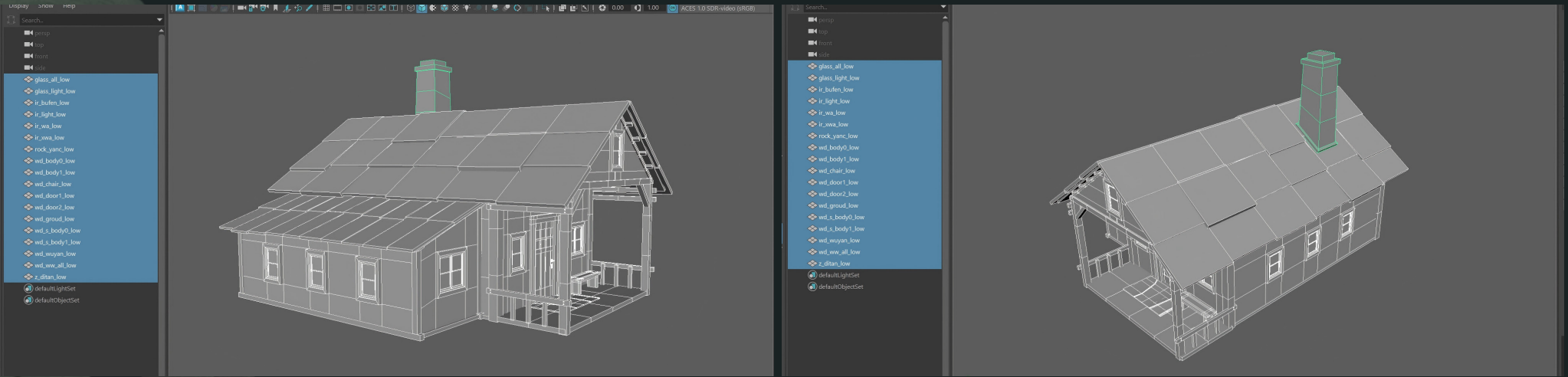
Low model



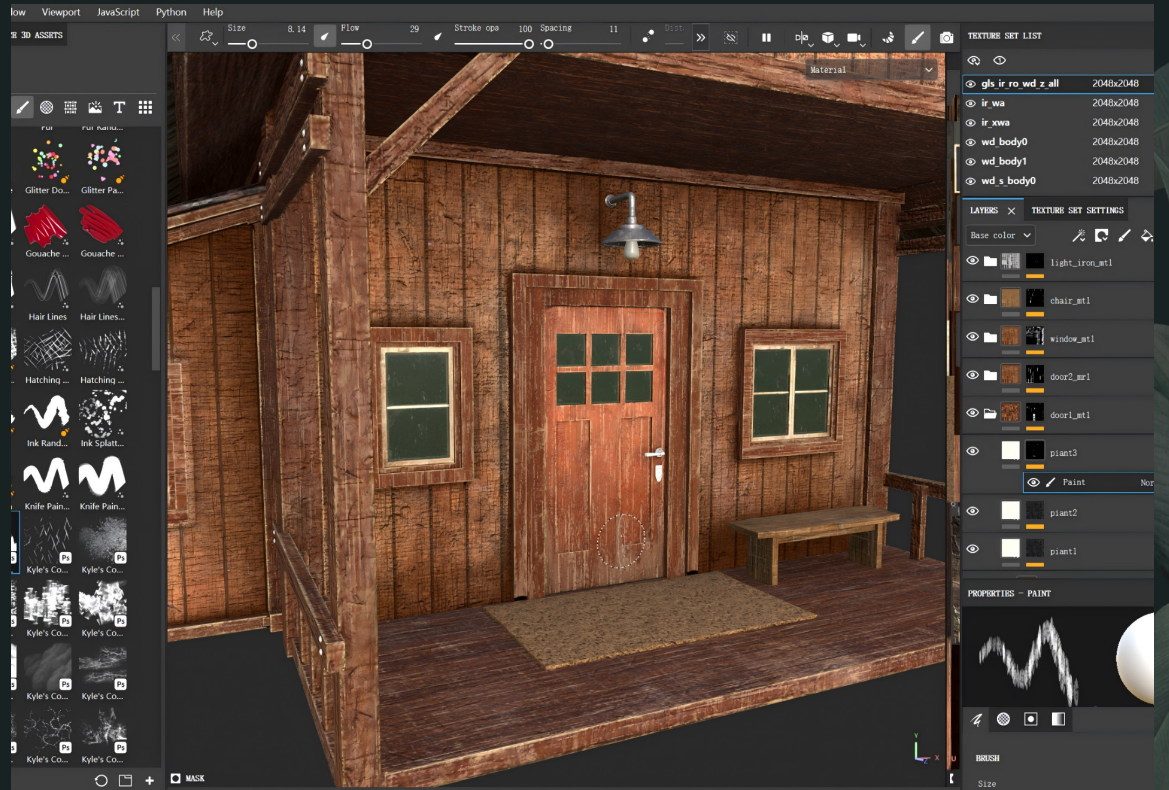
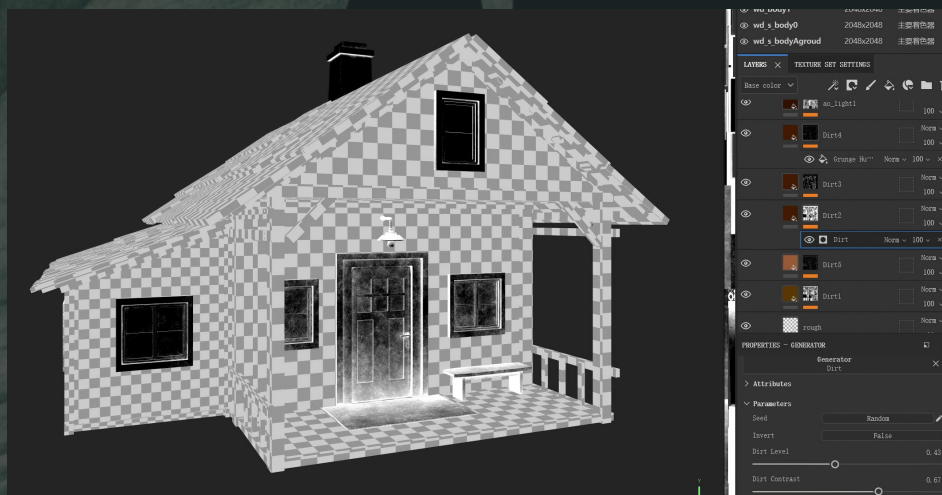
