

Immigrants in Portugal



Financial Wellbeing

User-Centered Design and Evaluation

Professor: Augusto Esteves

Our team

Group 13, Gold Rushers, Lab shift on Thursday at 10:00



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The phases of our project

User
Research

Analysis and
Synthesis

Ideation

Prototyping &
User Evaluations

Solution
& Refinement

Hunt Statement

"We are going to **learn** about the **preparation** that goes into **budget management** and **savings planning**, how it influences **short-term** and **long-term financial goals**, so that we can **understand** how people **prepare before moving** from their home country to **Portugal** and what their main **financial concerns** are during this process."

Research Plan

Goal: identify people's financial concerns and common difficulties when planning to move to Portugal

Target Group: 18 to 35 y.o's that are planning to move to Portugal, or people already living in Portugal and have gone through the immigration process

User research methods: Ethnographic Interviews

Secondary research: cost of living in Portugal; common expenses; portuguese taxation; savings and budgeting.

Ethnographic Interviews

- 5 people were interviewed
- All meetings conducted over Zoom

Interview Questions

What do you need to know when planning to come to Portugal?

How influential is your financial situation in your decision to emigrate?

What do you find the most difficult when managing your finances?

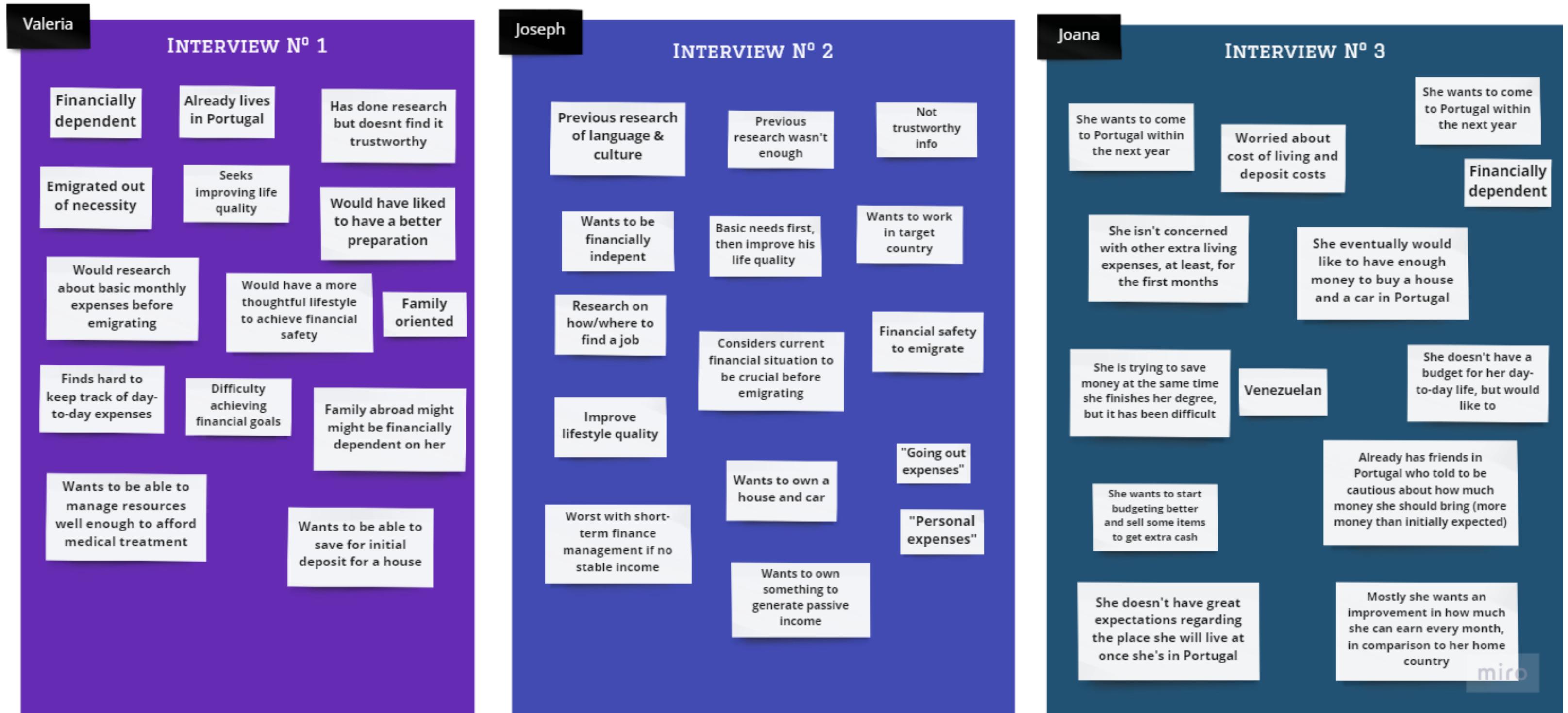
Do you expect to have the same lifestyle in Portugal?

What are some of your short and long-term goals financially?

How would you go about financial planning before moving?

