



CONNECT

share

Interim - Group 05 - Digital Art



■ Digital Isolation

→ Metro passengers are physically packed but socially disconnected within private screen bubbles

■ Passive Users

→ Transit has shifted from a shared community space to a passive "digital void"

Problem Statement



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Industrial Organization
Engineering



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Mendes**
Systems Engineering



Giulia Vaneeckhout
Product Development



Leon Gunsilius
Interactive Media

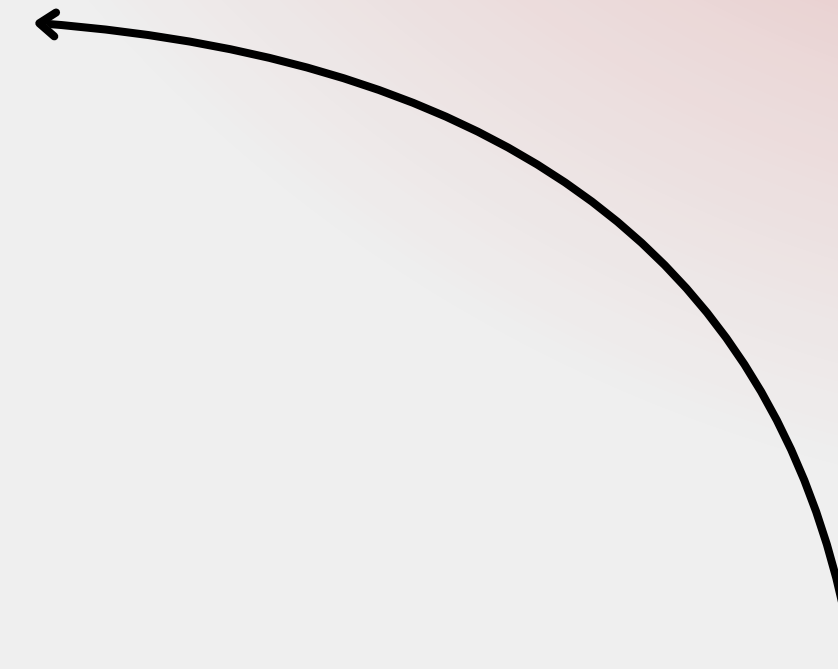


Anna Bentzen
Information Technology



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Computer Science

02



Our Team



■ CONNECT

Visual Connection

- Interactive Poles
- Traveling Light
- Merging Colors

Personal Connection

- QR Code Bridge
- Audio Stories

Concept



■ **Target group**

Young Urban Commuters

- Gen Z & Millennials
- Students & young professionals
- Affected by “alone together” paradox

■ **Connection**

Break the Digital Bubble

- Urban Well-being
- “Micro-Connections”