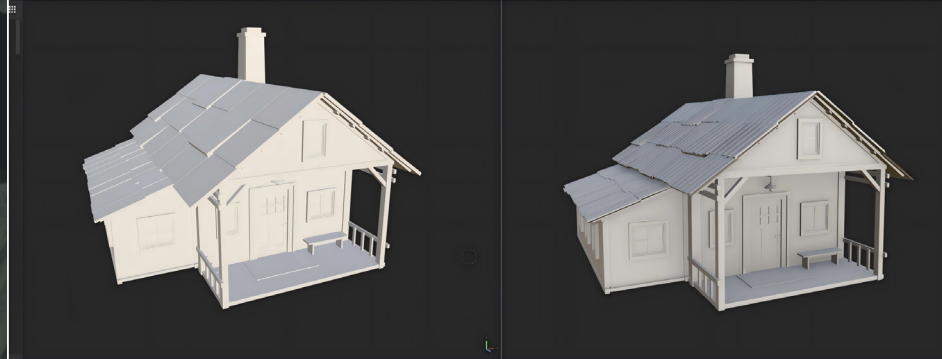
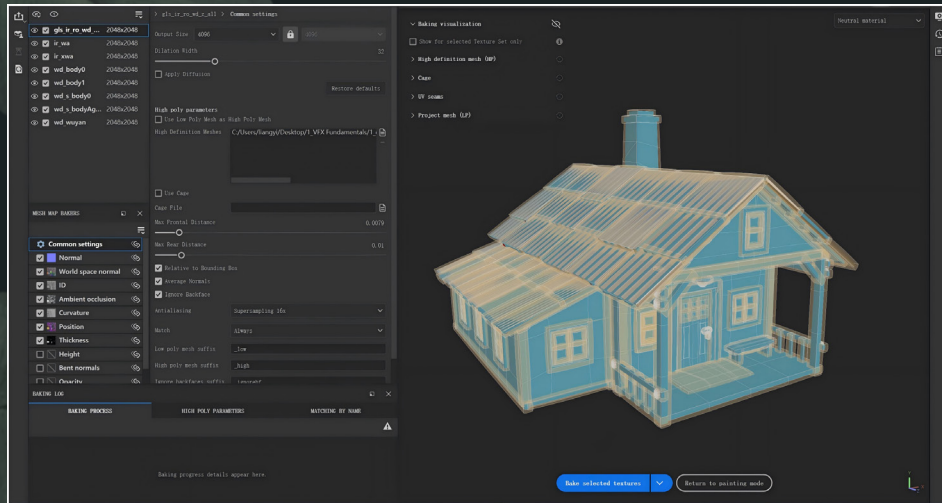
High model



