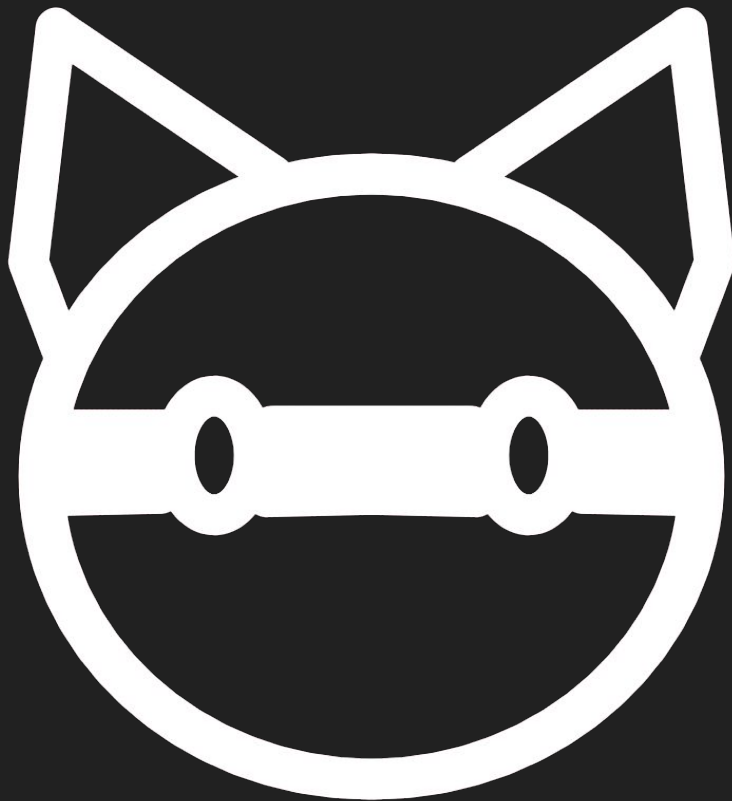


DupliCat



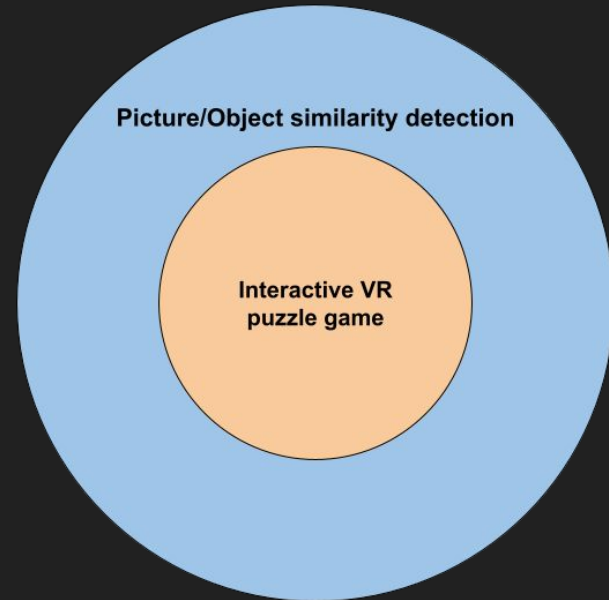
DupliCat

By Brush n' Rush

Clemens Fromm, Kim Simon, Klejdi Sinollari, Georg Eickelpasch, Leonard Keil

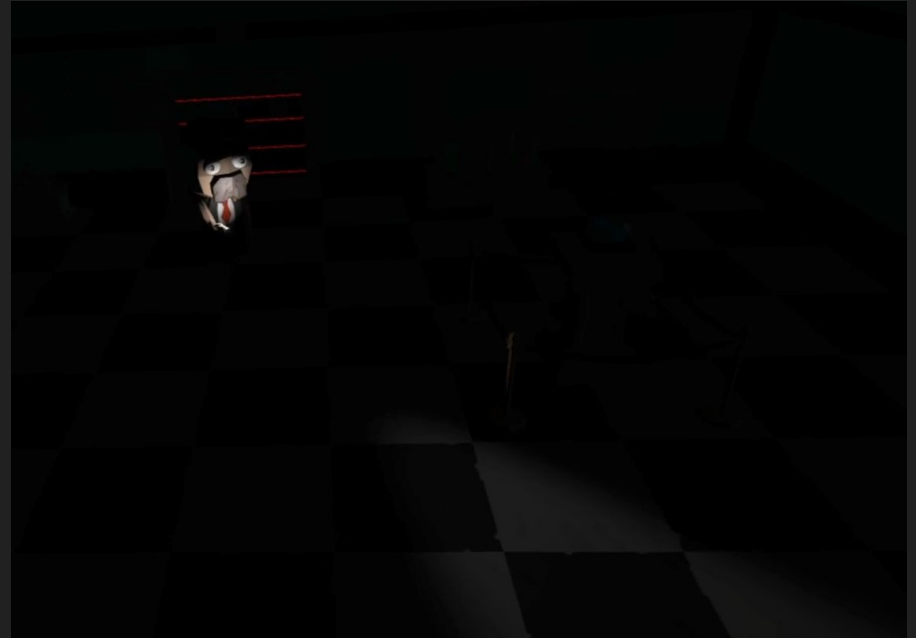
The Original Idea

- A VR drawing heist game
- Duplicate theme:
 - Story:
 - DupliCat, an art thief
 - Duplicates art to steal it
 - Gameplay:
 - Copy paintings
 - Recreate sculptures



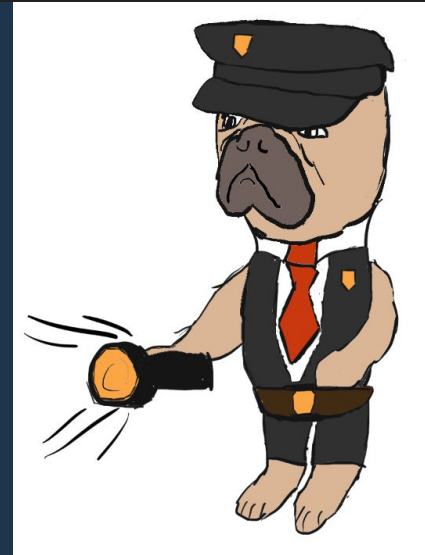
State of the Game

- Interactive main menu/tutorial scene
- Two different modes: Painting & Sculpting
- Several different paintings
- One major environment
- Focus on light & darkness with guards and flashlight



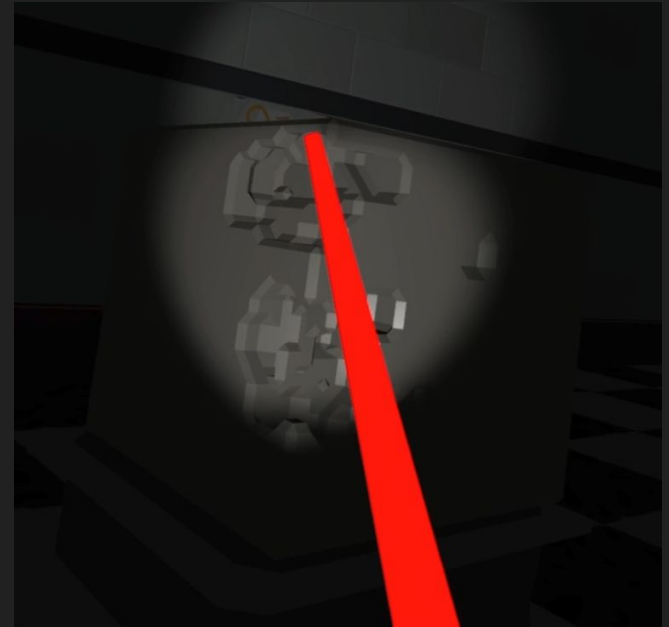
Project Changes

- No significant changes to our original concept
- Opted to not use a timer
- Some mechanics have less depth than originally planned
- Higher focus on making core features work
- Story is only portrayed in a limited fashion



Sculpting

- Sculpting mechanic realized
 - Implemented using Marching Cubes
 - Performance issues, mostly solved
 - Only significant issue is recreating the colliders
 - Solved by updating in chunks, causes some visual artifacts
-
- Initially used a high resolution Voxel Grid
 - Was very time-consuming and boring
 - Lower resolution grid still a bit tedious and looks chopier



Project Targets

Functional Minimum

- VR setup (Done)
- Basic drawing mechanic (Done)

Low Target

- Picture similarity detection (Done)
- Basic art and assets (Done)
- Simple 3D environment (Done)

Desired Target

- User Interface (menus and interface) (Done)
- Audio (music and sound effects) (Done)
- Story (Done, less depth)
- Game modifiers and conditions (Done, less depth)

High Target

- 3D sculptures as art objects (Done)
- Sculpting mechanic (Done)
- Object similarity detection (Done)
- Stealth mechanics (Done, less depth)

Extras

- Additional game modes (Cut)
- Procedural shapes and paintings (Cut)
- Scoring system (Done)

Demo-Day Results

- For many, VR is interesting but also unknown.
 - moving / teleporting
 - grabbing
 - rotating / orientatingare always a challenge for newcomers.
- Received good feedback and could use it right away to change our game on the fly.
 - Flashlight - not spawning on the ground
 - Highlight reference picture
 - Turn up the volume



Live Demo



Thank you!
Any questions?