CS354R I Need A Hero Final Report
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Demo Video

Project README has links to the windows binary and VR demo video.
VR Demo video: https://www.youtube.com/watch?v=JSNHY7wqvLw

Finished Components

- Fake Entity Component System
- Level Manager that consistently spawns more and more enemies
- Keyboard/Mouse Player Controller
- Health Component
- Inventory Component
- Inventory Display
- Items
- State Machine
- Enemy AI that navigates to your base, attacks, and dies
- Generic attack hitboxes
- Turrets for the player
- A VR inventory display (uses the same 2d interface from before but it gets rendered in 3d space in front of the VR player) & interaction
- Game resets when player loses

Teammate Contributions?

N/A

Thoughts

The game is playable and works really well even though it hasn't been optimized too much. For the mobile processor on the Quest 2 it didn't lag at all even when >30 enemies were actively spawning and pathfinding. Given more time, I would optimize and add unique turrets and enemies to balance out the game. At its current state, turrets are really overpowered and there's no point in using the basic blocks in the game. In other words, this game needs some balancing, but that's not necessary for a simple demo/proof of concept. The game also needs a constraint on placing down turrets. My original idea was an energy system to prevent infinite turrets – although that requires a lot of work.

Why does the Hand Tracking seem so finicky?

Up until 2 days ago the hand tracking was amazing. It seems that with Meta's v47 quest software update the hand tracking now has some jitters to it unfortunately.