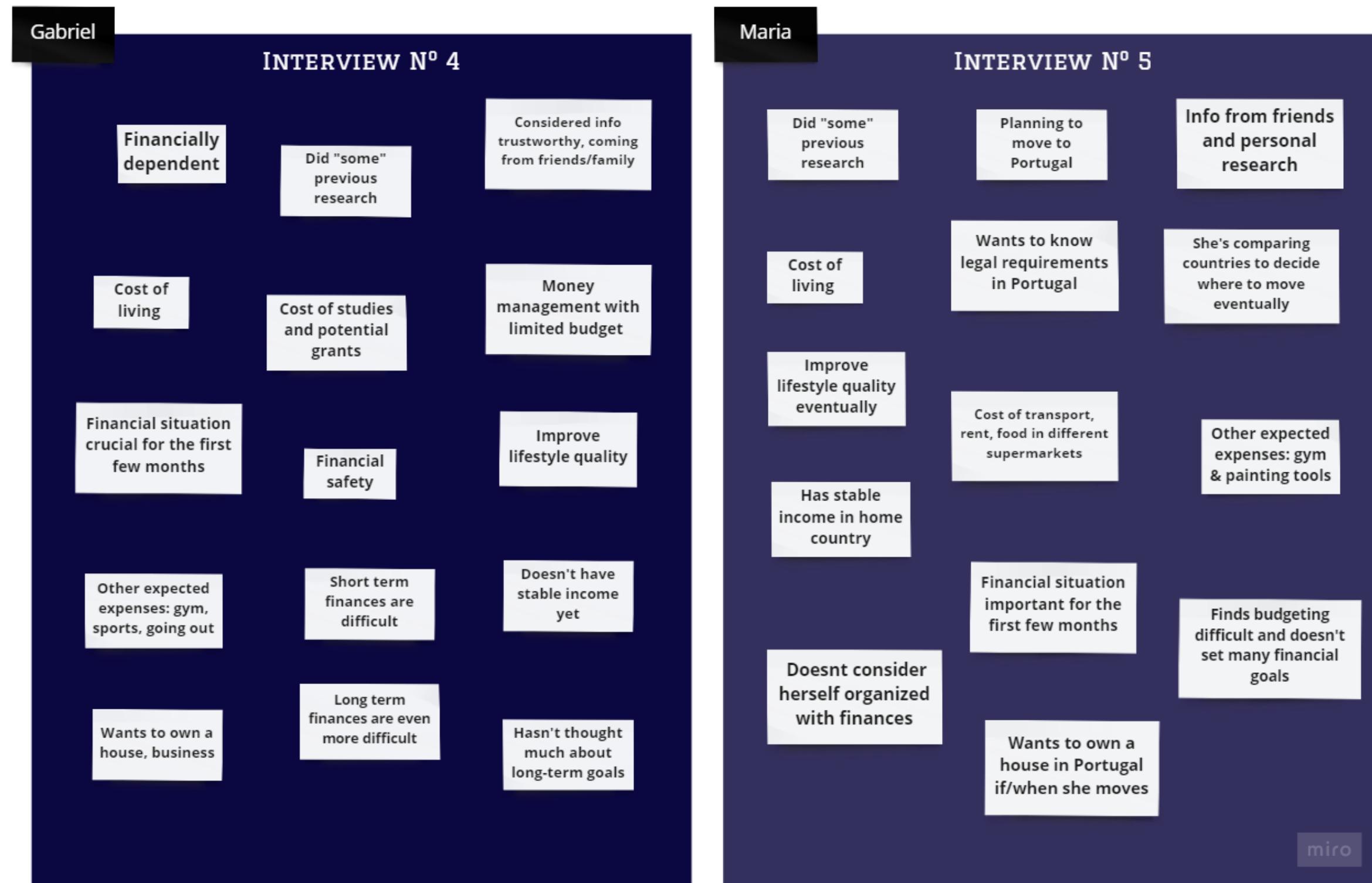
Thematic Analysis

Coding



Thematic Analysis

Coding



Thematic Analysis

Generated themes

How much money should they bring to Portugal when emigrating

How long until they can start working legally in Portugal?

Difficulties with short and long-term goal-setting and financing

Not trusting cost of living information found online

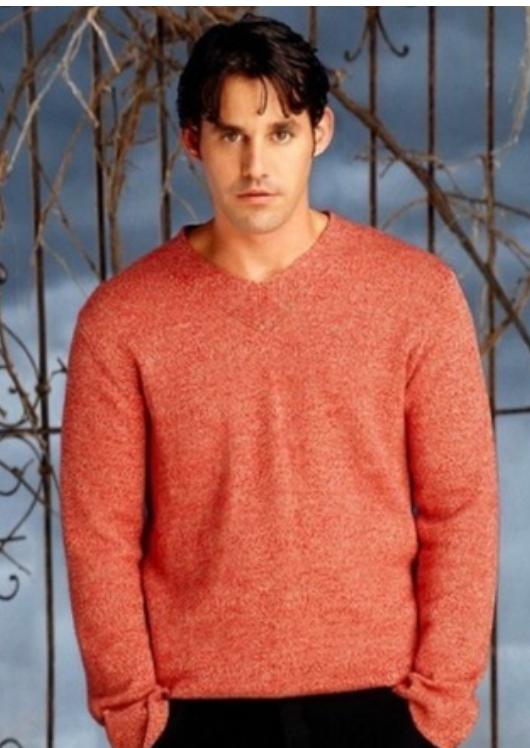
Managing money with a limited budget

Difficulty with the tracking of daily expenses

Personas

	<p>FINANCIAL GOALS</p> <p>SHORT-TERM</p> <p>Getting a raise and advance in the hierarchy at work.</p> <p>LONG-TERM</p> <p>Achieve the financial stability required to buy a house of her own as well as a car. If possible, she would like to eventually have something that gives her passive income.</p>	<p>CONCERNS EXPERIENCED BEFORE MOVING TO PORTUGAL</p> <ul style="list-style-type: none">• Financial stability – how much would she spend in a month and how much should she bring with her to "survive" the first months;• How easy would it be to find a job that allowed her to keep on being financially independent;• Language barrier – she knew little to no Portuguese;• Unhappiness that would lead to regret about the choice to immigrate (Carol considered the possibility of trying a second country if she couldn't adapt to Portugal).
<p>CAROL DIAZ</p> <p>WORKS AT MEDIACTICO RESTAURANT</p> <p>Demographic Profile</p> <ul style="list-style-type: none">• Age: 30• Cook at Mediactico Restaurant• Master of History of Art from UCV• She lives in Loures.• She is originally from Caracas, but has been in Portugal for the past 13 months.	<p>VALUES</p> <ul style="list-style-type: none">• Family;• Achievements;• Perseverance;• Integrity;• Cultural Identity. <p>IDIOMS</p> <ul style="list-style-type: none">• Fluent Spanish• Advanced English• Beginner Portuguese	<p>HOW IS SHE DEALING WITH HER FINANCIAL WELLBEING</p> <p>Although she has a stable income of money now, she worries she is not doing her best to save for unpredictable financial shocks.</p>

Personas



MAURICIO RUIZ

UNEMPLOYED

Demographic Profile

- Age: 20
- Unemployed
- Planning to study Computer Science in Lisbon
- Lives in Mérida, Venezuela
- Planning to move to Lisbon

FINANCIAL GOALS

SHORT-TERM

Getting into a good college in Lisbon.

LONG-TERM

Eventually either getting a part-time job in Lisbon or getting a scholarship to help his parents pay for their expenses.

VALUES

- Self-reliance.
- Appreciation.
- Family.

IDIOMS

- Fluent Spanish
- Beginner Portuguese

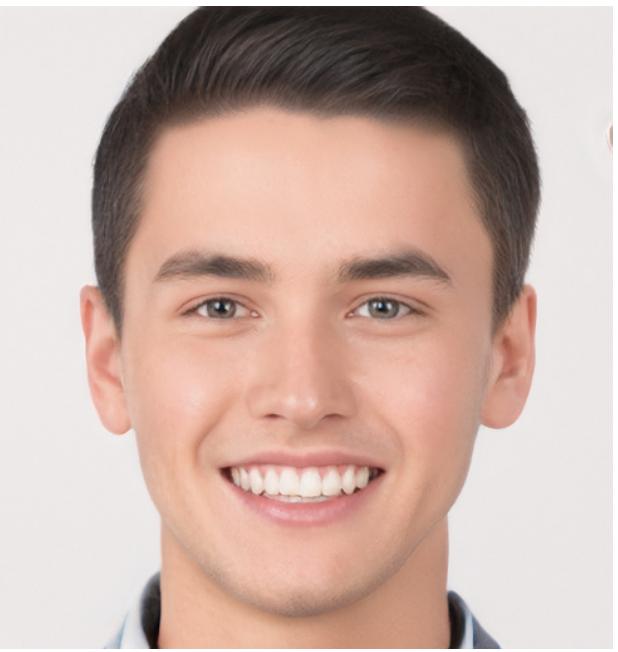
CONCERNS EXPERIENCED BEFORE MOVING TO PORTUGAL

- Language barrier - currently learning Portuguese but still not as good as he would like;
- Putting too much financial stress on their family;
- Having trouble adapting to a new place, running into academic struggles and being unhappy in college.

HOW IS HE DEALING WITH HIS FINANCIAL WELLBEING

Although they are not currently worried about their financial wellbeing, they fear that going abroad will put too much financial stress on their family, and are hesitant to do so because of it.