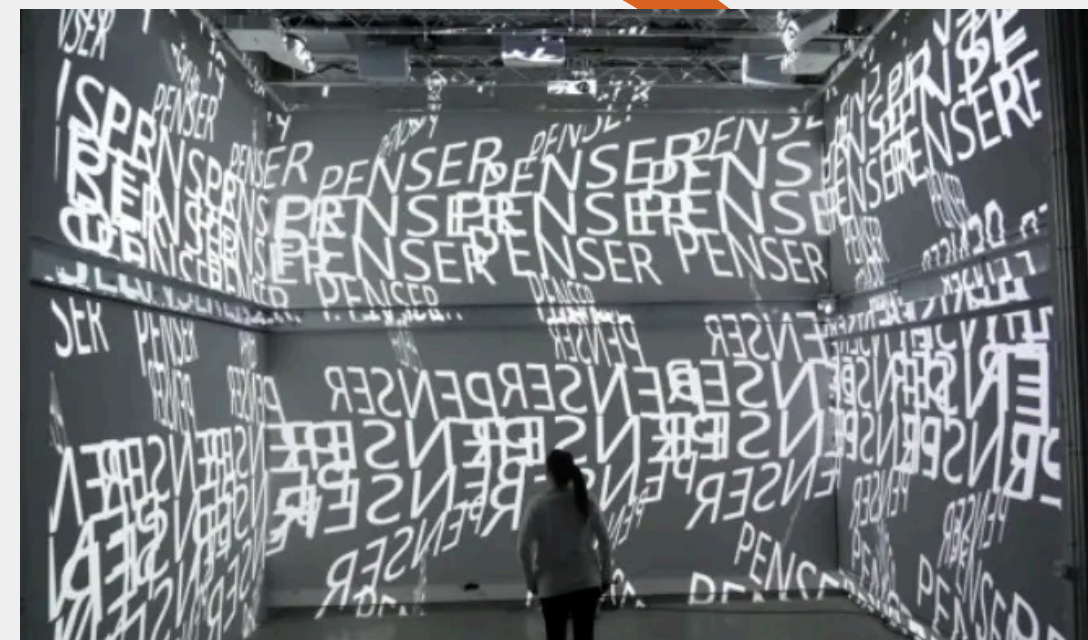
State of Art

■ Interactive installations

- Kinetic Particles
- Camera and body tracking technology
- Same idea: collective, visual interaction



Kinetic Particles installation
(Lafontaine et al., 2023)

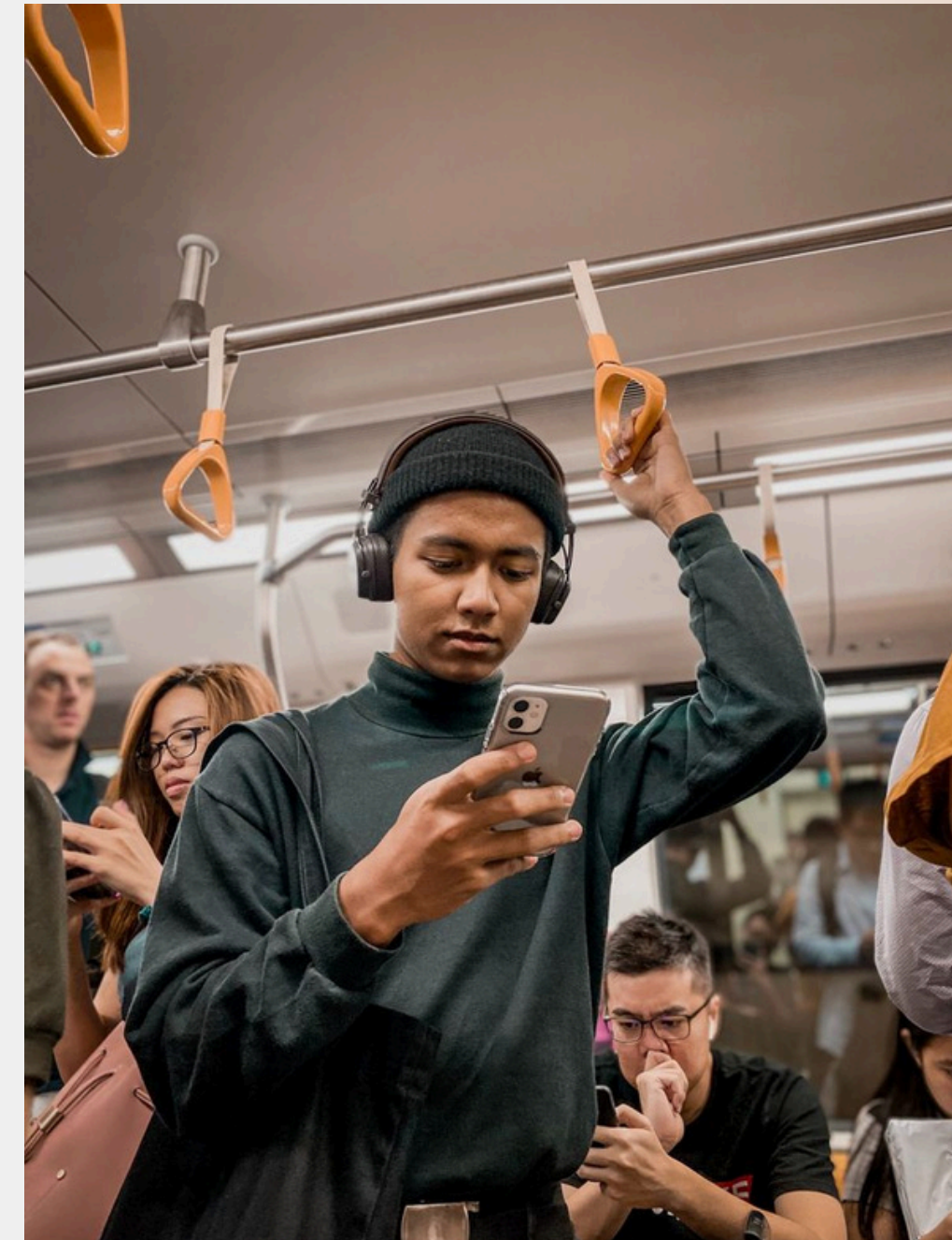


■ Research on problem

- “Lonely in a crowd” (Hammoud et al. 2021)
 - relationship between loneliness and environment

