

One of the main lessons learned from this project was the importance of building and validating core functionality early in VR development. Establishing a stable wheelchair movement system and collision detection framework made it easier to expand the environment and add additional features incrementally.

This project highlighted the unique challenges of VR interaction compared to standard 3D applications. Handling user input, camera stability, and motion comfort required careful tuning to ensure a usable and comfortable experience, especially when simulating wheelchair navigation.

Another key lesson was the value of designing with accessibility in mind from the beginning. Features such as adjustable brightness and text size were easier to integrate when considered early, rather than added as an afterthought.

Working on both VR and desktop emulation reinforced the importance of cross-platform testing. Differences in input methods and performance between platforms required additional testing and small design adjustments to maintain consistent behavior.

Finally, this project emphasized the importance of scoping and iteration. Focusing on completing a fully functional scene before expanding to additional environments helped ensure stability and made future expansion more manageable.