

Design choices

- I downloaded the base model (Meine Villa) from sketchfab.com
- "Meine Villa" (<https://skfb.ly/6ZBGq>) by Home Design 3D is licensed under CC Attribution-NonCommercial-ShareAlike (<http://creativecommons.org/licenses/by-nc-sa/4.0/>).
- I removed the road leading to the villa in the original model since it looked out of place.
- I removed the content of the swimming pool, filled the edges lining its opening, selected and separated the resulting face of the filled edges from the villa to create the independent plane called pool-surface which was animated with a custom script to replicate water.
- For lighting, I used a point light to replicate the sun and another in the bedroom.
- The background is an a-sky element with a High Dynamic Range Image as its source.
- The ground is a repeated seamless grass image texture.

Technical Challenges

- a-light elements weren't casting shadows even though all three requirements were met to do so. **Solution:** Didn't find any.
- Folder size exceeded specified limit. **Solution:** Compression.

Future Improvements

- The model could be made tangible so users can interact with it movement-wise to climb the stairs to the first floor.
- More realistic textures could be used.