■ Research on technology

- Velostat pressure sheets
- CAN bus
 - protocol for noisy environment
- Datasheets from manufacturers



Project Management



Agile Framework & Planning

Methodology, Project Plan,
Evaluation



Scope, Time, Cost & Quality

Scope Management, Financial
Tracking, Quality Assurance



People & Stakeholder Management

Team Dynamics, Resource
Leveling, Stakeholder Engagement



Risk & Procurement

Risk Mitigation, Sourcing





■ **Social Marketing**

- Focus on social behavioural change
- Emotional value

■ **Business Model (B2G/B2B):**

- Value creation for both
- The passenger
- The infrastructure partner

■ **Main competitor:**

- The smartphone.
- Strategy: Utilise it by intentional delay

Marketing

■ Action plan

- Physical integration
- Guerrilla marketing in stations
- Digital storytelling via social media.

■ Process and control = PDCA cycle

- Focus on hard data
- 30–60 seconds less screen time & 1,000 stories.



People

Disrupting the
"Together Alone"
paradox (SDGs 3 & 11).
Inclusive, barrier-free
connection

Profit

Highly cost-effective
prototype (< 100 €).
Built for scalability and
indirect value creation.



Planet

70% more energy-
efficient than
traditional displays.
Uses bio-based PLA

LCA

Designed with the
full cycle in mind,
emphasizing
responsible e-waste



Sustainability

Ethics



Privacy

Zero data storage during physical interaction.

The Safety Dilemma

Human safety prioritized over ecology / fire-certified material (PA Rail) over bio-plastic (PLA)

Inclusive

Physically accessible to everyone

Commercial interests

Separation between passenger data and commercial interests





CONNECT

Brand



For everyday metro passengers
who want to experience their commute differently

How does it work?
1. Touch the handrail
2. Look up
3. Experience

Why?
Invites passengers to share a small moment together during their commute.

Share your experience

**LOOK UP
CONNECT
SHARE**

Trindade Station | Yellow Line (Line D)
ISEP INSTITUTO SUPERIOR DE ENGENHARIA DO PORTO
@Connect_Porto



CONNECT

Color Palette

Colors set the tone and elicit strong feelings in users, influencing user perceptions and emotions. Research reveals that users make a subconscious judgment of a product within 90 seconds of initial viewing and 62%-90% of the assessment is based on the color alone. This is on visual communication.

CONNECT

Buttons

Primary

Normal	Icon-Left	Icon-Right	Icon Only
Default	Button	Button	Button
Hover	Button	Button	Button
Focus	While pressing	While pressing	While pressing
Selected	Button	Button	Button
Disabled	Button	Button	Button

Secondary

Normal	Icon-Left	Icon-Right	Icon Only
Default	Button	Button	Button
Hover	Button	Button	Button
Focus	While pressing	While pressing	While pressing
Selected	Button	Button	Button
Disabled	Button	Button	Button

CONNECT

Typography

Typography is the discipline designers use to arrange typefaces in a way that is legible, readable, and scalable. It must also be visually appealing. Good typography can enhance a product's aesthetic, optimize user-friendliness, and improve brand perception.

