

Vinicius Ferreira Portfolio

2023

▶ ABOUT ME

A short work history

RESEARCH METHODS

An overview of my mixed-methods research

▶ CASE STUDIES

Some of the projects I have worked on

PERSONAL PROJECTS

Projects I am very proud of

UX TOOLS & METHODS

Tools and methods I created

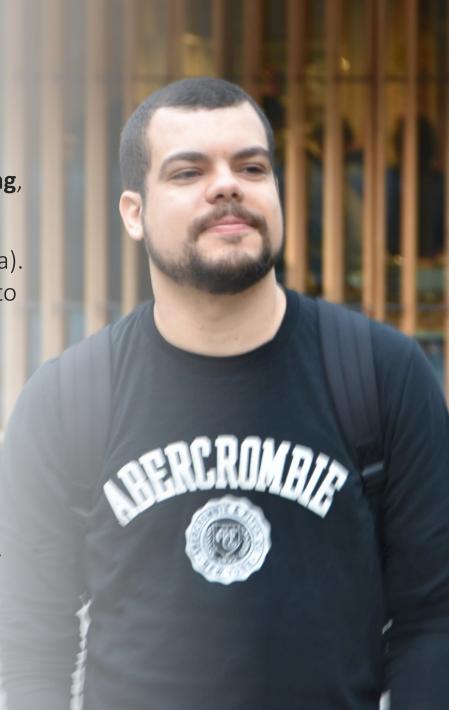
ABOUT ME

I am a **UX Design Researcher** with over 12+ years of experience and a **PhD** in **Computer Science**. My expertise is on **Lean UX**, **Design Thinking**, **Artificial Intelligence**, **Smart UIs**, and **Mixed-methods research**.

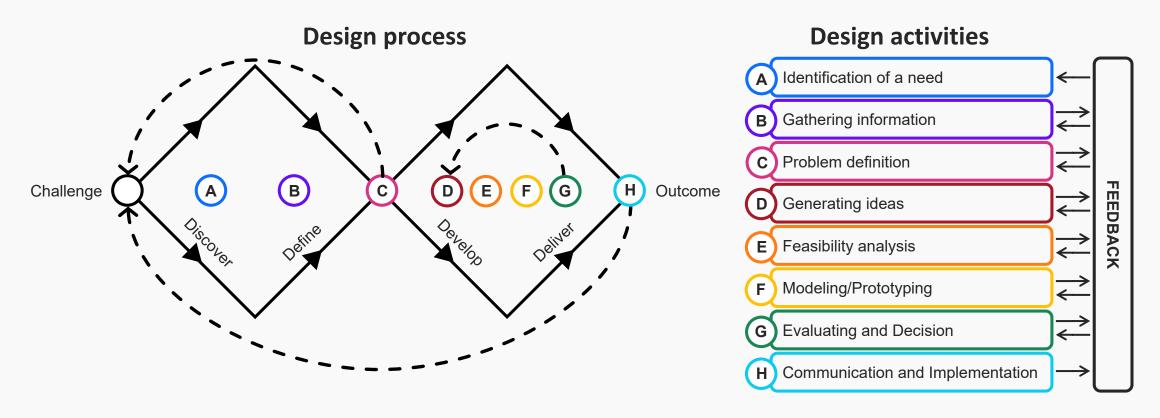
I was trained at **UFSCar** (Brazil), **UBC** and **Dalhousie University** (Canada). Throughout my career I have been able to provide consulting services to large companies such as BairesDev, Itaú BBA, Bradesco, and SEBRAE.

I published **20 academic papers** in the field of UX, Design, and HCI. I worked on different types of projects, including the design of automated outbound sales processes, AI-assisted systems for financial market, AI micro services, Education, Games, and Health care.