• Model wireframe

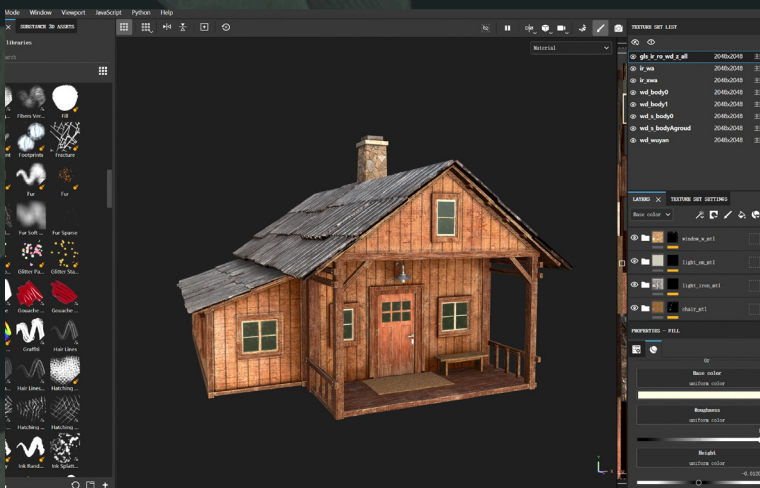
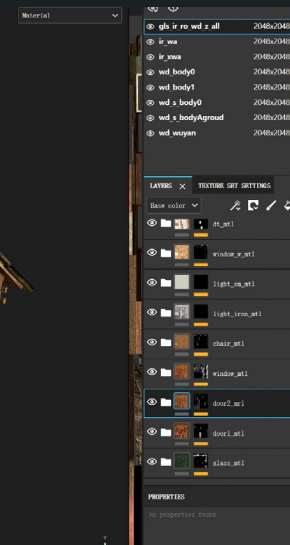
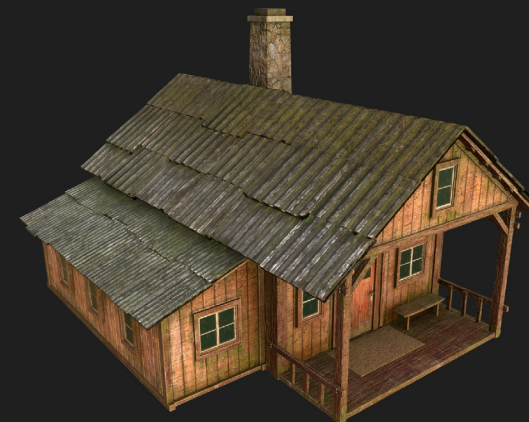


