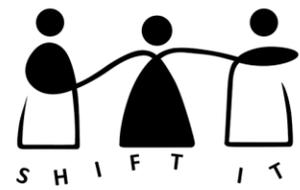


Our City Experience

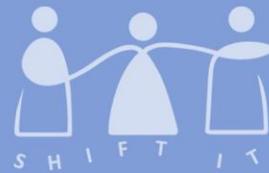
An interaction stimulating game for public
spaces

Overview



- 1 The Team
- 2 The Problem
- 3 Project Management
- 4 State of the Art
- 5 Marketing
- 7 Sustainability
- 8 Ethics
- 9 Proposed solution
- 12 Solution diagrams
- 13 End

The team



Alicja Faber

Industrial Biotechnology

Felix Ljungkvist

Industrial Engineering &
Management

Ângelo Torres

Mechanical Engineering

Lahore Hauspie

Product Development

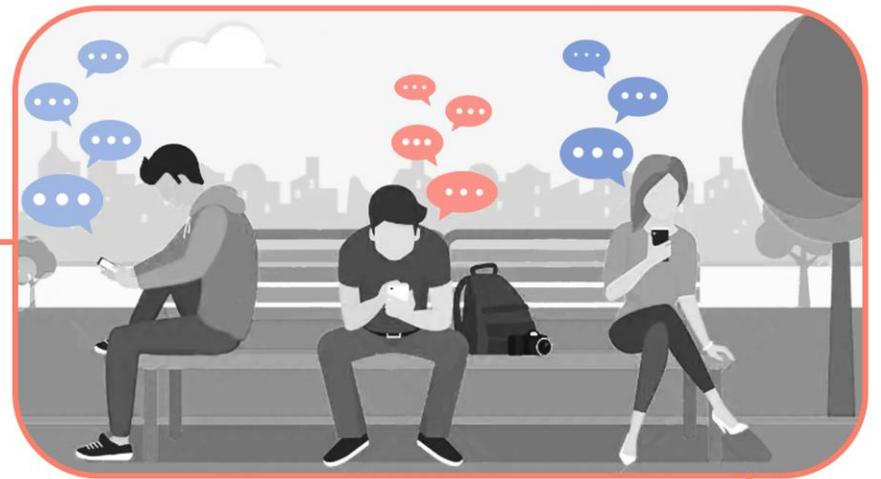
Elena Boucher

Packaging Engineering

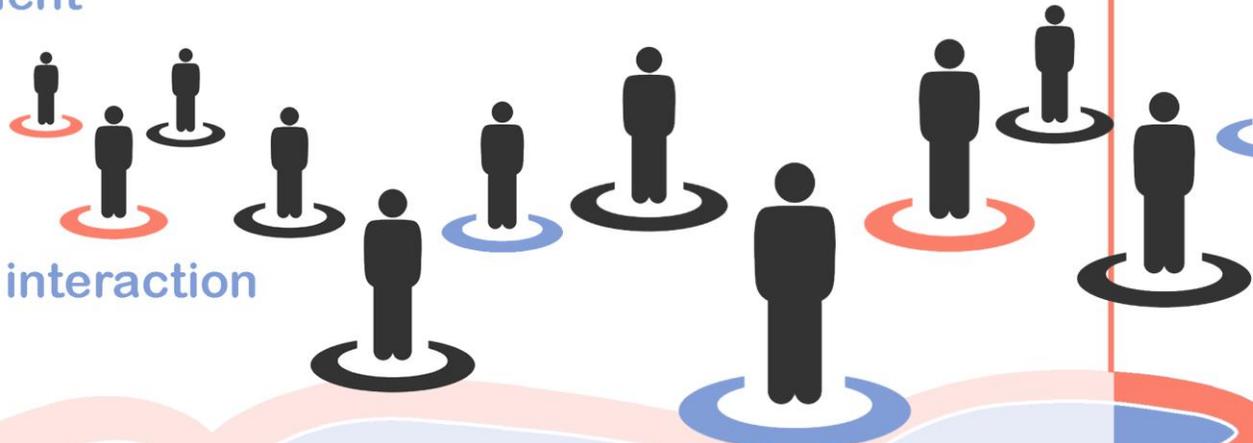
Sander Spaas

Electronics - ICT

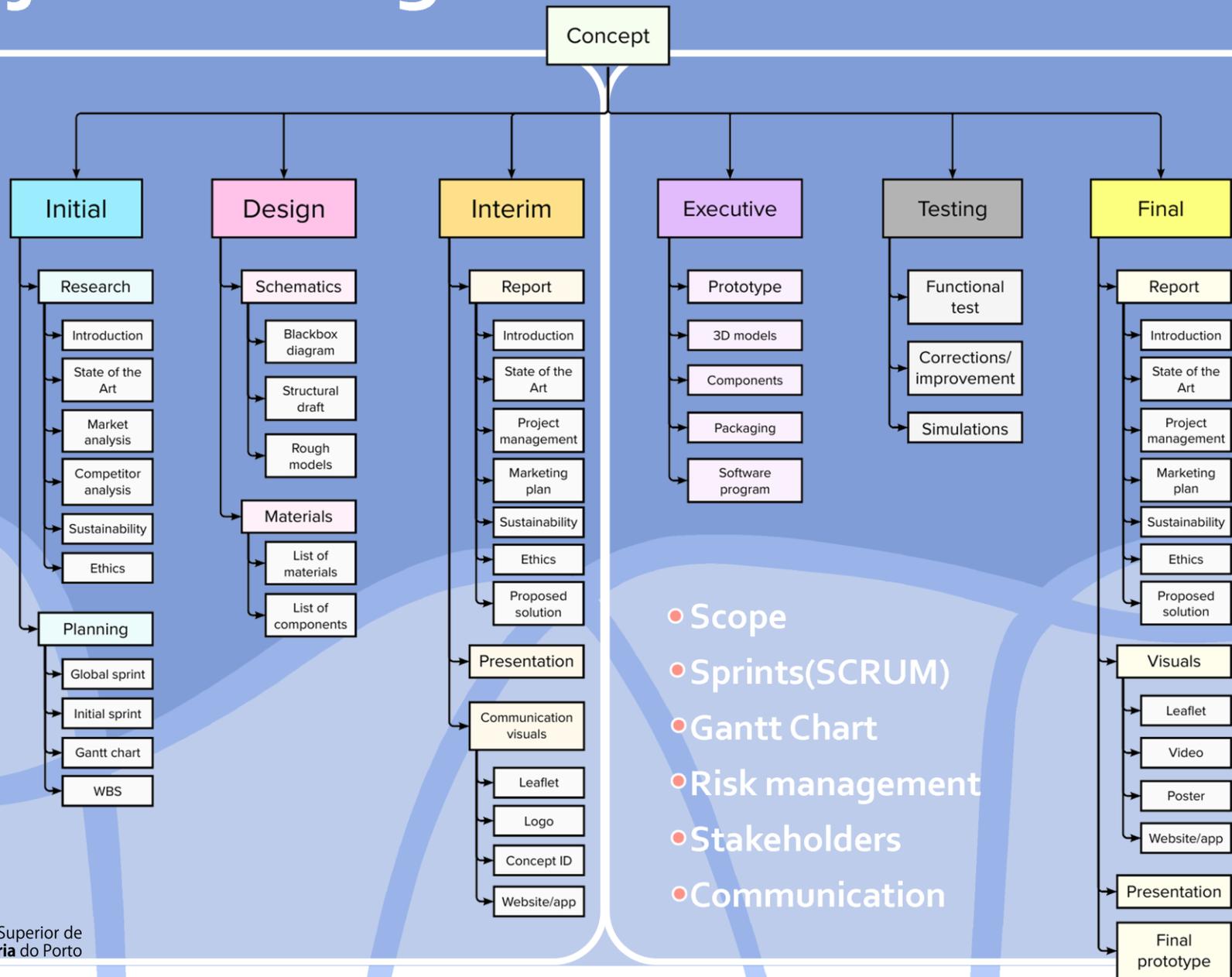
The problem



- Social Isolation
- Digital world attachment
- Shyness
- Decreasing of social interaction
- Lack of confidence
- Unaware of the surrounding environment and people