Font

Geologica

HEADLINES

Desktop	Tablet
Headline 1	Headline 1
Headline 2	Headline 2
Headline 3	Headline 3
Headline 4	Headline 4
Headline 5	Headline 5

BODY

Body 1	Body 1
Body 2	Body 2

BUTTON/LINK

Large	Normal	Medium
Text	Text	Text

FIELDS

Text_Placeholder	Text_Fill	Text_Disabled
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50 100 200 300 400 500 600 700 800

Purple

50 100 200 300 400 500 600 700 800 900

Orange

50 100 200 300 400 500 600 700 800 900

Grey

50 100 200 300 400 500 600 700 800 900

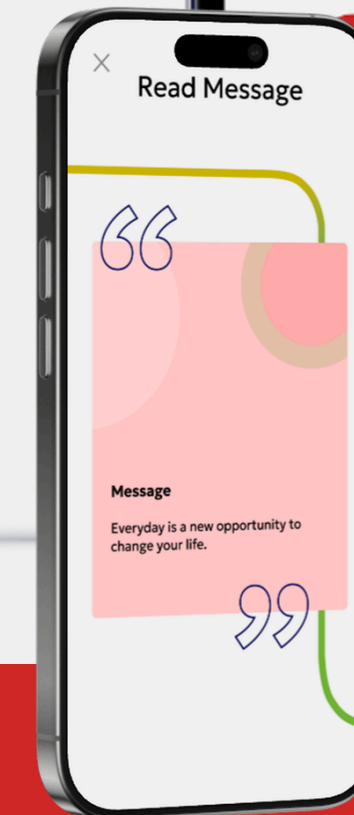
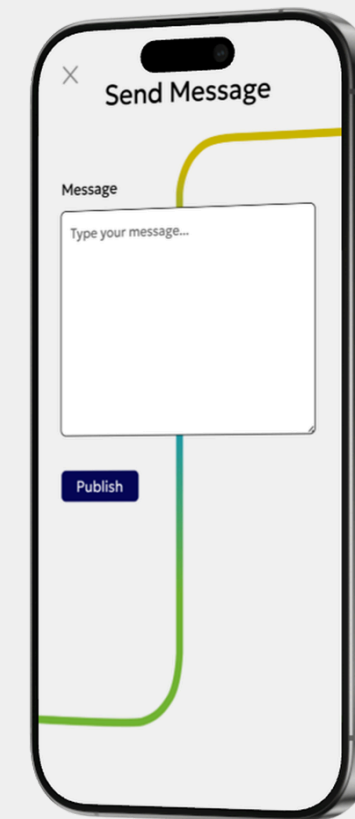
dark blue

Web App

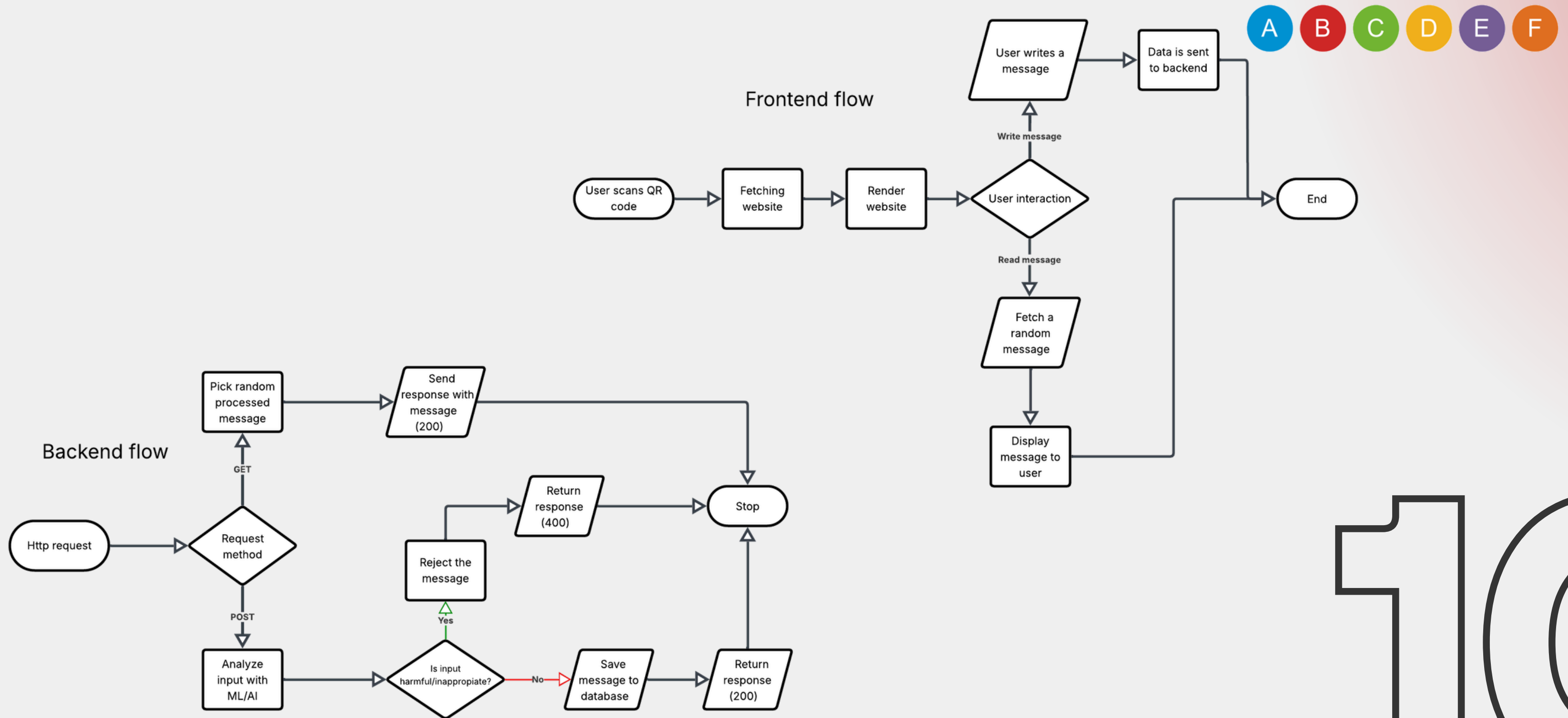
- **Simplicity** - no Logins, no users
- accessible
- time-efficient
- Only two Possibilities