Personas



GABRIEL ALVES

CURRENTLY STUDYING
COMPUTER SCIENCE AT UFU

Demographic Profile

- Age: 19
- Freshman at UFU, Santa Mônica
- Majoring in Computer Science
- He was born and has lived in Uberlândia his whole life
- He has family living in Guarda, Portugal
- He is planning to move to Portugal before his next school year starts

FINANCIAL GOALS

SHORT-TERM

When he arrives in Portugal, he wants to have a side job at the same time he finishes his studies.

LONG-TERM

Although he hasn't given much thought about it yet, he believes he would like to own his own place and his own business

VALUES

- Environment;
- Learning;
- Integrity;
- Skill;
- Wealth.

IDIOMS

- Fluent Portuguese
- Advanced English
- Basic Spanish

CONCERNS EXPERIENCED BEFORE MOVING TO PORTUGAL

- Education - how will he be able to get into a good University, how much will the tuition be and if he will be eligible for a grant;
- Financial stability - if he doesn't find a job, he will keep on being financially dependent on his parents. If he finds a job, he doesn't know how to best manage his money;
- Lifestyle - how much money will he have to have to be able to keep going to the gym or go out to have some fun in Portugal.

HOW IS HE DEALING WITH HIS FINANCIAL WELLBEING

Given that he is still financially dependent, he isn't really worried about not being prepared to absorb potential financial shocks, however he wishes to gain confidence to manage his day-to-day finances.

Summarized Scenario



- Beginner chef at restaurant in Lisbon;
- Needed a fidediging source of information regarding the cost of living in Portugal before moving abroad;
- Tried to do research on the topic to feel more financialy confident and stable during the first months abroad, but without any trustworthy results.

Summarized Scenario

- Though she has always been a hard worker, doing her best to achieve her goals, she felt uncertainty before moving abroad due to the lack of a reliable source of information;
- Believes that having a reliable central source of information would be beneficial not only for people wanting to move to Portugal but also for the locals.



Summarized Scenario



- Currently unemployed;
- Needs a reliable and trustworthy way to financially prepare for his upcoming emigration from Venezuela to Portugal;
- Needs ways to estimate cost of living in Portugal, so he can have a better idea of how much strain he would be putting on his family, whom he is financially dependent on.

Summarized Scenario

- Always wanted to pursue academic studies abroad;
- Uncertain about how much it would affect his family's financial situation, he tried to do some research, but had to rely on the information given by friends that were already in Portugal.



Summarized Scenario



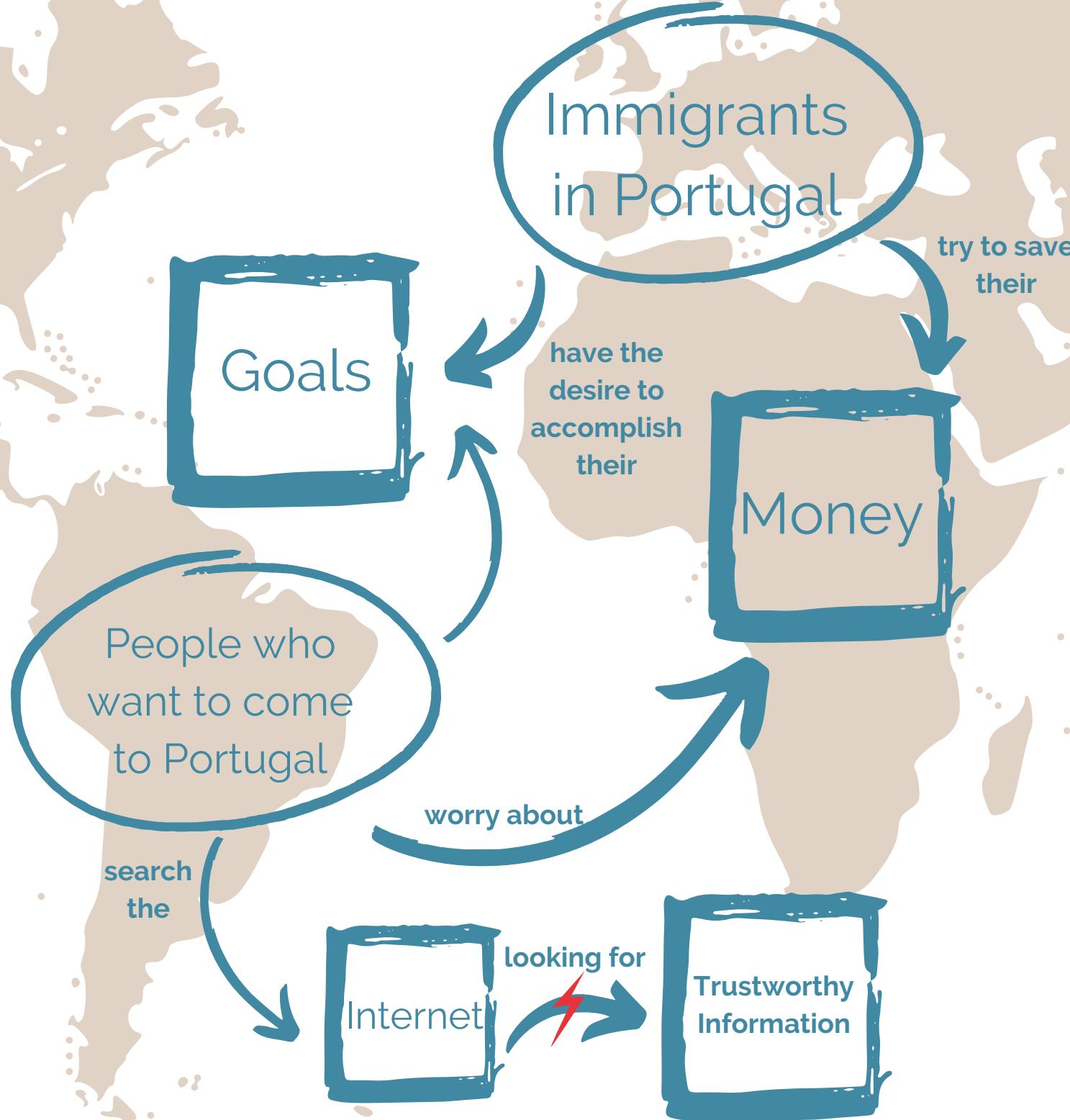
- Studying Computer Science;
- Planning to move from Brazil to Portugal within the next few months;
- Needs to know how much he is expected to spend during his firsts months in Portugal.

Summarized Scenario

- Needs to improve his budget management skills;
- Would like to be know said information with enough time to prepare himself and thus be financialy stable before moving abroad;
- Doesn't want to be dependent on others in the near future.