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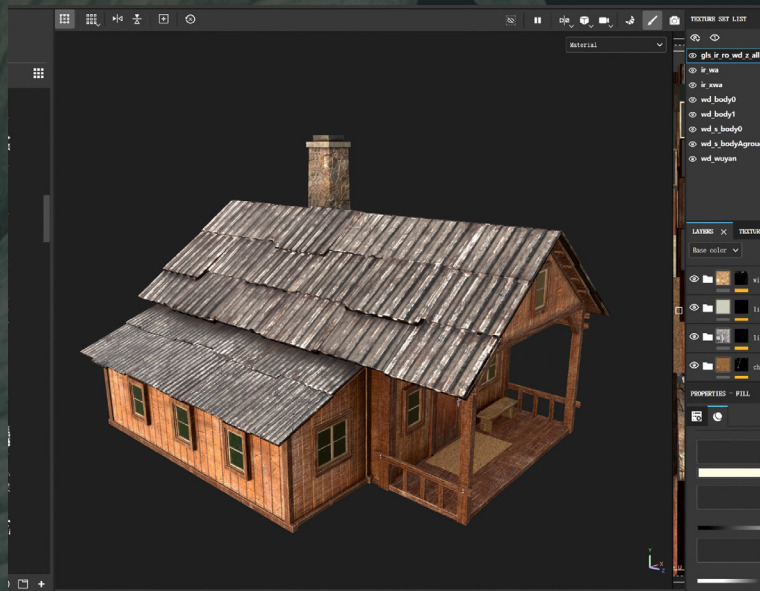
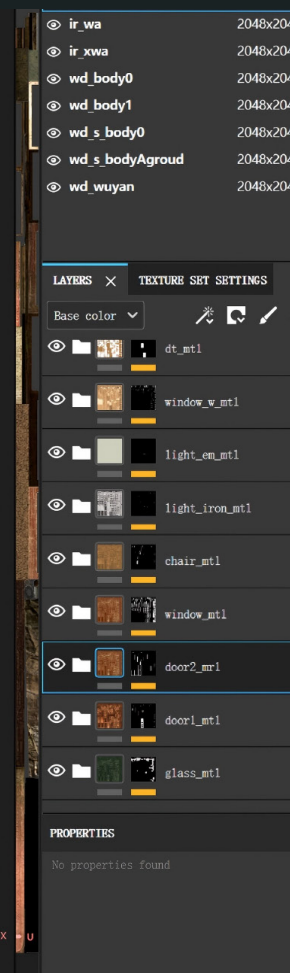


