



Pietro Peduzzi
Portfolio
2025

CONTENTS

Resumé	3
Master's Project	4-5
Bachelor's project	6-8
AR projects	9-11
Figma projects	12-13
My contact	14

Resumé

Education

Master in design, specialization Digital Ideation
2023 – 2025

Hochschule Luzern Design Film Kunst (HSLU)

Bachelor in design, specialization Game Design
2019 – 2022

Zürcher Hochschule der Künste (ZHdK)

Vorkurs, Foundation Course in Art and Design
2018 – 2019

Hochschule Luzern Design Film Kunst (HSLU)

Experience

Internship by ETHZ, 8092 Zurich, Student Project House
October 2022- September 2023

Aldi Shop in Giubiasco, 6512 Giubiasco (TI),
Warehouse, bakery, customer management
Summer 2020

Secretarial work by paediatrics practice FmH Paolo Peduzzi,
6500 Bellinzona (TI),
Working on process of digitisation
Summer 2019

Languages

Italian: Native

English: Full professional proficiency

French: Limited working proficiency

German: Limited working proficiency

Hobbies

Theatre

Arduino and 3D printing

Scout leader

Custom PC builds

FPV drone flying

CODEX ALGORITHM [+]

Master's Project

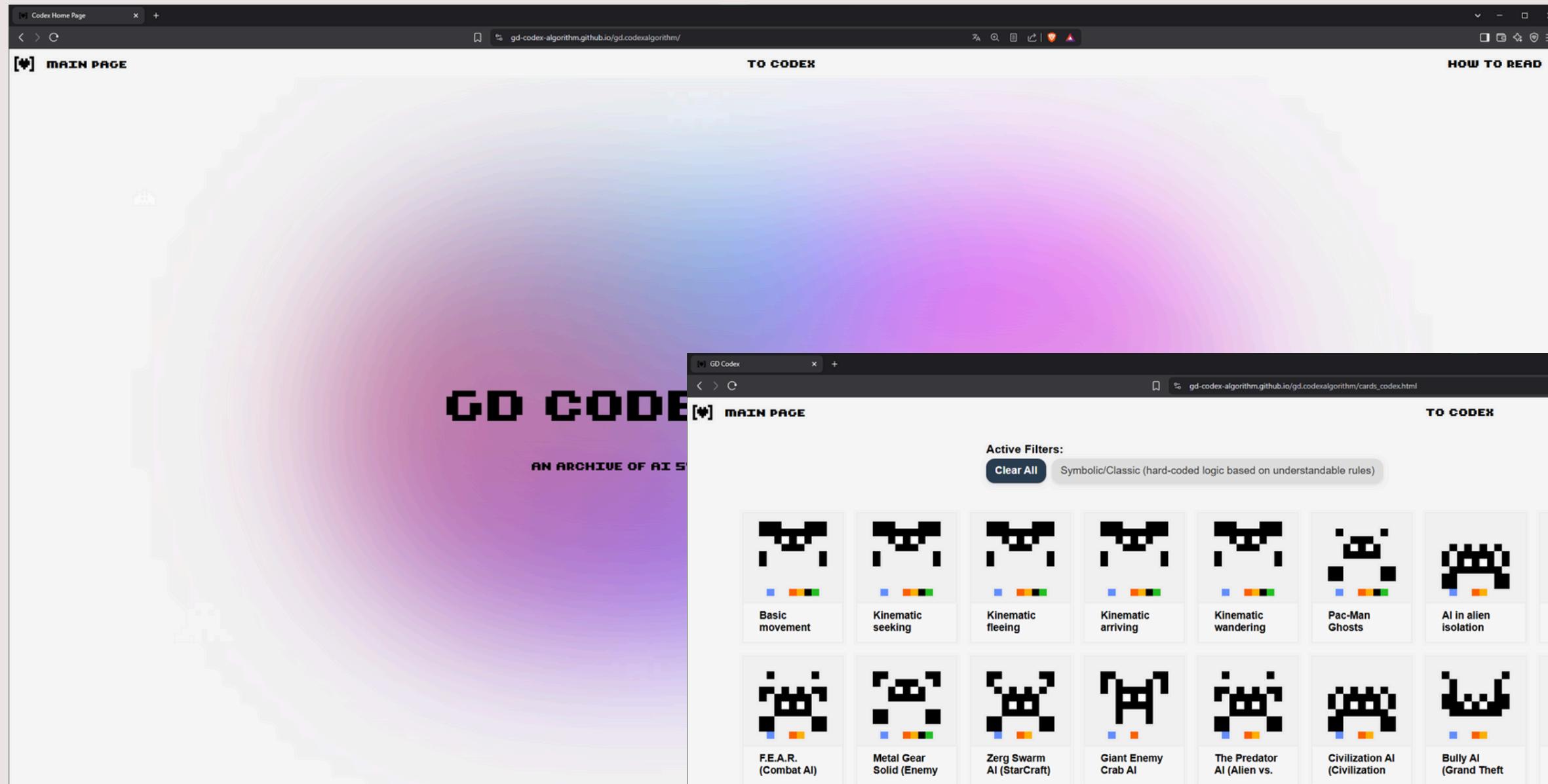
The video game industry is rapidly growing, with global revenue projected to rise from \$262 billion in 2023 to \$312 billion by 2027. At the same time artificial intelligence (AI) research has become widely discussed, many companies have started exploring and implementing AI technologies for performance and profitability. The increasing use of the term "AI" deriving from these processes has led to confusion, especially in the game design industry, where now the use of the term is often inconvenient and can lead to struggles in communications due to its morphing interpretation. This lack of clarity does not only affect game developers but also other stakeholders, delaying communication and slowing progress.

