The Dungeon of Schmöprl

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Pitch

The Dungeon of Schmöprl is multiplayer game for VR that is specifically designed for local cooperation.

VR player navigates, PC player informs. All communication is in person by playing in the same room



In VR, the player moves around a 3D world



The player at the PC plays using a top-down 2D View

Design goals

Avoid intentional and accidental cheating in the VR-space

Indicators for play area

Everyone has something to do



The Gamey Bits

Buttons, Doors, Keys, Locks, the whole kit and kaboodle

Akin to classic adventure games

Stealth / puzzles rather than violence

Obstacles and difficulties become insurmountable alone: a helpful fairy knows the dungeon layout



Views from the VR player and PC player respectively



Enemies

Navmesh and patrol points

Cameras alert nearby enemies

Dodge behind obstacles to break line of sight

PC player can see exact coordinates / line of sight safely



Beware the angry snowman, a descendant of the yeti from SkiFree!



The latest in floating box-shaped security camera technology.
The doors are automatic too, so the place must have magic electricity

Navigation

Tile-based movement

Direction indicated by pointing

Detect obstructions with the marker

Vision blurs if player moves out of bounds



The movement indicator displays when the player points in the direction they want to move. Green means the move is possible, otherwise the marker becomes orange



Some areas require creative maneuvering to find a path between tiles

Puzzles

Initial brainstorming was Metal Gear Solid, result was more Legend of Zelda

Areas separated by locked doors

Progressively harder, always a clear stopping and starting point, leads to a twist ending

When visibility in the VR world is limited by line-of-sight, the top-down view from the computer player may be necessary to proceed





Markers

All relevant objects in the play area have their own visible markers

Sometimes it helps to have a physical pointer to back up verbal communication

Can click to lay down numbers as indicators, and can place multiple to sequence multiple steps towards a goal



The guide can drop numbered markers into the VR world to draw an ordered path



The helpful math wizard powers will guide the way

Challenges Faced

Mapping markers to in-game VR objects

Plot / art / ending

Intuitive vs anti-motion-sickness vs useful when choosing movement system

AI / LoS / Lag issues



We had to use MATH to make rotated boxes look like boxes, and to get cameras to look back n' forth realistically

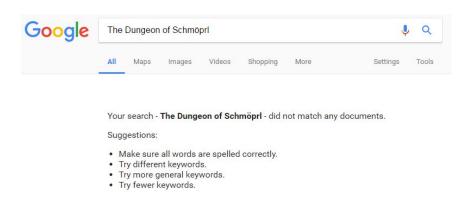
Trailer



Overall

Playtime: 10-20 minutes

Experience = Keep Talking and Nobody
Explodes + Metal Gear Solid + Legend of
Zelda





1/1 internal playtesters agree: the Tower Of Buttons section elevates this game into Triple-A GOTY territory

Thank You

Questions?