CI Flow Model



Ideation Process

Initial Brainstorming

First iteration of ideation

Second iteration of ideation

Third iteration of ideation

Final Ideas

Portugal map
with average
cost of living
by district

Budget
Planner

Expenses
Tracker

App to help
people convert
money
between
currencies

App
teaching
Financial
Laws

Online
community
for
immigrants

App to limit
daily
expenses

Educational
platform for
immigrants

Average
spending
calculator

(and many more)

Ideation Process

Initial Brainstorming

First iteration of ideation

Second iteration of ideation

Third iteration of ideation

Final Ideas

Budget
Planner

Expenses
Tracker

Portugal map
with average
cost of living
by district

Online
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Educational
platform for
immigrants

App to limit
daily
expenses

Average
spending
calculator

Ideation Process

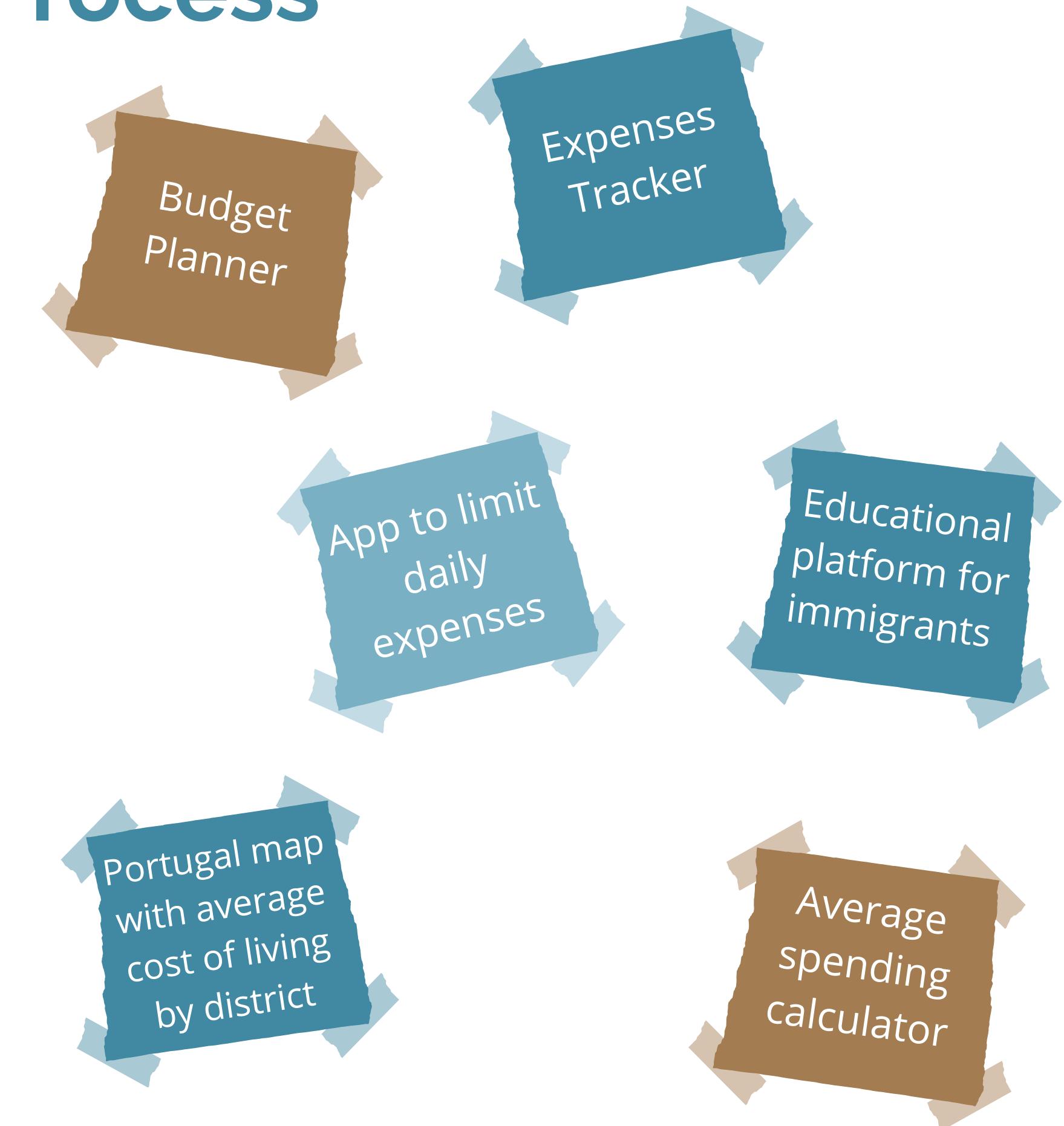
