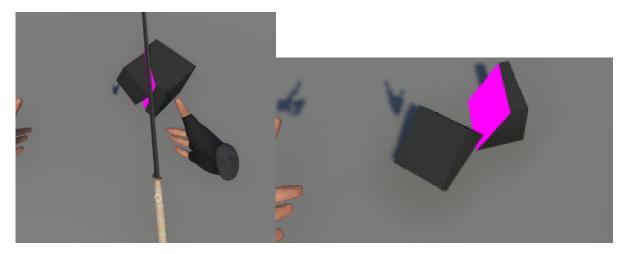
# **Portfolio**

### Boxing Game (coming soon)

Physics-based VR Boxing game with active ragdolls and inverse kinematics. The player has to beat 5 levels by fighting and using their surroundings to deal damage to the enemy.



Player with inverse kinematics and enemy made with an active ragdoll. Enemy's punches try to aim at player's face with IK rigging. The end result increases immersion and enhances VR combat.



Sliceable objects to be used for some parts of the levels, so that the player is able to figure out more ways to take out enemies other than punching.

#### Stack Game (in progress)

Github (some features): https://github.com/Timohjh/Playground

VR Multiplayer game where the player needs to complete multiple randomly chosen minigames while climbing up the stack. Current state: Photon multiplayer is close to being ready, nine minigames done but waiting to be implemented to the game, player mostly ready (IK and character missing) and game's flow + level design mostly figured out. Todo: Players inverse kinematics, finish multiplayer, ideally add more minigames, finish the game's levels and refactoring/optimizing.

### **Zombie Game**

Github: <a href="https://github.com/Timohjh/ZombieGame">https://github.com/Timohjh/ZombieGame</a>

Youtube: <a href="https://www.youtube.com/watch?v=Pehyu-1zPZU">https://www.youtube.com/watch?v=Pehyu-1zPZU</a>

Game page: https://timoheikkilae.itch.io/a-game-with-zombies-and-stuff

Round-based VR zombie killing game. The further you get the more zombies you need to kill.



Simple UI with a couple of settings and score tracking. Persistent data between sessions.



Three different monsters (slow, fast and boss) made with Unity's NavMesh pathfinding. Terrain made with Unity's terrain tools and assets mostly from the asset store (listed on the game's page).



Player has access to two swords and a can of soup that spawns every 3 rounds to increase health.

# **Target Practice Game**

Thesis (in Finnish): https://www.theseus.fi/handle/10024/505971

Game page: <a href="https://timoheikkilae.itch.io/target-practice-game">https://timoheikkilae.itch.io/target-practice-game</a>

VR target practice with two gun ranges (long and short) and a timed obstacle course. This game was made as a thesis project for Haaga-Helia University of Applied Sciences. The purpose of the game was to demonstrate VR-specific game development process with Unity and its VR capabilities.





Two gun ranges: a short range with a pistol and a longer with a rifle. Targets spawn and despawn on a timer. Score is given based on where the player hits the target. Tooltips help the player to figure out jow the gun works.



During the obstacle course, the player must clear out the building and the backyard as fast as possible. Score is given by the accuracy points and the time it took to finish.



UI for moving between games and a couple of settings.

# **Dungeon Game**

Game page: <a href="https://dungeongame1.itch.io/dungeon-game">https://dungeongame1.itch.io/dungeon-game</a>

Procedurally generated 2D dungeon crawler during which I mainly managed music/SFX and menu systems. The game was made during one of Haaga-Helia's courses with five other people.

My job was to find the foley sounds for the game and modify them to suit the game better. I decided to create a sound manager that made it easier to play sounds from only a couple of audio sources, since no 3D sound was needed. Below are pictures of the menus I made.



Main menu



Pause menu