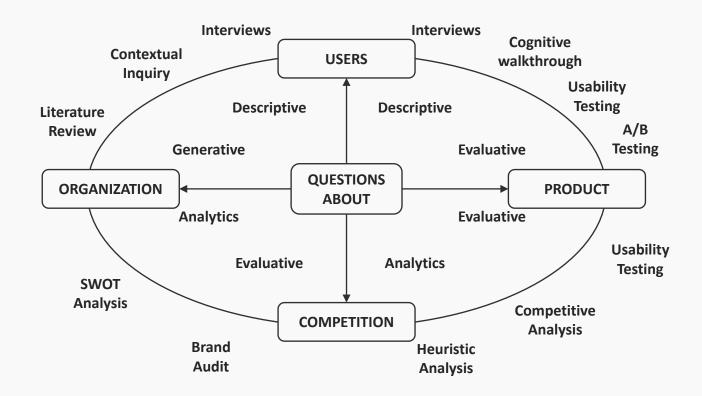
My background in **Web** and **Mobile** Development allows me to make better **Design** decisions, balancing user needs and development effort.



I adopt **agile methods** for all stages of the product development process: from **open explorations** in the discover phase to **validation-oriented research** in the deliver phase.



I use a broad toolkit of **UX research methods**. I select the appropriate method based on **stakeholder** input and the **research questions** we are trying to **answer**. You can use the matrix below to analyze what questions you need me to help answer, and some methods I recommend for your question.



I have strong experience in mediating **participatory design** with stakeholders. A key success factor is establishing **common ground** where **stakeholders** know the goals and feel free to **express their ideas**. Then, manage stakeholders' **expectations** as the ideas are developed and validated.





Define a facilitator



Tackle the complexities early



Adopt a flexible process



Grassroots UX Strategy

Here are some techniques I have used:



Brainstorming sessions



Assumption busting



SCAMPER



Persona creation



Journey maps



Wireframes & Mockups



1:1 Interviews (remote/in-person)



Heatmap



A/B testing



UX canvas



Mental models



Cognitive walkthrough



Red routes



Card sorting



How Might We (HMW)



Usability heuristics



Shadowing



User survey



Diary studies



Fake door testing



Wizard of Oz

CASE STUDY 1 Handover process Improving data collection and knowledge transfer **Client:** BDev Ventures My role: UX Researcher

CASE STUDY 1 Handover process

OVERVIEW

A VC company's lead journey includes various lead touchpoints and inputs from people with different expertise. To optimize and avoid losing track of valuable data, a well-defined handover process is critical.

Furthermore, it is important to balance the amount of data collected at each step of the investment process and make it clear to the lead why we need this data. In addition, automating the collection of public data is important to assist in decision-making.

DESIGN PROCESS

DEBRIEFING DATA ANALYSIS USER RESEARCH DATA ANALYSIS CONSOLIDATION DOCUMENTATION Understanding the Analysis of existing data Conducting an in-depth Statistical analysis of Review of the insights Report of the results. in the CRM and known needs and qualitative study with the quantitative data and results with opportunities, and requirements for the pain points stakeholders and thematic analysis managers to define a gaps to be prioritized of the qualitative data final version and included in the research roadmap

CASE STUDY 1

CHALLENGE

How to optimize the amount of information collected to improve the decision-making process in a VC company.

STRATEGY

Using thematic analysis, I mapped all the data inside of the CRM and defined a draft version for the optimized fields. Then, I conducted an internal survey to evaluate how easy is to collect this data (for those how were in charge of collecting it) and how relevant this data is (for those who will need this data), and collected which other data they think we could collect. Finally, we reviewed the results and insights with the managers and defined a final version.

RESULTS

This research led internal teams to improve their scripts and data collection process. The fields implemented in the CRM were easier to read and faster to fill in, avoiding redundancies and non-relevant information.

RESEARCH METHODS











Mental models

In-depth interviews

User survey

Thematic analysis

Statistical analysis

CASE STUDY 2 Lead Journey

Mapping the process, gaps, and best practices in a outbound investment process

Client: BDev Ventures

My role: UX Researcher

Stakeholders

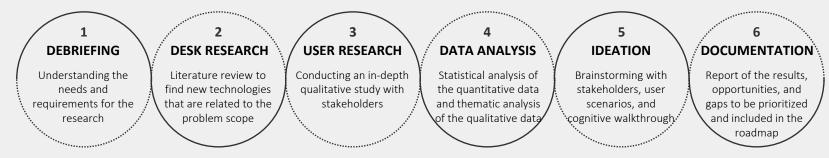
CASE STUDY 2 Lead Journey

OVERVIEW

The lead journey in a venture capital company involves identifying high-potential startups and leading the investment process, including initial evaluation, deal negotiation, and post-investment support. This complex process requires input from experts across different fields and can take several months to complete.