→ Send Message

→ Read / Listen Message



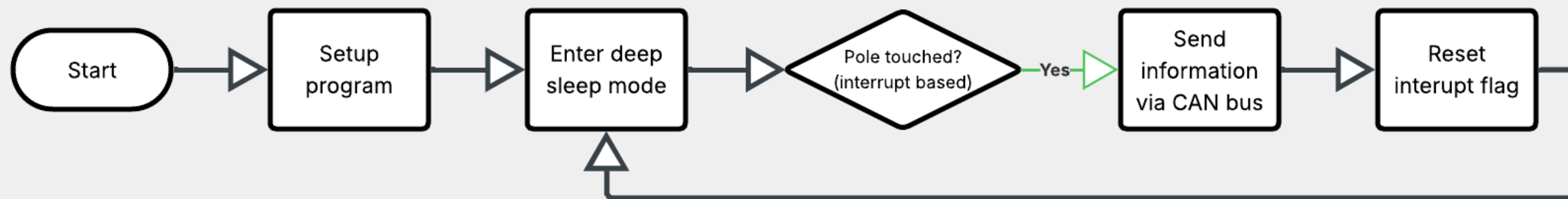
Solution Design



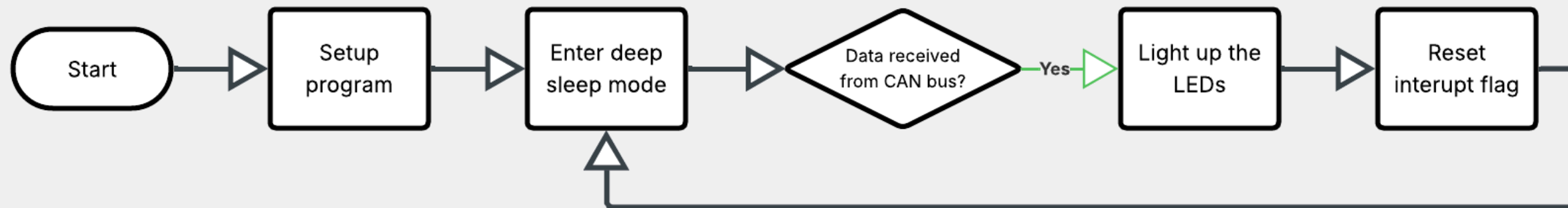
Solution Design



MCU handling velostat sensor



MCU handling LED strip



Conclusion



■ Result

Innovative solution to combat social isolation in public transit

■ Innovation

Ethics and sustainability-driven design

■ Team

Synergy through diverse expertise and backgrounds.

■ Outlook

Validating real-world utility through a functional prototype.



Thank You

For Listening