Initial Brainstorming

First iteration of ideation

Second iteration of ideation

Third iteration of ideation

Final Ideas



Ideation Process

Initial Brainstorming

First iteration of ideation

Second iteration of ideation

Third iteration of ideation

Final Ideas



Ideation Process

Initial Brainstorming

First iteration of ideation

Second iteration of ideation

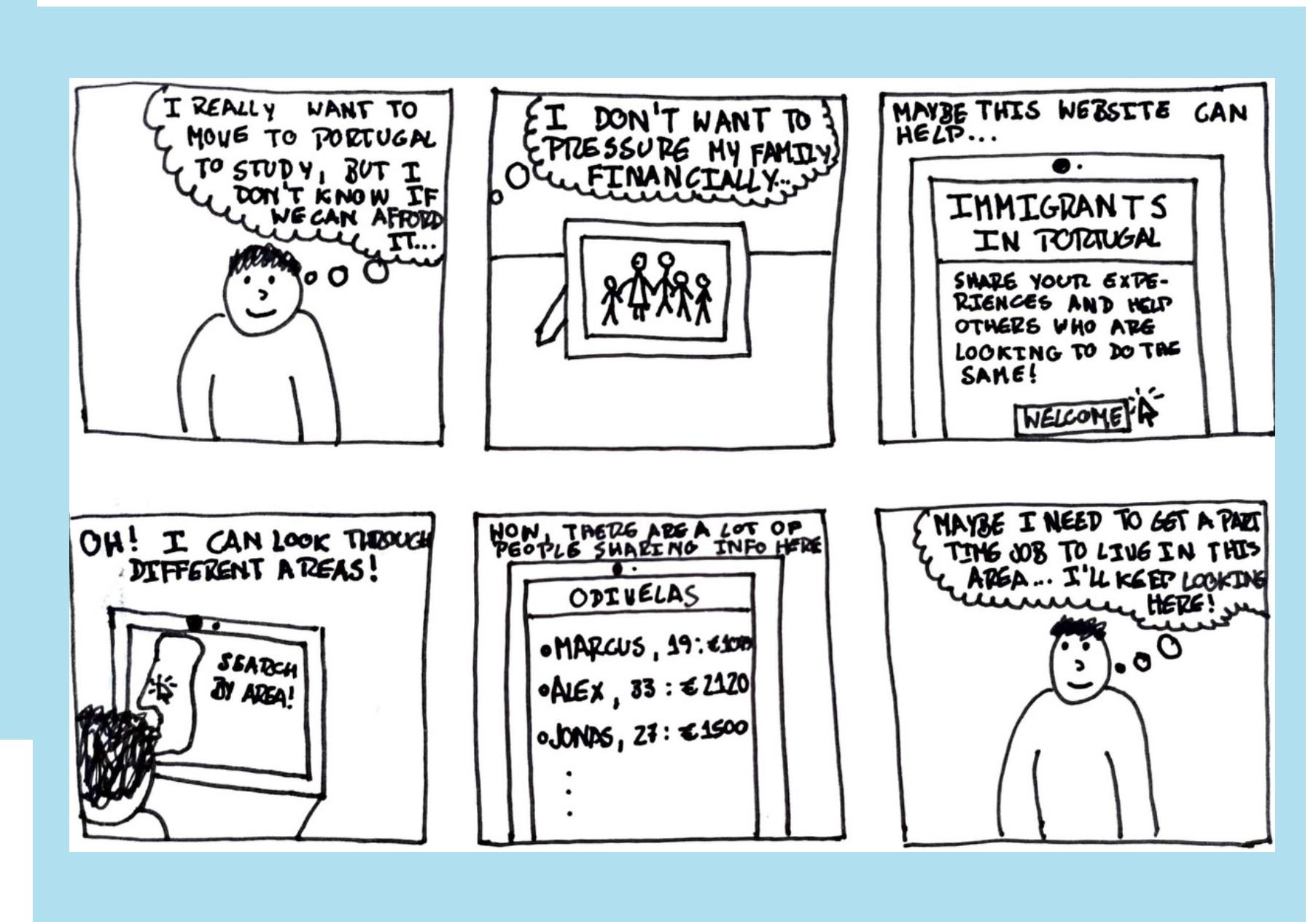
Third iteration of ideation

Final Ideas



Storyboards

(solution focused)



User Tasks

Set of predefined tasks for the users

Test the overall flow of the application

Critical tasks that align with our objectives behind the application

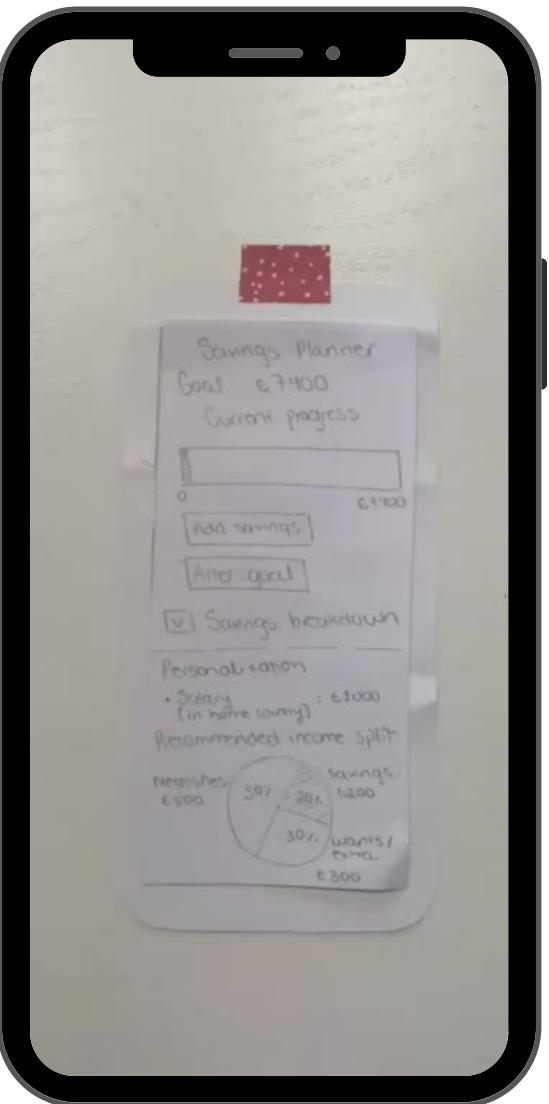
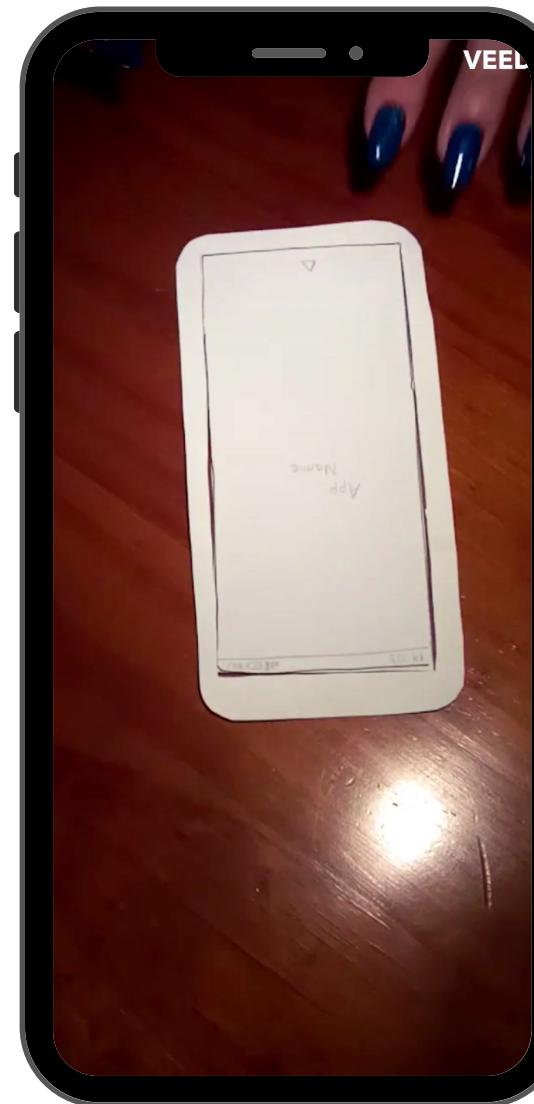
Observe user behavior and thought process during the tasks

Imagine you are a user called Mauricio Ruit. Attempt to perform the following tasks:

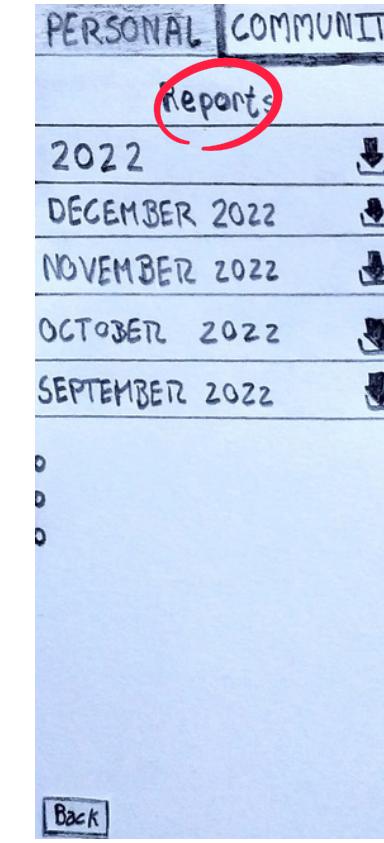
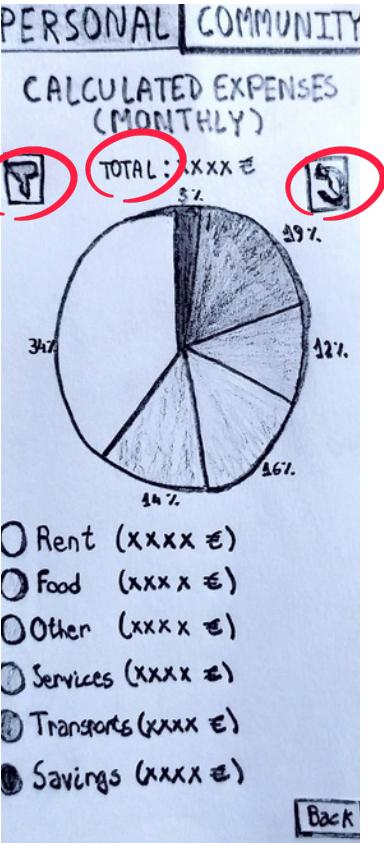
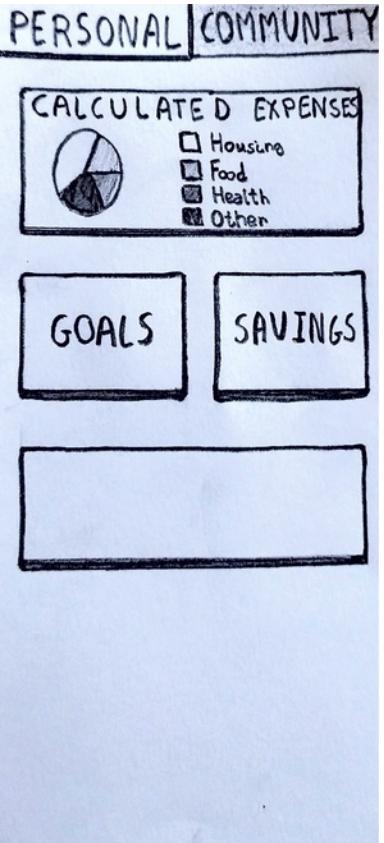
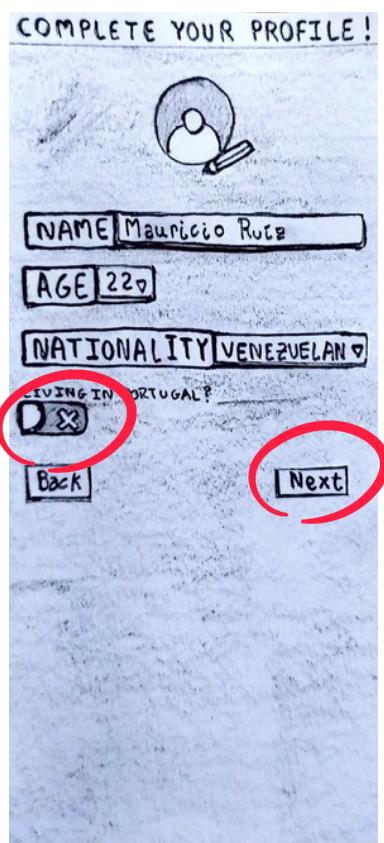
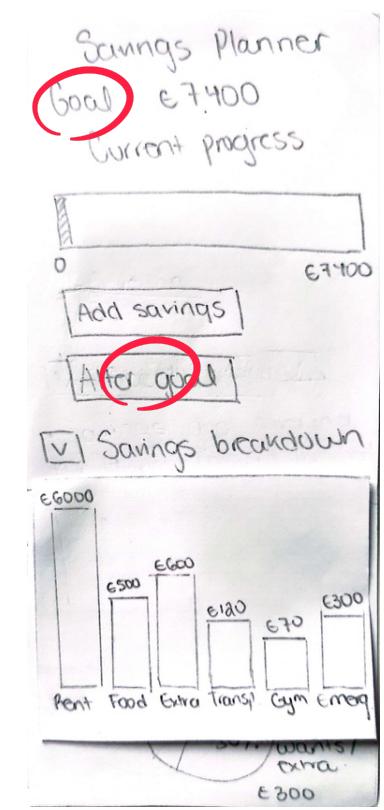
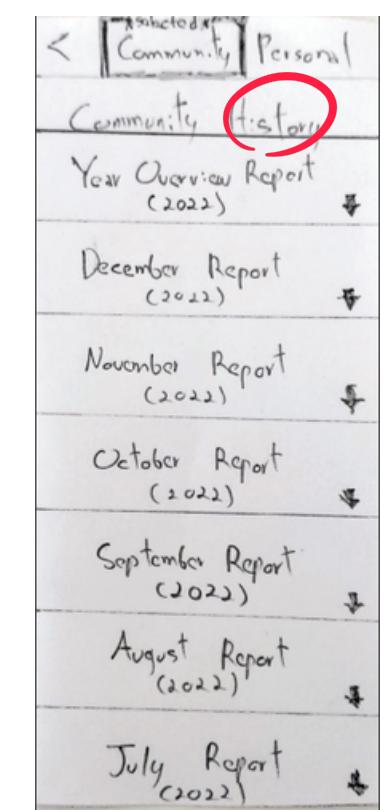
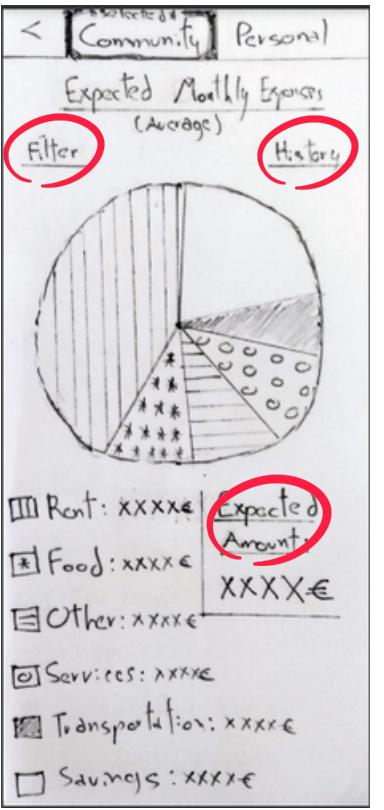
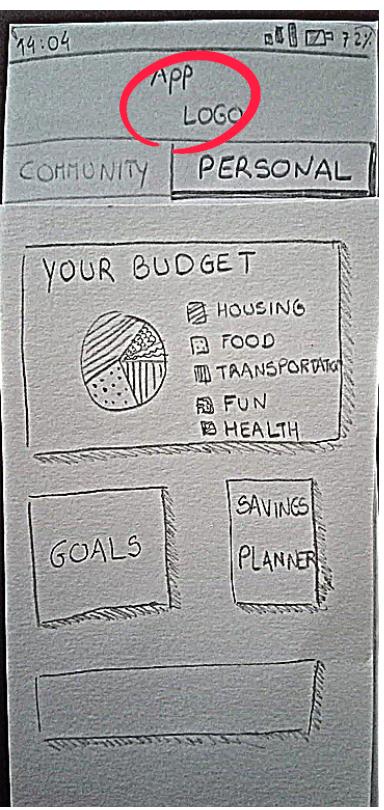
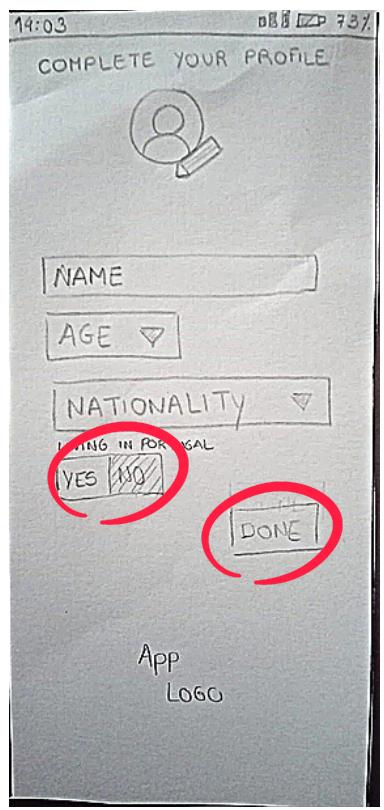
1. Access the application by signing-up.
2. Go to the Personal area and complete your profile.
3. In the main page, find the budget area of the application.
4. Get access to your expected monthly expenses information.
5. Check the personal history and return to the main page.
6. Go to the savings planner and add 1000€ to your savings.
7. Alter your current goal of coming to Portugal to be 4 months.
8. Check your savings breakdown of the current goal.