Project management



State of the Art

Stimulating social interaction in public spaces

- Types of social interaction
- Peoples' feelings
- Factors affecting social interaction
- Space/place of the interaction
- Benefits

Findings

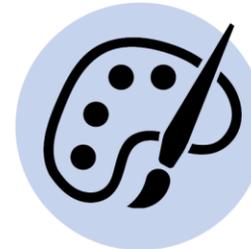
- Collaboration = Social interaction
- Competition = Motivation to participate
- Classical games = Good inspiration



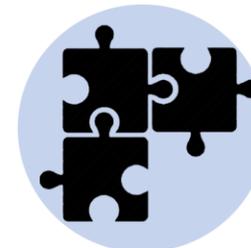
Sports - competitive
VS team



Creating music



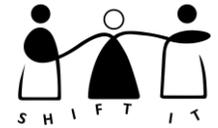
Art



Puzzles-
mental



Games



Physical components
can be combined
with technology

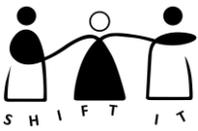


Different options



Stays interesting

Marketing



Product

Price

Place

Promotion



People



Physical environment

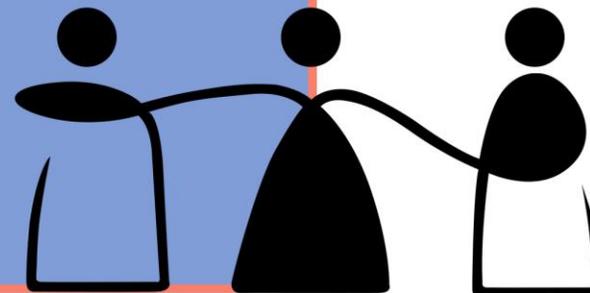


Process

Market analysis → Market strategy (BMC)

Micro environment
Macro environment

- Define objectives
- The target market
- Competitor analysis
- PESTEL
- SWOT
- Articulate communication axis and positioning (Product)
- Funding
- Promotion and distribution channels



Value Proposition

Users:

- For:**
- All ages
 - Visiting/living in the city
 - Any language
 - Background

- Who:**
- Want to socially interact
 - Have fun with others in public spaces

The value proposition is:

Promote:

- Social interaction
- Collectivism
- Fun
- Awareness of others
- Participation is free

Business partners:

- For:**
- Local governments
 - Events
 - Museums
 - Businesses surrounding public areas

- Who:** Want to:
- Attract customers
 - Be fun
 - Promote themselves in an appealing way

The value proposition is:

Provides a:

- Unique, fun experience
- An unobtrusive way of promotion
- Way to attract clients

Sustainability

Sustainability is the capacity to satisfy existing needs without compromising the capacity of future generations to satisfy their own needs.

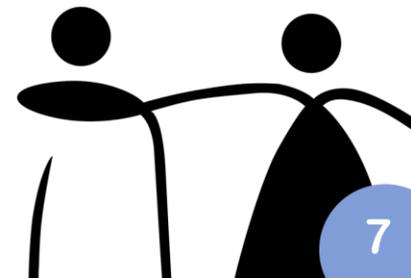
Environmental

Economical

Social

Life-Cycle Analysis

Consider when designing, choosing materials, production processes, energy sources



Ethics



Why ethics is important when doing a project

Types of ethics that we have to take into consideration:

- Engineering ethics
- Sales and marketing ethics
- Environmental ethics
- Liability

How is this implemented in our project...



Proposed solution

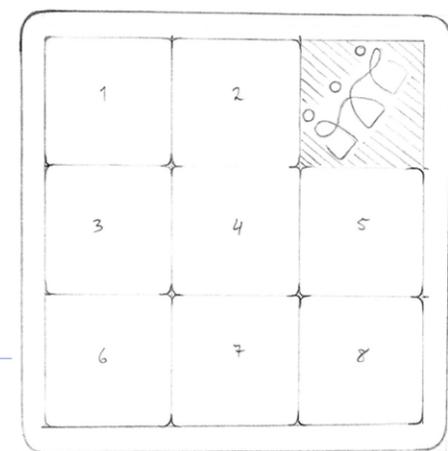
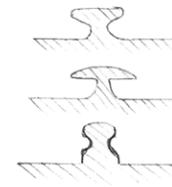
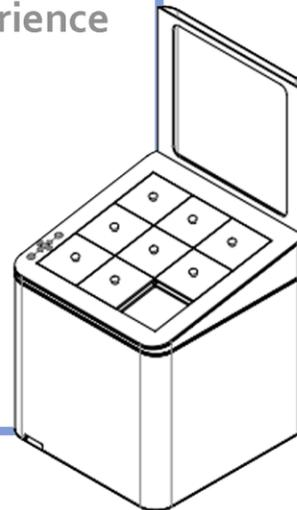
Description