The research, and the subsequent project, addresses these issues by exploring how game developers can better understand and apply AI systems in their work.

The project aims at creating a digital library that gathers AI applications, systems, and tools used in the game development community. This would be a starting point for game developers to understand the complexities of AI systems and their potential use in games.

Codex Algorithm evolves with AI and its impact on game development. The virtual library builds a community and resource archive to track AI advancements and aid design decisions. Often, the best solution isn't the most elaborate but the one that looks the smartest in the simplest way.

<https://gd-codex-algorithm.github.io>



The screenshot shows the 'cards.codex.html' page of the GD Codex. At the top, it says 'MAIN PAGE', 'TO CODEX', and 'HOW TO READ'. Below this, there is a section titled 'Active Filters:' with a 'Clear All' button and a selected filter 'Symbolic/Classic (hard-coded logic based on understandable rules)'. The main content is a grid of 40 AI card icons, each with a small image and a caption. To the right of the grid is a detailed sidebar with filters for various categories:

- Type**:
 - Machine learning
 - Symbolic/Classic (hard-coded logic based on understandable rules)
- Employment**:
 - AI that creates
 - AI that models
 - AI that plays
- Technique**:
 - Behaviour tree
 - Decision tree
 - Finite state machine (FSM)
 - Generative AI
 - Neural network
 - Pathfinding system
 - Reinforcement learning
 - Rule-based system
 - State machine
- Task**:
 - Decision making
 - Learning
 - Movement
 - Narrative
 - Pathfinding
 - Procedural content generation
 - Tactical and strategic
- Genre**: (This section is partially visible at the bottom right)