Low-Fidelity Prototype

- User Evaluation -

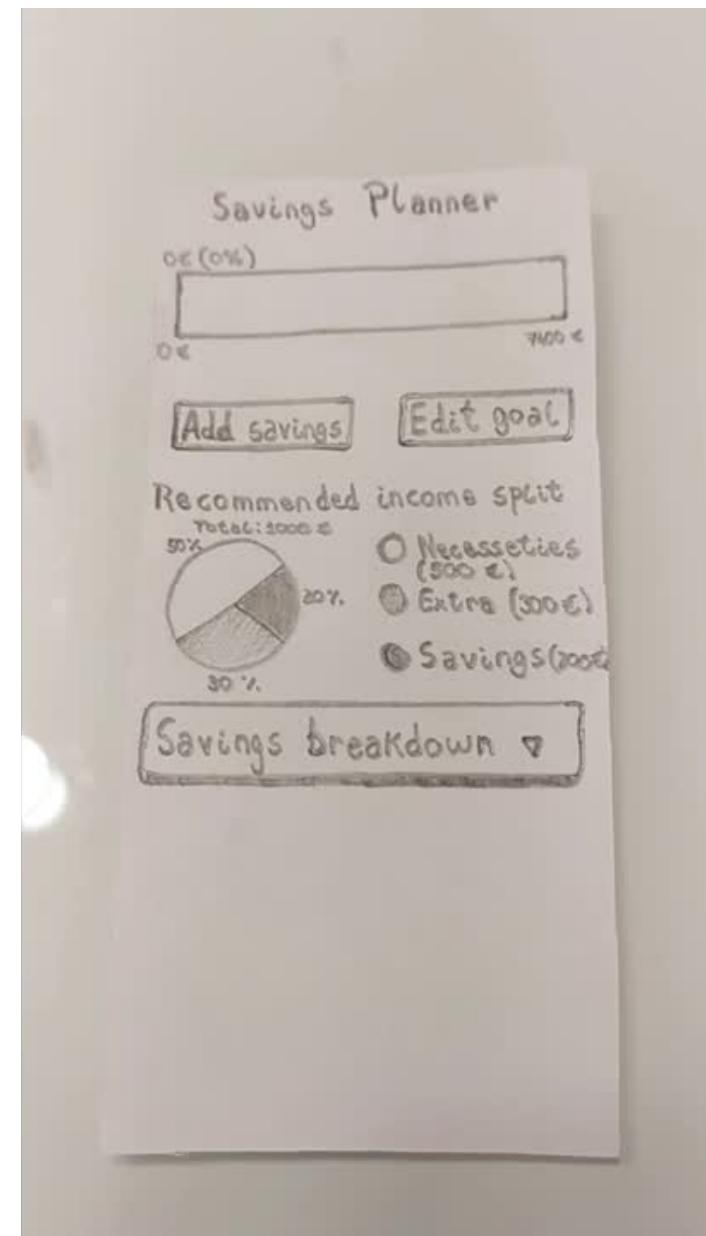


Low-Fidelity Prototype - 1st / 2nd Iteration

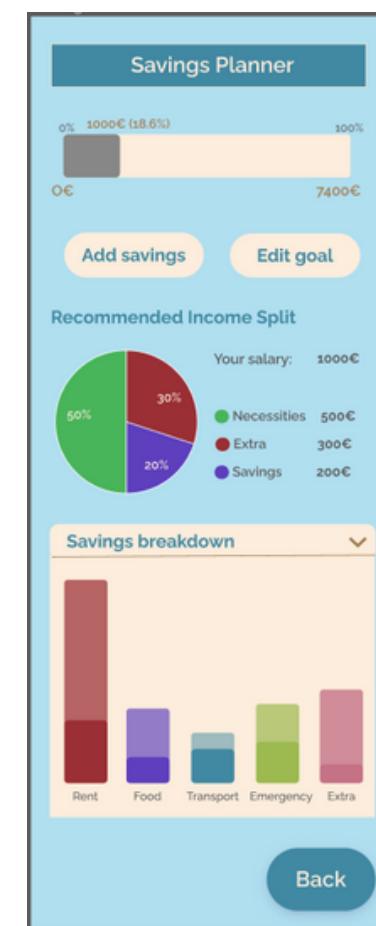
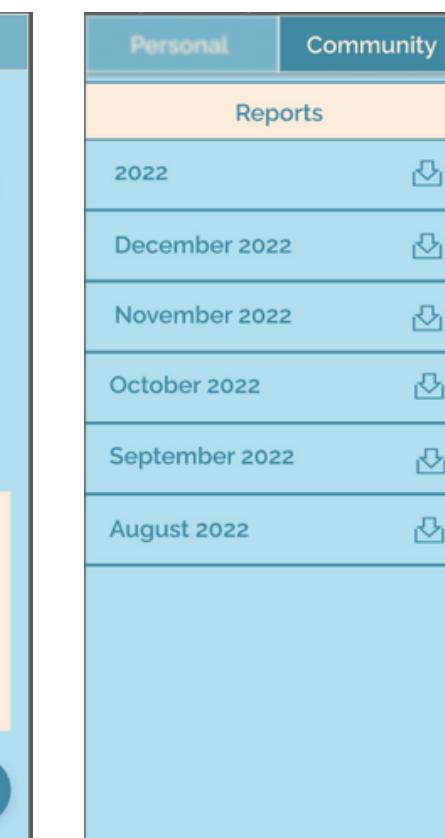
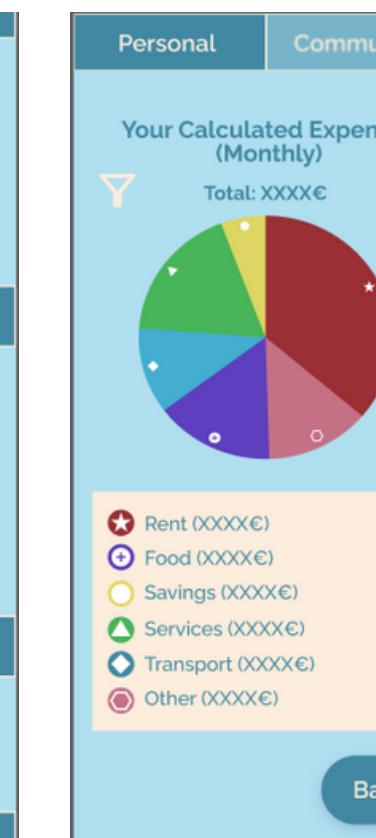
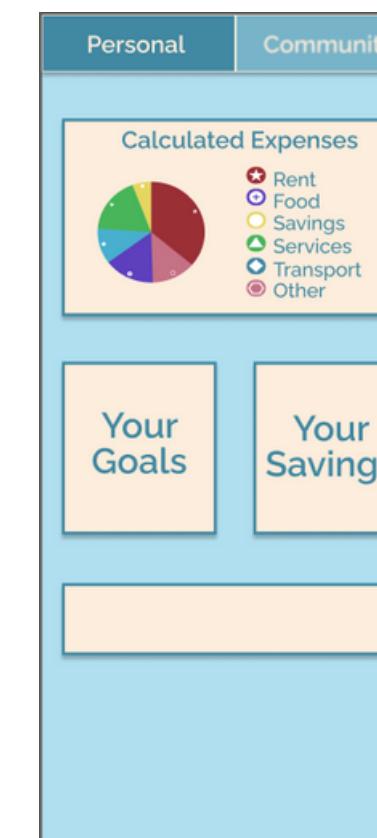