Sliding puzzle game installed outdoors in public spaces

Requires collaboration that stimulates interaction

Has competitive side that motivates participation

Provides a fun, social experience

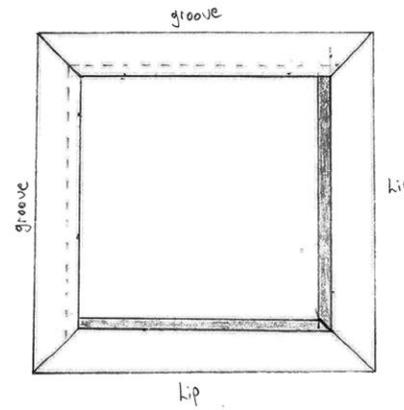
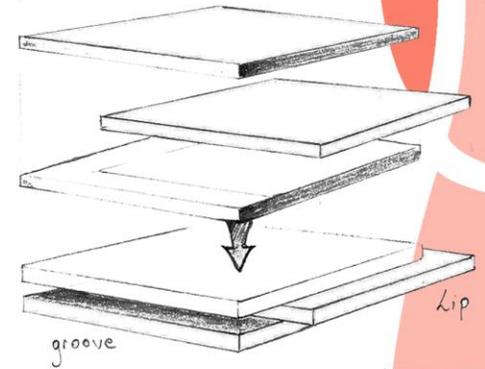
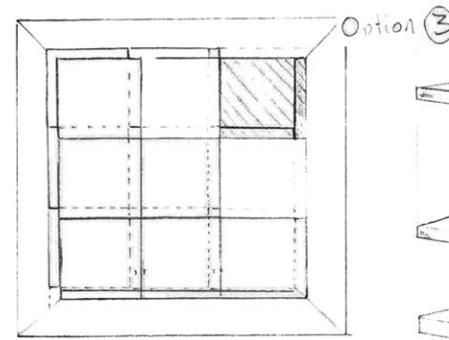
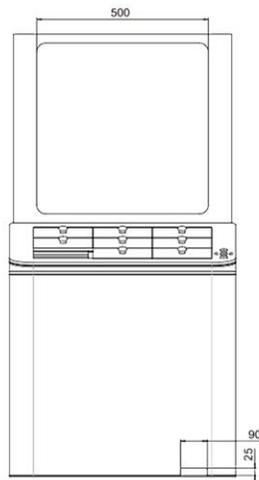
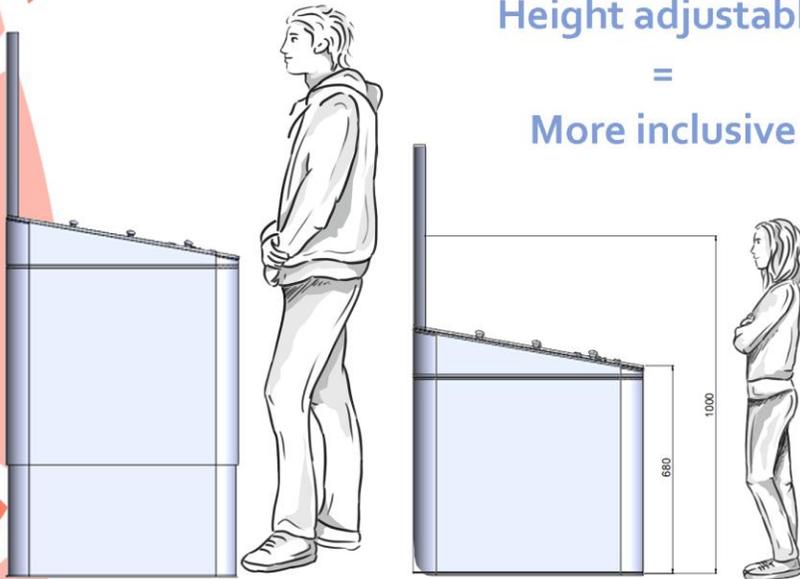