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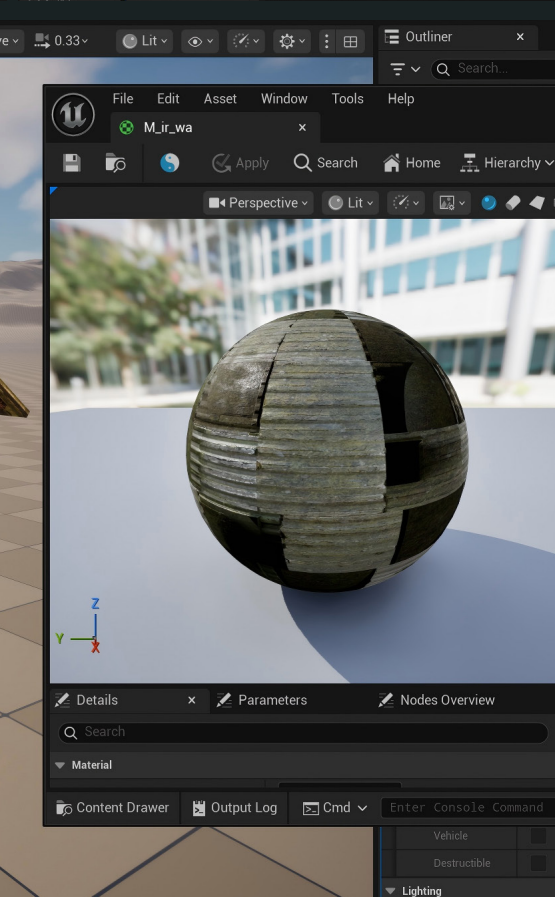
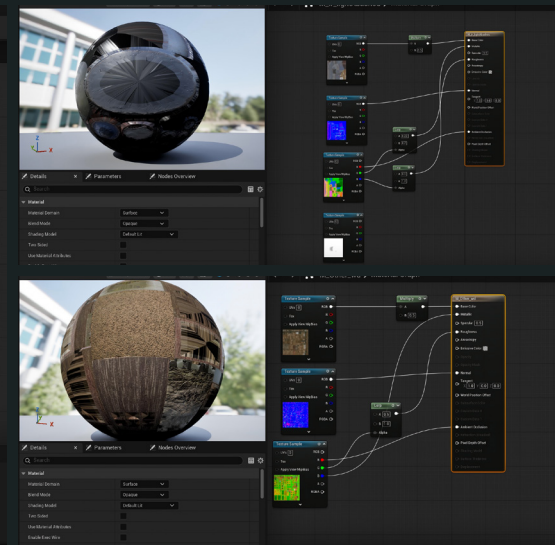
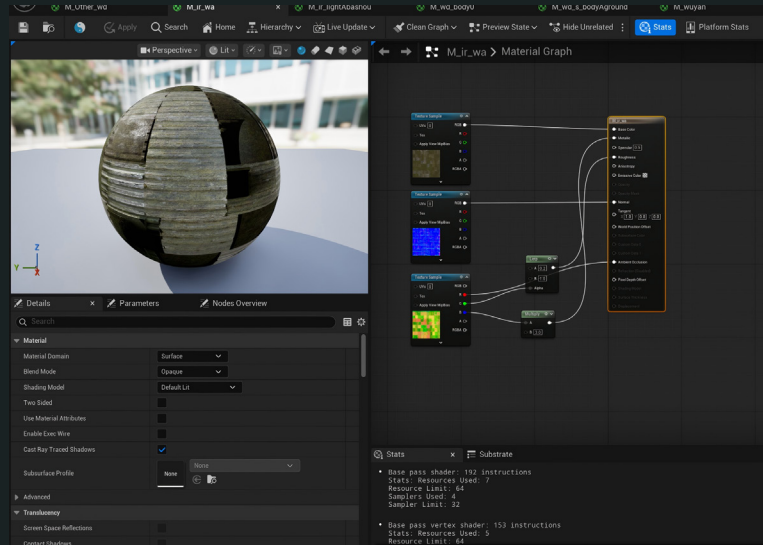
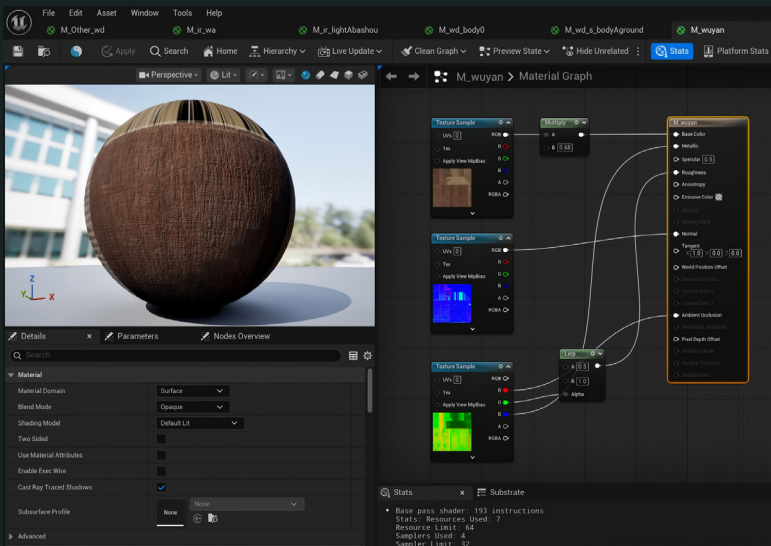
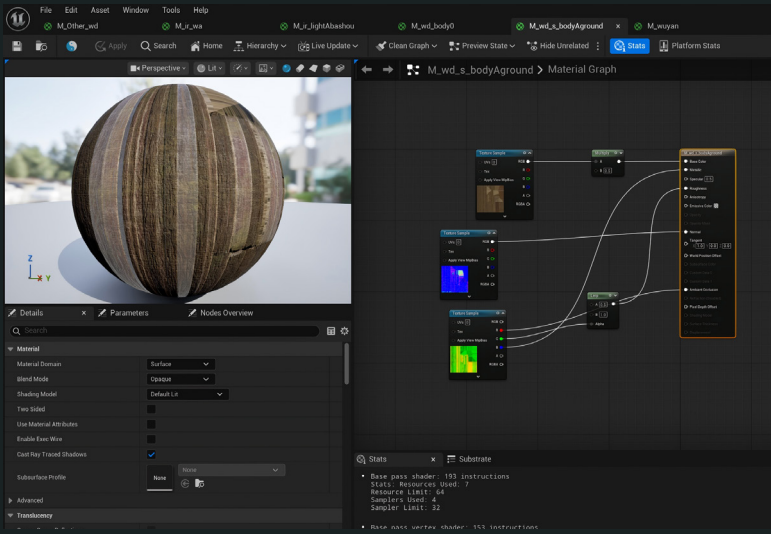
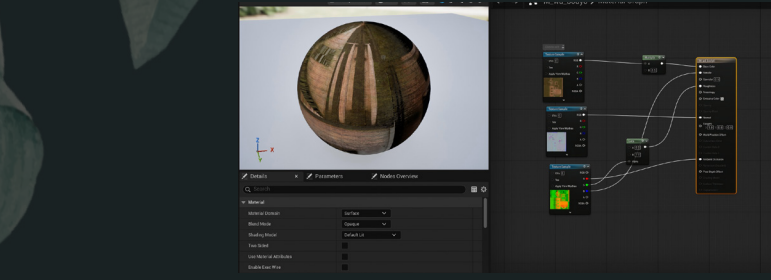
Mainly finished