<https://www.youtube.com/watch?v=w0UYdTPesFU>

AIR-TIGHT



Bachelor's Project

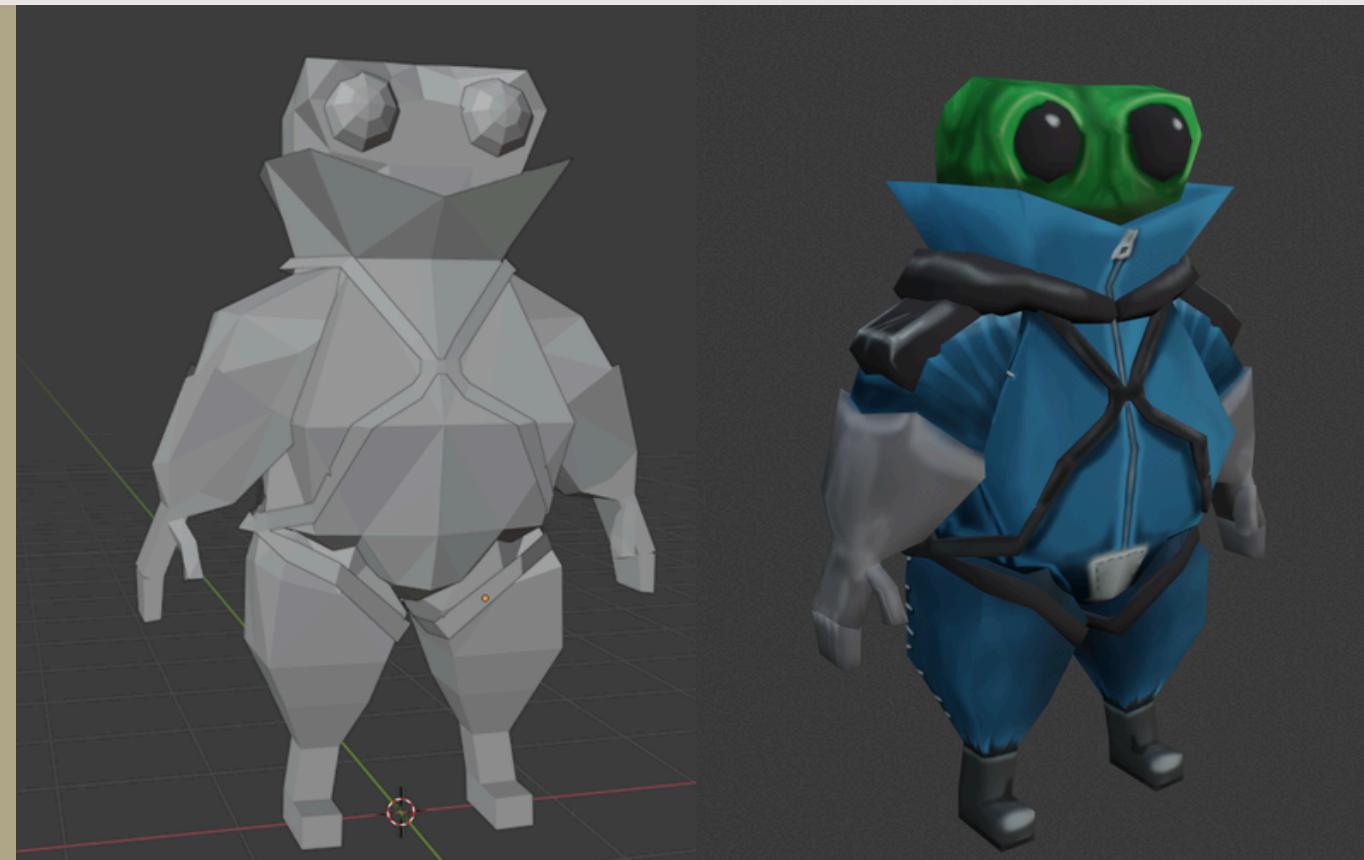
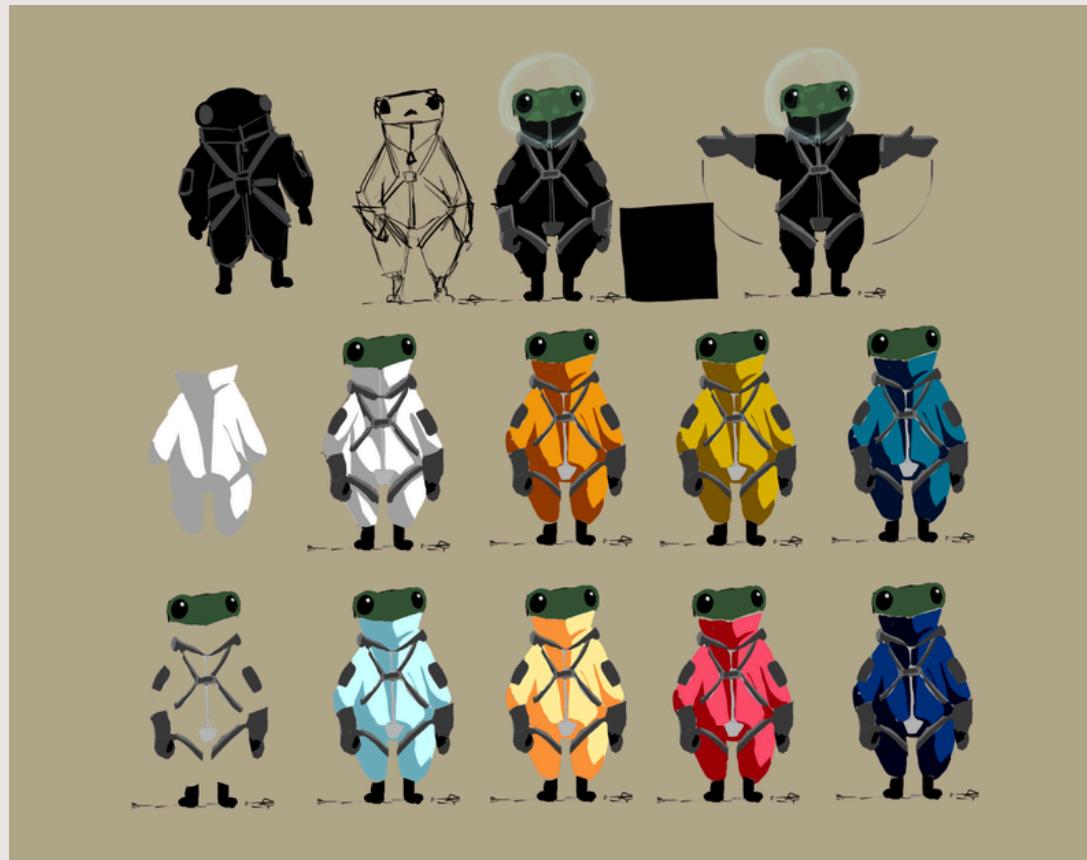
Air-Tight is a 2.5D survival crafting game where the player must keep moving in order to survive. This project is linked to a research and thesis that explore how the gameplay experience of a survival game changes when the player has to move along with their base.