Requirements

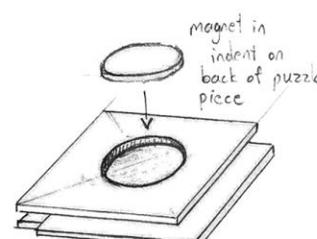
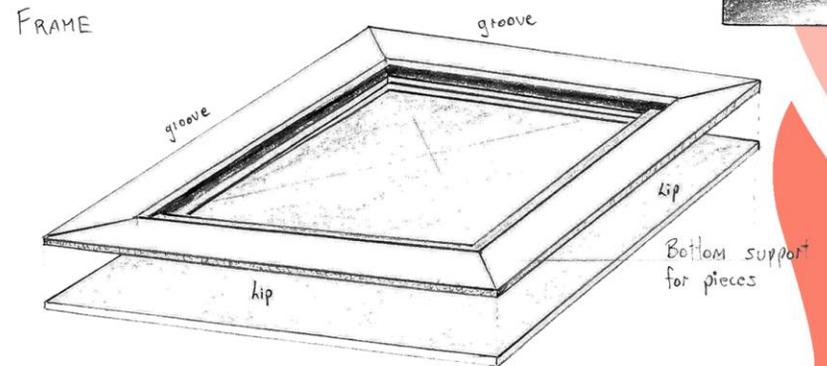
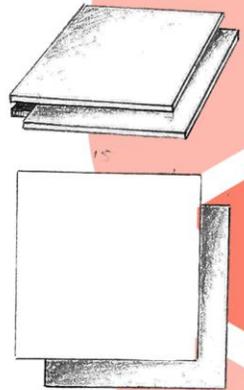
- Intuitive in use
- Involve minimum 2 people
- Accessible by a wide target group
- Not take longer than 15 min.
- Easy to install and assemble in various types of public areas
- Activate interest and curiosity

Proposed solution

Height adjustable
=
More inclusive



Handles
=
Better grip



Sliding puzzle pieces
=
Lip & Groove system

Step process

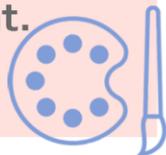
1

Push the button to take a photo-look at the screen to make sure you are within the frame.



2

Choose the artistic effects you want.



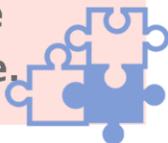
3

Your photo will appear jumbled up onscreen.



4

Slide the physical puzzle pieces vertically or horizontally to complete your photo on the screen as quickly as possible.



5

Your time and score will appear on the screen-have a race with another team!



6

Once the puzzle is completed, choose whether your photo can be on display or not.