Finally- draw the moss texture



• Import the material into UE5

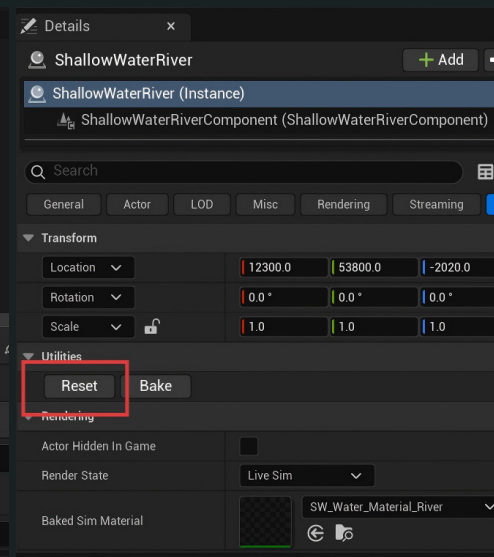
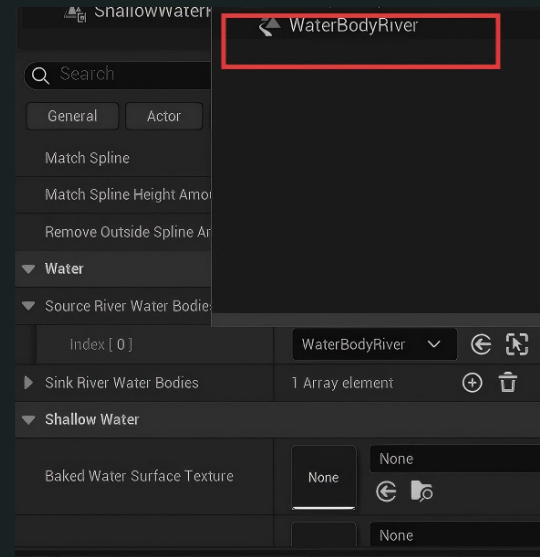


• Simple scene_Unreal feature

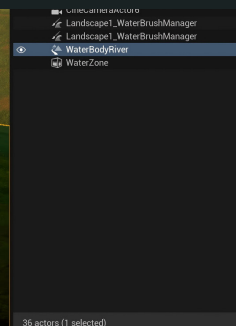
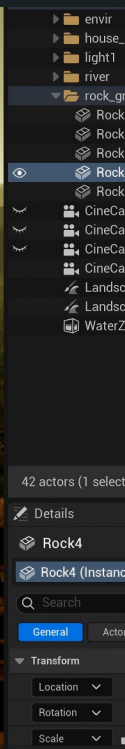
Add trees and grass



Add river



Add rock



- Final result display



• Vision vs Outcome

In this project, I hoped to create a summer forest cabin with a warm atmosphere, using yellow-green tones as the main palette to emphasize the feeling of being immersed in the woods.

As I completed the cabin modeling and worked on the materials, I felt I was gradually getting closer to my goal.

Overall, the project was successfully completed in the end. Despite many challenges and uncertainties, it ultimately presented a complete final result.

• Challenges & Solutions

This project came with several challenges. For example, I'm not very skilled at creating realistic materials (I'm more familiar with producing stylized and cartoon textures). To improve the material quality, I studied many real-world wooden objects and examples of wear and tear. In Substance Painter, I used generators along with hand-painting to achieve the desired results.

Another challenge was that I had never created moss materials before, so I searched for tutorial videos on YouTube and learned how to add moss to my wooden cabin.

The final challenge was integrating my cabin model with rock and tree models found online to build a coherent scene, which also involved lighting and water-flow effects. At first, the placement of the models didn't look very good, and I spent a lot of time making them work harmoniously together, constantly adjusting both lighting parameters and material settings.

• Lessons & Future Plans

This was a great attempt that helped me become familiar with the full workflow—from modeling in Maya to scene building and lighting in Unreal Engine.

First, I gained many modeling methods and material-creation techniques that I had never tried before. I also learned about lighting and water-flow effects in Unreal Engine.

Finally, I worked hard to make my cabin integrate harmoniously with the scene.

These valuable experiences will help me create 3D environments more effectively in the future, and I look forward to producing even more complex works.