The project had two main parts: research and practical development. The research focused on understanding survival games and what happens when an object that is usually static, like a base or important landmark, starts moving without the player's control.

In the second part, I built a game prototype from scratch to test the ideas from the research. Creating a working game helped to prove or challenge some assumptions that might have been missed otherwise.

Air-Tight was developed completely from the ground up. I used Blender to make the 3D models and Unity as the game engine.

The game concept changed several times before finally focusing on the idea of a giant moving insect. This creature carries all of the player's belongings and holds the important devices needed to progress in the game. A new gameplay mechanic was added so that the player cannot stay far from the moving companion for too long. This increased the need to stay close to the base and take risks in order to move forward in the game.





<https://www.youtube.com/watch?v=w0UYdTPesFU>

AR APPLICATIONS

Pigeon

PIGEON was a project born during an Interdisciplinary module FS 2021. By collaborating with a PhD at ETHZ that was experimenting on implementation of a technology called Immersal AR we came out with the idea. In this project my role was coding and implementation of assets.

Goal:

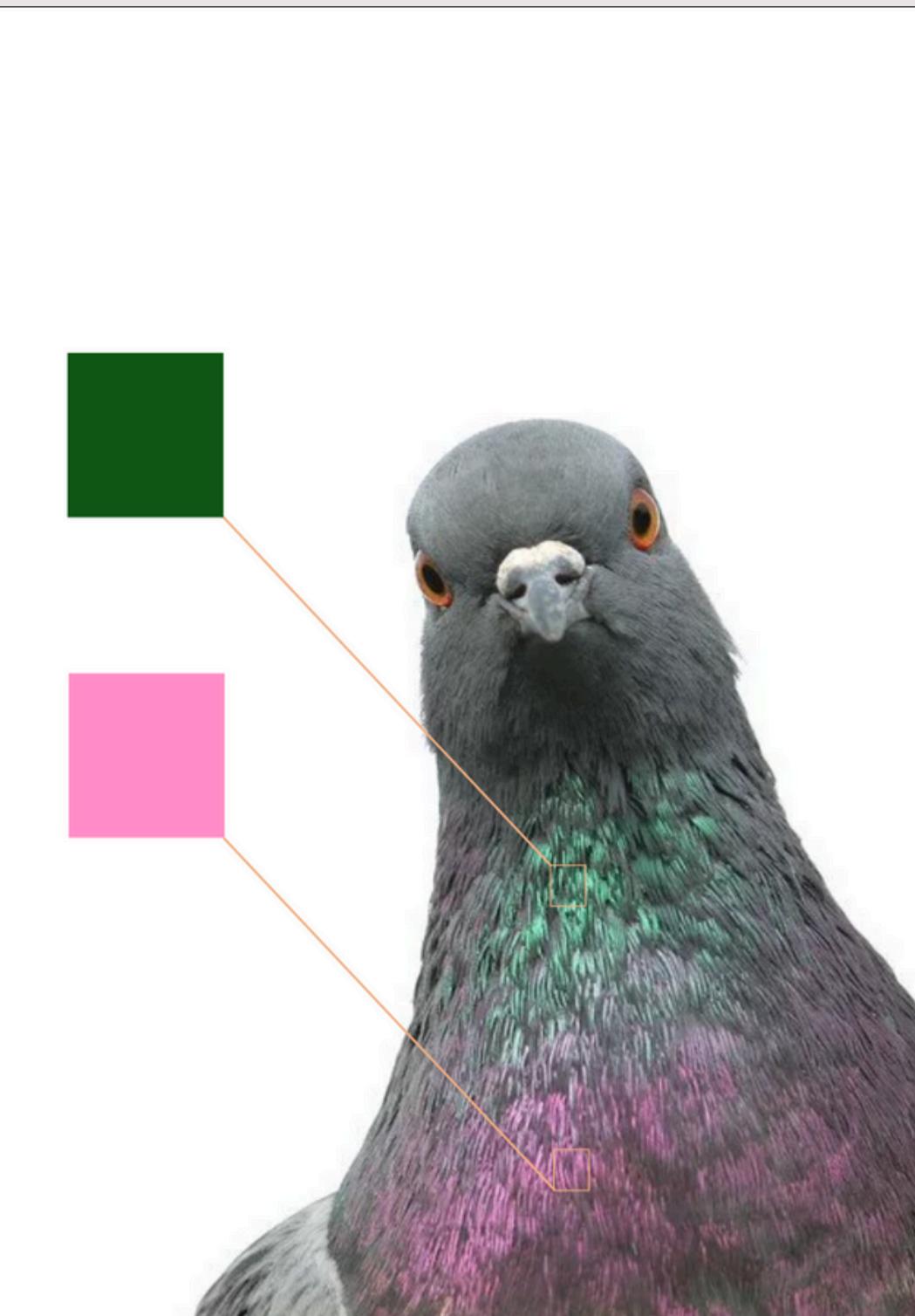
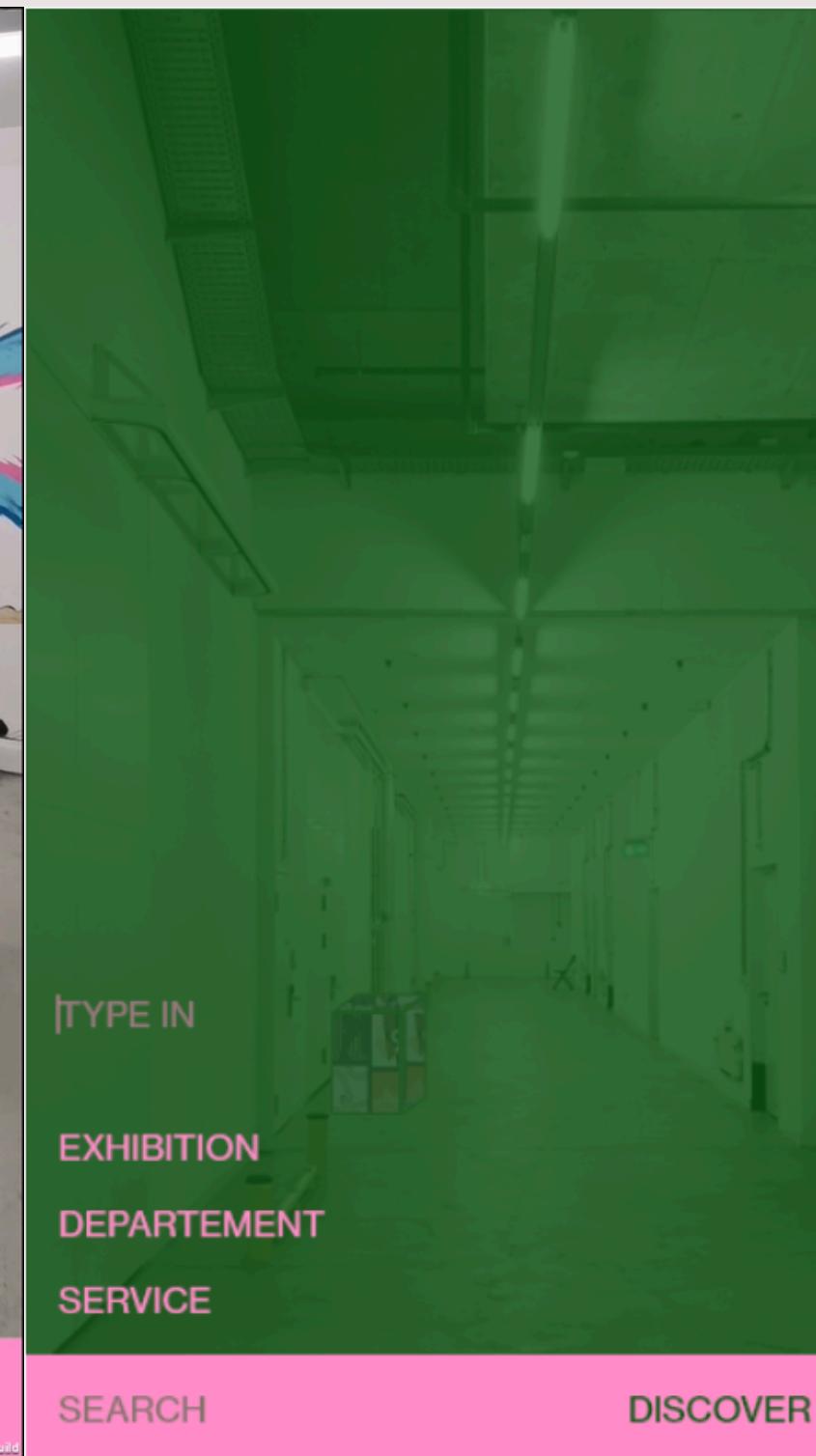
Making it easier to orient yourself inside ZHdK
Give visitors and other students an inside into different courses/projects.