7

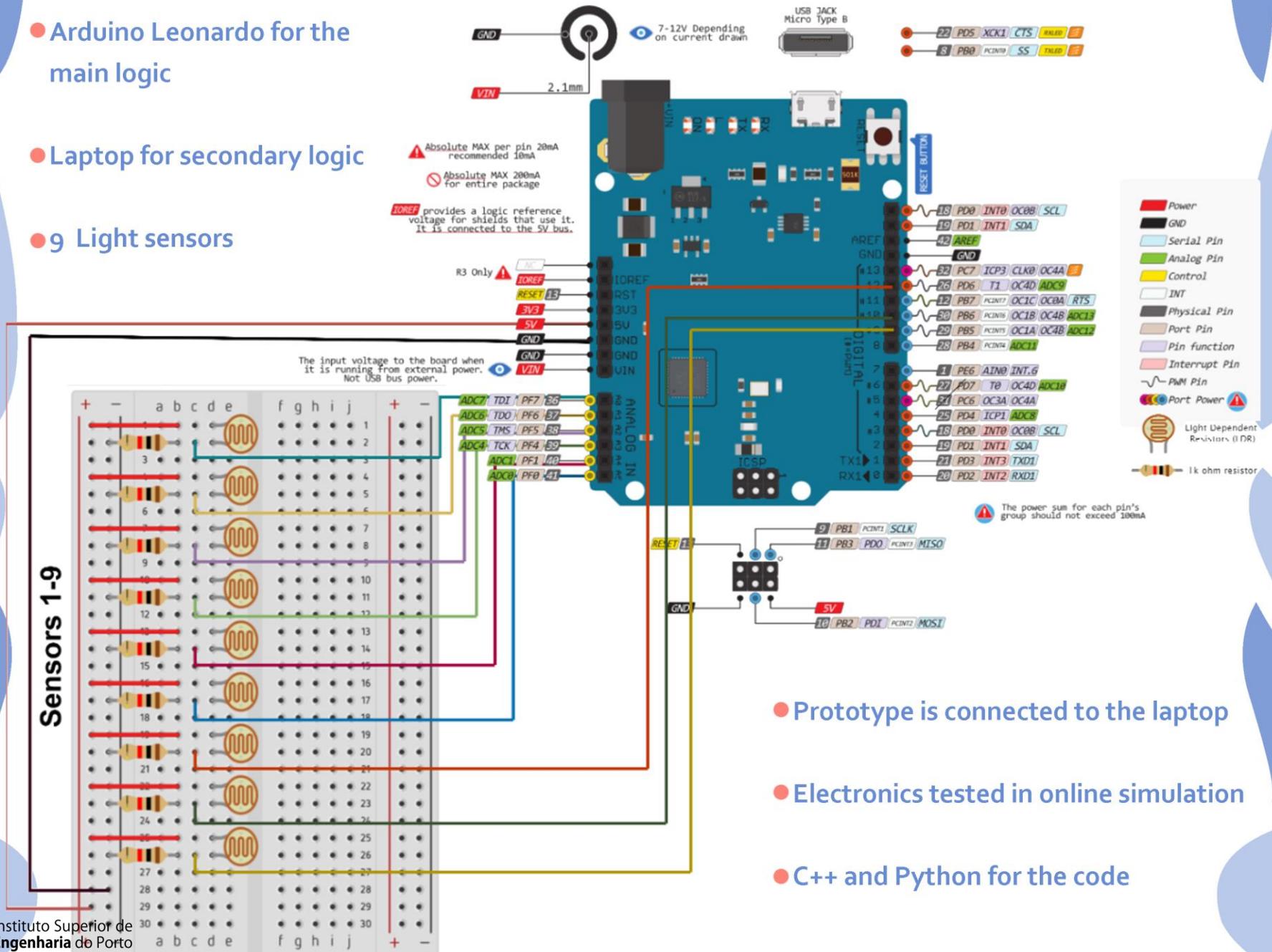
Scan the QR code if you want to visit the website to see your ranking and download your photo.



- Arduino Leonardo for the main logic

- Laptop for secondary logic

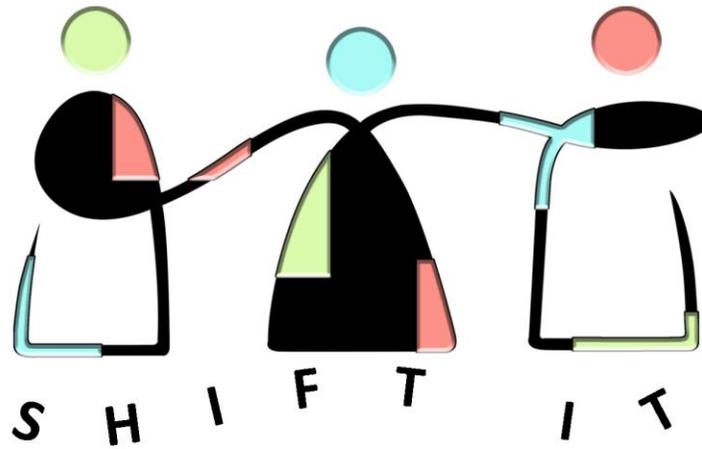
- 9 Light sensors



- Prototype is connected to the laptop

- Electronics tested in online simulation

- C++ and Python for the code



Thank you
for your attention