To streamline and scale this process, it's essential to thoroughly analyze and map the lead journey, identifying opportunities to implement best practices and automation while addressing any gaps.

DESIGN PROCESS



CASE STUDY 2

CHALLENGE

How to scale and optimize the outbound investment process in a venture capital company.

STRATEGY

I mapped the entire lead journey from an overview to detailed information using in-depth interviews with stakeholders. Then, I added info about performance from the CRM. The idea was to understand the process and collect the gaps, best practices, insights, and opportunities for improvements.

RESULTS

I interviewed 10 people involved in different steps of the process and collected 91 pain points, 9 best practices, and several insights and opportunities that were prioritized with the business team and added to the development roadmap.

RESEARCH METHODS











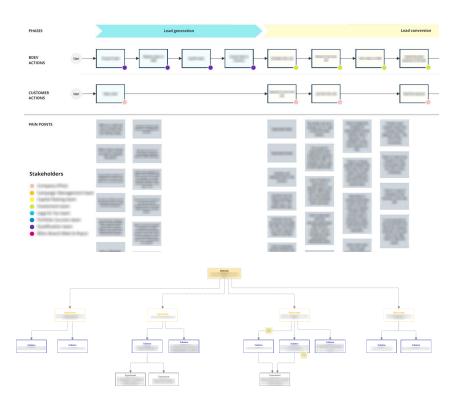
Mental models

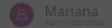
In-depth interviews

Opportunity Solution Tree

Thematic analysis

Statistical analysis





CASE STUDY 3

12/2018 -





Al Platform to assist financial analysts

Client: Itaú BBA & Bradesco



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CASE STUDY 3 Alice

Data 12/2018 -92.945.312/0001-96 Histórico Indicadores utividade. Conheça rapidamente todas as funcionalidades e facilidades desta ferramenta neste vídeo. 18 17.pdf Escala: Unidades

OVERVIEW

Alice is an AI system that assists financial analysts in performing business financial health analysis, which involves normalizing financial statements.

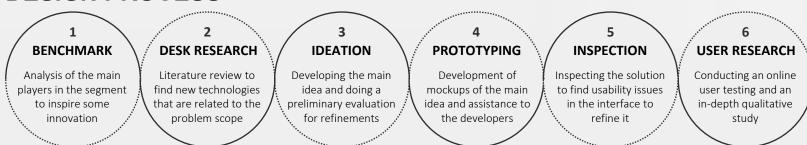
CHALLENGE

How to improve the performance of analysts when performing business financial analysis.

SOLUTION

Al system that reads and understands financial documents to automate extracting financial statements, normalizing them according to a set of custom rules.

DESIGN PROCESS



Checklist v

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CASE STUDY 3

RESULTS

Performance improvement in financial analysis process.

Before

- Manual process
- Highly skilled professional required
- Requires focus and attention
- Stressful and boring activity

Now

UP TO **3X** FASTER

- Intuitive and guided process
- Any professional can perform the activity
- Can be used to train young professionals
- Easily scalable