Make it possible for students to exhibit their projects.

Team Members: Andreas Waldburger, Felix Brunold, Lucienne Chrétien, Pietro Peduzzi, Ryan Brand.



PIGEON

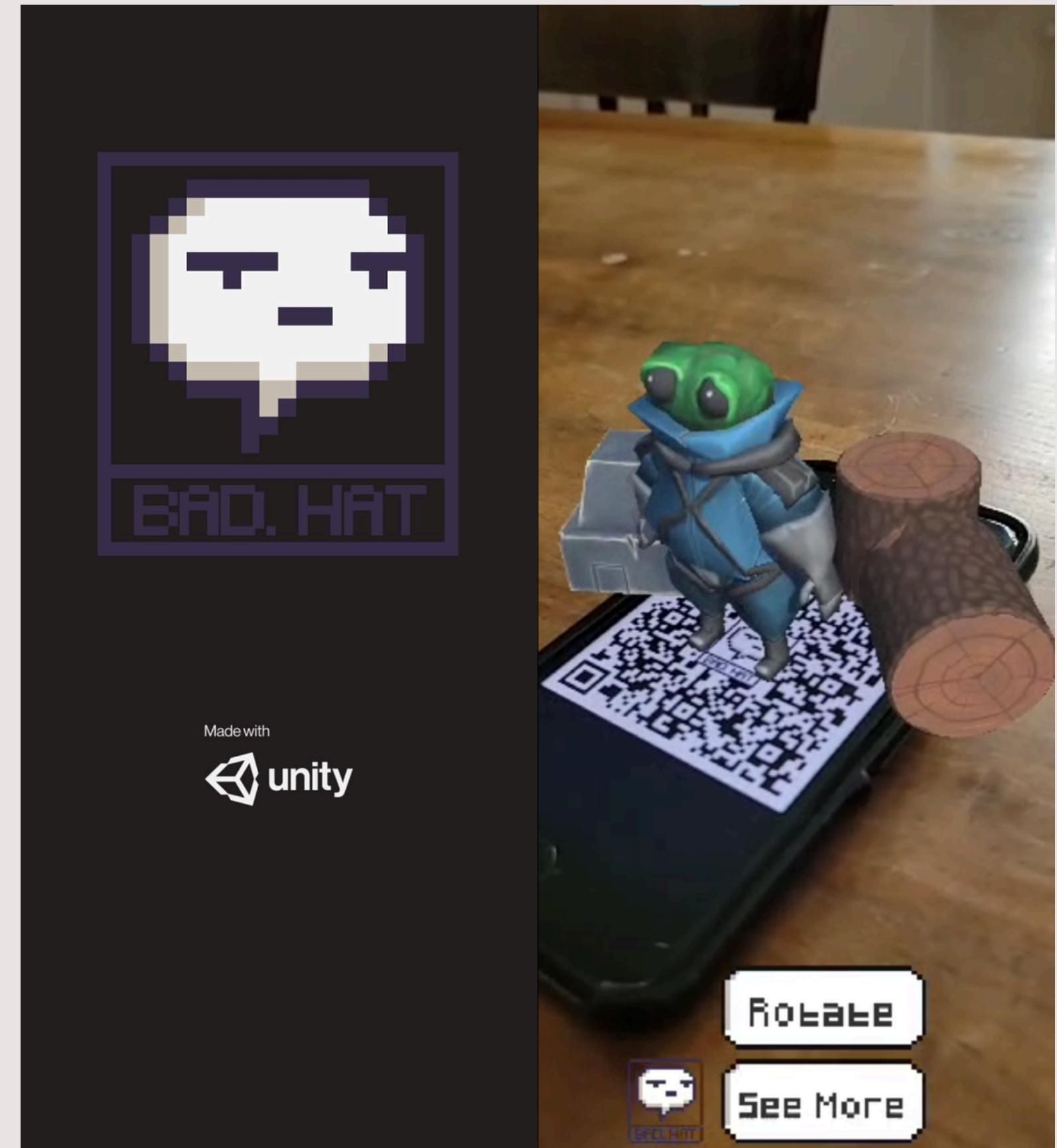


<https://www.youtube.com/watch?v=w0UYdTPesFU>

AR Business card

After the module I kept researching on AR application and I created this application that can be used as an extension of a business card for 3D artists. The idea is that when scanning the QR code on a card the user would be sent to a download page.