RESEARCH METHODS







Participatory design



Brainstorming sessions



Wireframes & Mockups



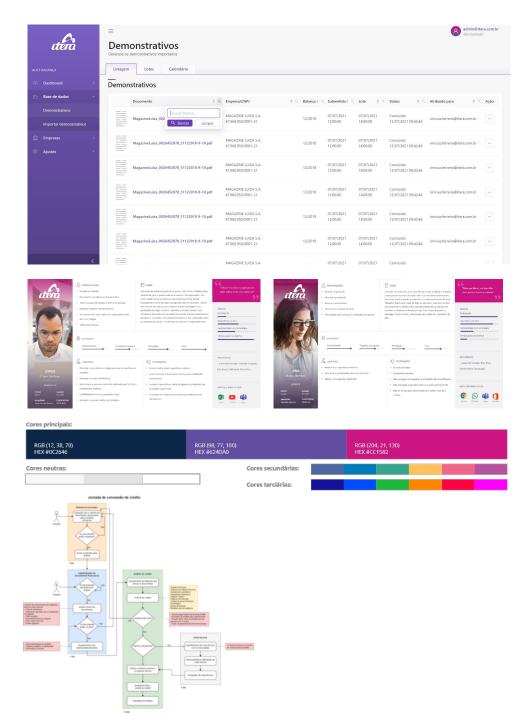
Persona creation



Mental models



User testing



CASE STUDY Preço referencial Deal Optimizer

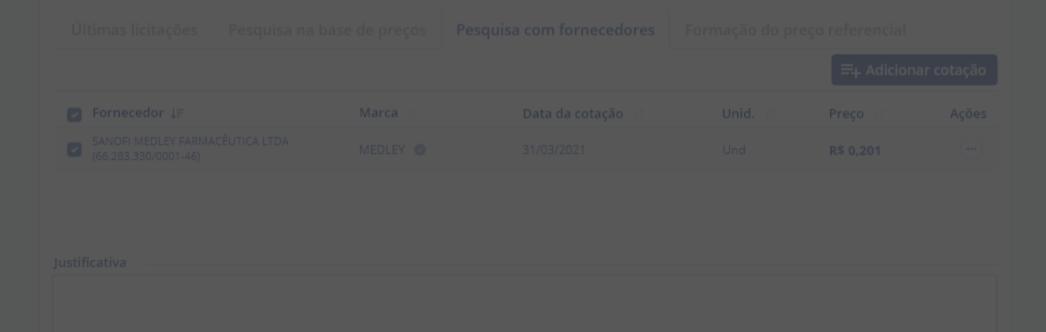
Al solution to assist price negotiation with suppliers

Client: Hospital das Clínicas da Faculdade de Medicina – USP/Ribeirão Preto-SP

My role: UX Researcher & Designer Consultant

Preço atual
R\$ 0,350

Preço anterior Média das últimas 5 licitações
R\$ 0,350 R\$ 0,350



Formação de preço referencial **CASE STUDY 4** Deal Optimizer (HC/FAEPA) nº 472/2020

OVERVIEW

Product **price reference catalog** powered by a **crawler** for purchases of inputs

used in the Public Health area, normalizing the data to assist in **price negotiation**.

Preço atual R\$ 0.350

Preco anterior

R\$ 0,350 R\$ 0,35

Pesquisa com fornecedores Pesquisa na base de preços

Data da cotação

Formação do pr

Unid.

CHALLENGE

How to improve the **price negotiation** with the suppliers of a public hospital.

Marca MEDLEY O

Ouant./Unidade

240.000 und

DIPIRONA SÓDICA AMPOLA 1G 2ML

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SOLUTION

Al system that searches, reads and understands public notice documents to extract purchases of inputs used in the Public Health area, normalizing the data according to a set of custom rules.

DESIGN PROCESS



IMMERSION

Understanding business and user needs through stakeholder interviews

INSPECTION

Inspecting the existing solutions to find usability issues in the interface

REDESIGN

Creating an interface more intuitive and useful without losing the brand identity

CASE STUDY 4

RESULTS

Highly scalable price catalog management, improvements in price negotiation, and purchase decision.

RESEARCH METHODS













Desk research

Participatory design

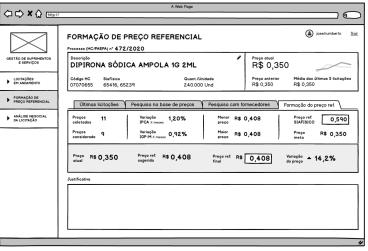
Brainstorming sessions

Wireframes & Mockups

Mental models

Usability heuristics





Some personal projects

PROJECT 1 WishBoard

Interactive art installation for sharing wishes

Client: UBC Alma Mater Society

My role: UX Designer/Researcher & Developer



PROJECT 1 WishBoard

OVERVIEW

WishBoard is an artistic installation aimed at promoting the sense of community through a collaborative artistic expression of the participants' wishes.

The installation invites people to openly share their expectations, thoughts and individual feelings. Since we all have dreams, plans and goals for the future, the installation works as a reminder for people to pursue their dreams.



DESIGN PROCESS

IMMERSION Understanding user needs and architectural requirements

DESK RESEARCH

Literature review to find new technologies that are related to the problem scope

IDEATION

Brainstorming with stakeholders, user scenarios and cognitive walkthrough

PROTOTYPING

Developing the main idea and doing a preliminary study for refinements

USER RESEARCH

Conducting an indepth qualitative study and in situ observation

DATA ANALYSIS

Statistical analysis of the quantitative data and thematic analysis of the qualitative

PROJECT 1

CHALLENGE

How to improve the sense of community at the hall of a university building.

STRATEGY

Translating how people make a wish by throwing a coin into a water fountain to create a space for self expression.

We put a real water fountain in front of a projection screen and displayed people's wishes coming out of the fountain and floating in a virtual pool

RESULTS

With this installation we were able to assess cultural traces and emotion in short texts, create a new prototyping methodology, and evaluate a method for translating a non-ICT-based embodied experiences into ICT-based experiences.

RESEARCH METHODS













Thematic

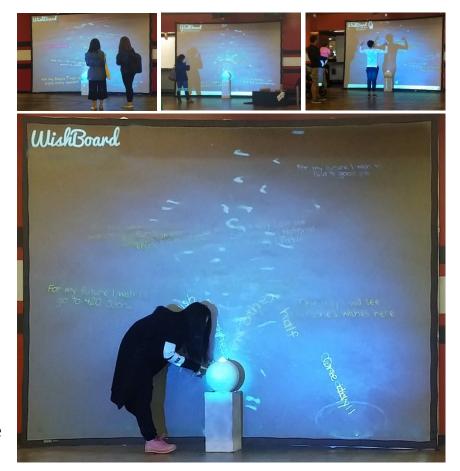
analysis



Mental Direct In-context User survey Dia models observation interviews

Diary studies

Statistical analysis



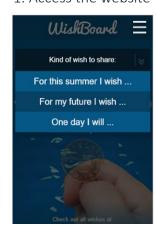
PROJECT 1

INSPIRATION

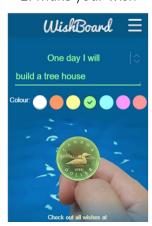
Before I die by Candy Chang

INTERACTION DESIGN

1. Access the website



2. Make your wish



3. Toss the coin



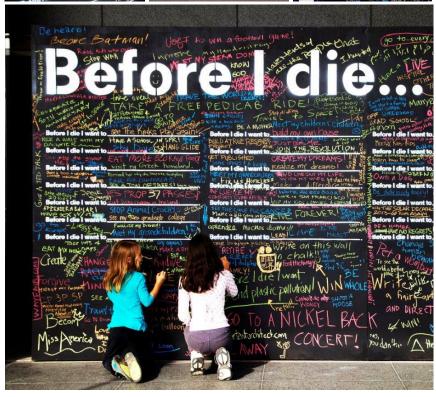
4. Contemplate your wish











Empathizing with users

Mapping user mental model and generating scenarios

Defining the requirements

Mapping user/system requirements using Stamper's latter

Designing the interaction

Mapping affordances and signifiers

Design inspection

Inspecting the design through cognitive walkthrough

Testing with users

Conducting user testing and performing design refinements

PROJECT 2 Parfait

Al solution to improve online clothing shopping experience

Client: Lojas Renner (Hackathon)

My role: UX Designer/Researcher



PROJECT 2 Parfait



OVERVIEW

Parfait is an **artificial intelligence** solution that recommends clothes according to user's body measurements and their clothing style to help customers find the perfect match. Thus, we improved the online clothing shopping experience, providing a unique and fully personalized shopping process for the customer.



DESIGN PROCESS

1 BENCHMARK

Analysis of the main players in the segment to inspire some innovation

DESK RESEARCH

Literature review to find new technologies that are related to the problem scope

IDEATION

Developing the main idea and doing a preliminary study for refinements

EVALUATION

Interview with online clothing shoppers and online clothing retailer industry experts

PROTOTYPING

Development of mockups of the main idea and assistance to the developers

INSPECTION

Inspecting the solution to find usability issues in the interface to refine it

Está em dávida se leva ou nã

Prove virtualmente antes de comprar

SAIRA MAIS -

PROJECT 2

CHALLENGE

How to improve the shopping experience in an online clothing retail store.