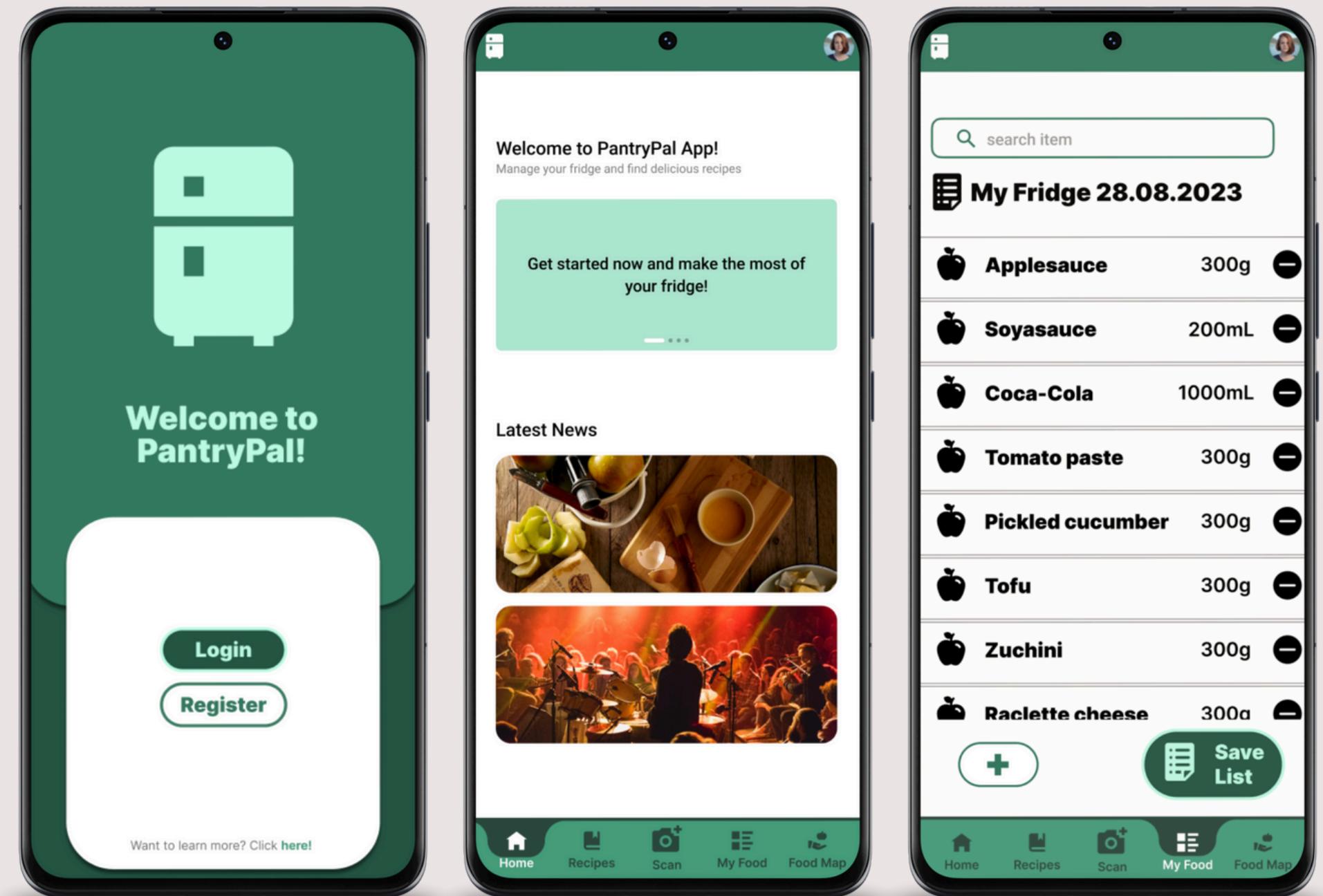
The QR code works also as a reference for the 3D models.