PROBLEM

High cost of reverse logistics in clothing retail online stores.

of clothes sold online are returned in Brazil

of people who return an outfit would not buy another from the same brand again

UP TO

of revenue is spent on reverse logistic every year

RESEARCH METHODS













Desk research

Online interviews

Brainstorming sessions

How Might We (HMW)

Mental models

Usability heuristics

Reference: ecommercebrasil.com.br

PROJECT 2

STRATEGY

Using **convolutional neural networks**, this system can **learn** with a few clicks the **style of clothing** the customer like and is looking for. Then, we have integrated a high-precision **body measurement AI system**, which only needs two photos that can be taken by a smartphone.



1

Capture your measurements by taking full body pictures (front and side view) 7

Train our AI by liking or disliking some apparels

3

Find clothes that suit you perfectly







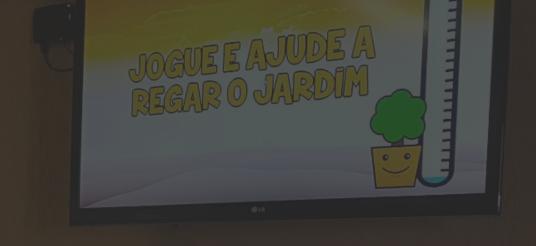
RESULTS

Got 1st place in the largest online hackathon in Latin America (MegaHack 2020).



Client: Personal project

My role: UX Designer/Researcher & Developer



PROJECT 3 PlayGarden

OVERVIEW

PlayGarden personifies a **small garden** into a game to create **daily challenges** for the community. Thus, when they collaboratively reach the goal, they can water the garden, helping with the **maintenance of the garden**.



DESIGN PROCESS

DESK RESEARCH

Literature review to find new technologies that are related to the problem scope

IDEATION

Developing the main idea and doing a preliminary study for refinements

∕ 3 PROTOTYPING

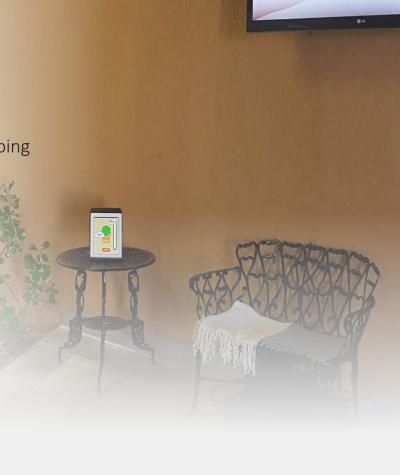
Development of mockups of the main idea and implementing

USER RESEARCH

Conducting an indepth qualitative study and in situ observation

DATA ANALYSIS

Statistical analysis of the quantitative data and thematic analysis of the qualitative data



PROJECT 3

CHALLENGE

How can we gamify the activity of taking care of a community garden to engage people in this chore?

STRATEGY

PlayGarden gamifies the maintenance of the garden by creating daily challenges for the community. Thus, people need to play a quiz game and answer the questions to get points that are translated into water for watering the plants.

RESULTS

Greater empathy and zeal for the public space and improved the feeling of belonging to the community.

RESEARCH METHODS

















User survey Di

Diary studies

Thematic analysis

Statistical analysis



Desk research Mental models

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Direct observation

In-context interviews

UX methods I created

NEW UX TOOLS & METHODS

Design decision-based assessment planning tool

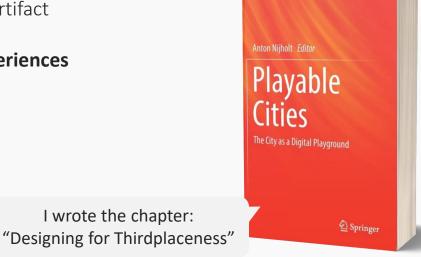
Design		Metrics		Data		
Design decision	Expected results	Success	Failure	Collect	Evaluate	Analysis
What are the motivations for design decisions? Are motivations evidence-based? What are the tradeoffs?	these design decisions?	What is considered a success for these design decisions? What are the metrics for measuring success?	What are the metrics for evaluating failure?	to measure metrics? Is this	design decision?	_

METHODS

- **Lean UX Research:** process for conducting UX Research in a lean way
- On-the-fly prototyping: assessing UX through real-time changes to a design artifact
- Method for assessing cultural traces and emotion in short texts
- Method for translating traditional embodied experiences into ICT-based experiences