<https://www.youtube.com/watch?v=w0UYdTPesFU>

PantryPal:

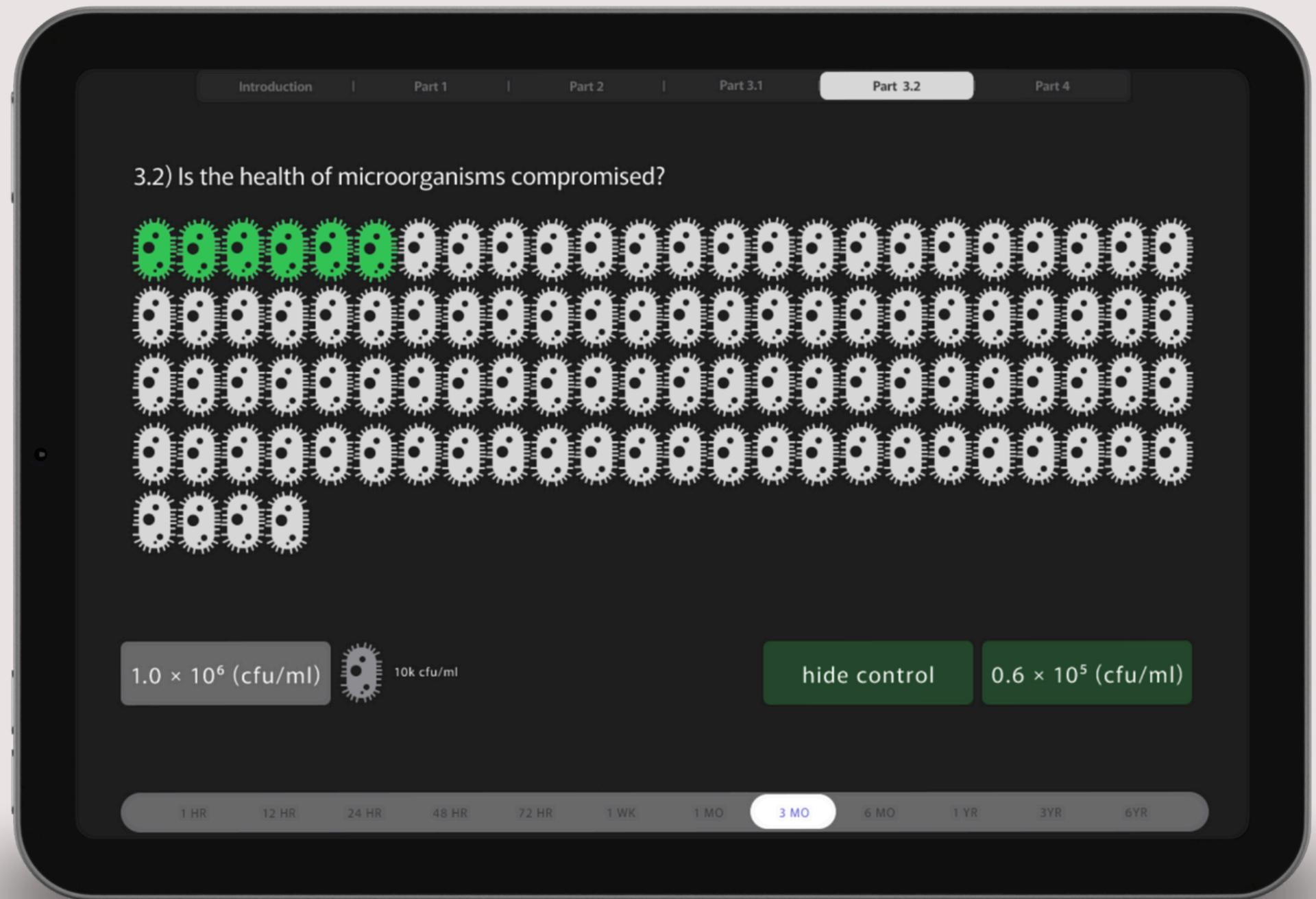
Developed during a module of interaction design and UX at the start of my Master's program. This prototype experimented on the concept of using AI for everyday tasks, An AI companion that helped you track the food in your fridge to avoid spoiling and suggested recipes with your current available ingredients.



<https://www.youtube.com/watch?v=w0UYdTPesFU>

Digital database for materials:

This prototype was created as visual example for another student's project during the Master. The project took a week to complete and I had to follow certain instructions from the colleague so that it would fit their needs and wishes. The idea was to create an archive where new materials could be tested and showcased, allowing the client to easily compare them and find the best option for their need. The prototype focused on the scientific side, showcasing materials data and experimentation results.



<https://www.youtube.com/watch?v=w0UYdTPeSFU>

MY CONTACT

Mail

pietro.peduzzi98@gmail.com

Website

pietro.design.io