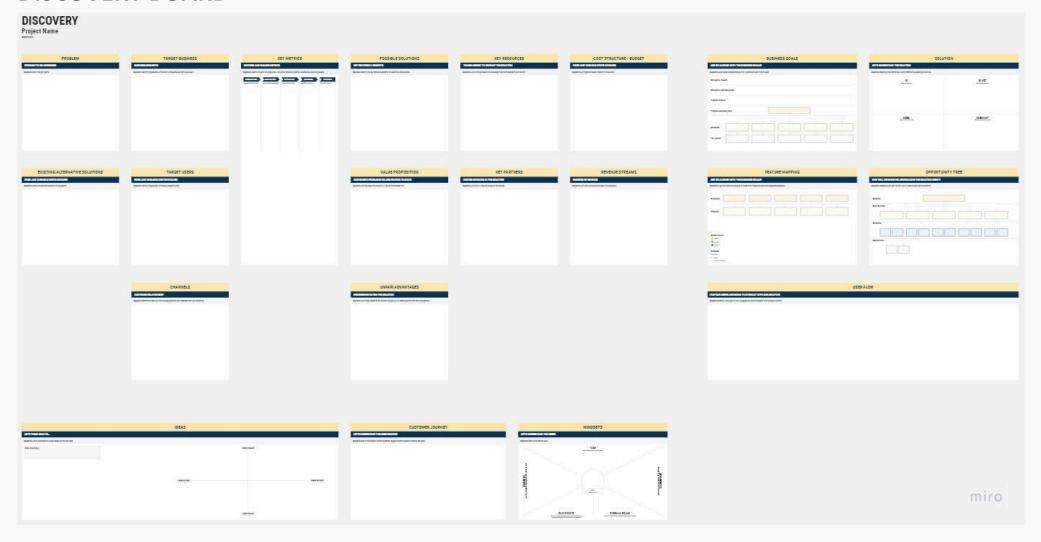
GUIDELINES AND LESSONS LEARNED

- Guidelines for lean design documentation
- Guidelines for designing installations for transient spaces
- Lessons learned on creating social spaces for smart cities



NEW UX TOOLS & METHODS

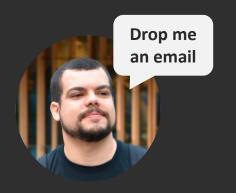
DISCOVERY BOARD



PUBLICATIONS

Most relevant academic publications in UX & HCI fields:

- Ferreira, Vinicius; Anacleto, Junia; Bueno, Andre. (2017). Failures Supporting the Evolutionary Design in the Wild of Interactive Systems for Public Spaces. In International Conf. on Human-Computer Interaction. Springer, Cham.
- Ferreira, Vinicius; Anacleto, Junia. (2017). On-the-fly Prototyping: Designing, Testing, and Evolving an Interactive Public Installation in Loco. In Proceedings of the XVI Brazilian Symposium on Human Factors in Computing Systems.
- Ferreira, Vinicius; Anacleto, Junia; Bueno, Andre. (2017). Designing ICT for thirdplaceness. In Playable Cities. Springer, Singapore.
- Zhou, Huiyuan; Alves, Thamara; Ferreira, Vinicius; MacKay, Bonnie; Hawkey, Kristie; Reilly, Derek. (2016) Enhancing Mobile Content Privacy with Proxemics Aware Notifications and Protection. In Proceedings of the 2016 CHI Conf. on Human Factors in Computing Systems.
- Zhou, Huiyuan; Ferreira, Vinicius; Alves, Thamara; Hawkey, Kristie; Reilly, Derek. (2015). Somebody Is Peeking! A Proximity and Privacy Aware Tablet Interface. In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems
- Ferreira, Vinicius; Anacleto, Junia; Bueno, Andre. (2015). Sharing wishes on public displays: using technology to create social places. In IFIP Conference on Human-Computer Interaction. Springer, Cham.
- Ferreira, Vinicius; Anacleto, Junia; Bueno, Andre. (2014). Translating art installation into ICT: lessons learned from an experience at workspace. In Proceedings of the 32nd ACM International Conf. on the Design of Communication.



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