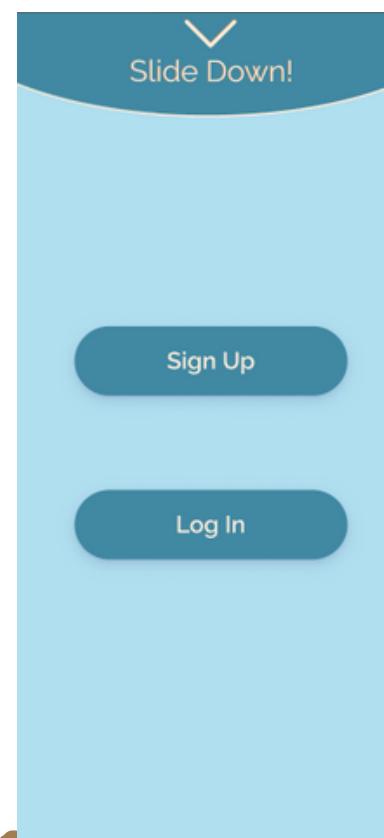
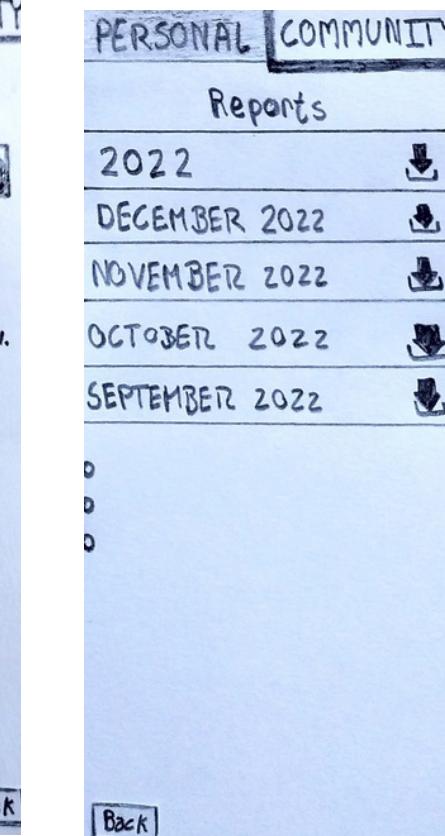
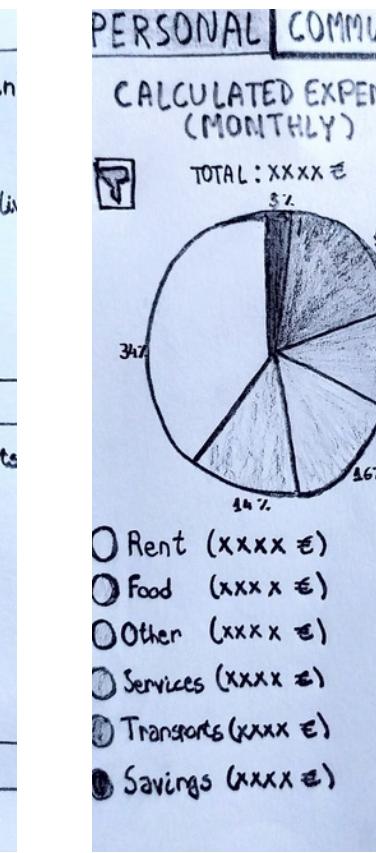
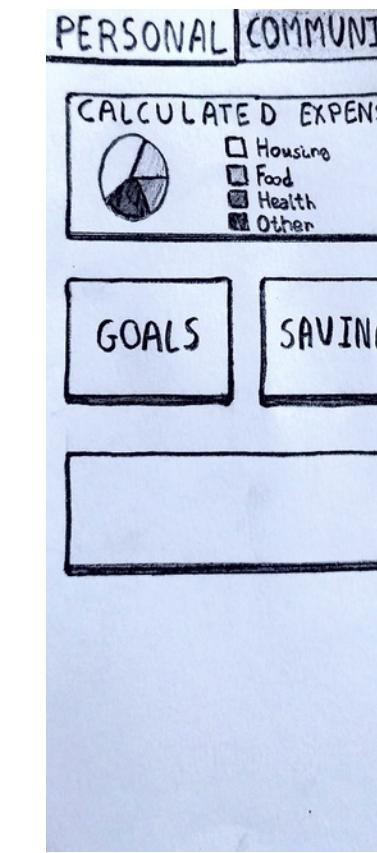


Low-Fidelity Prototype

- User Evaluation -

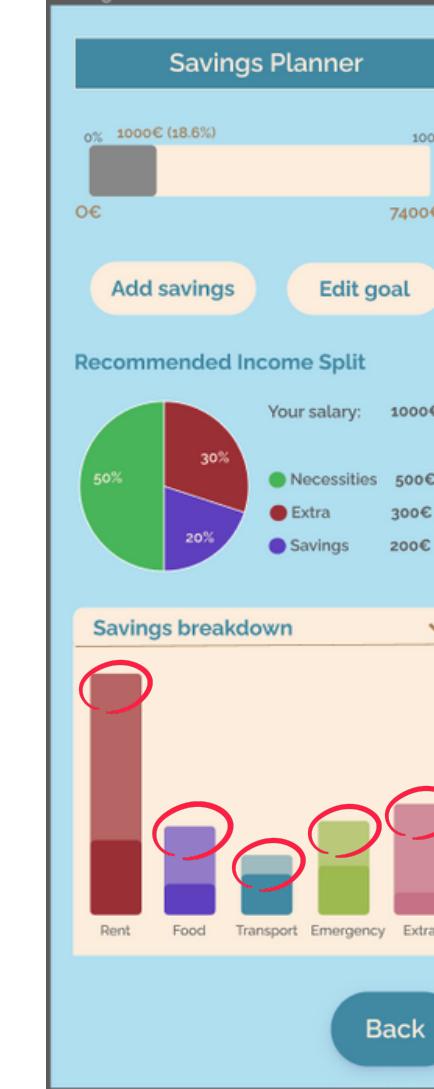


Low to Mid Fidelity Prototype

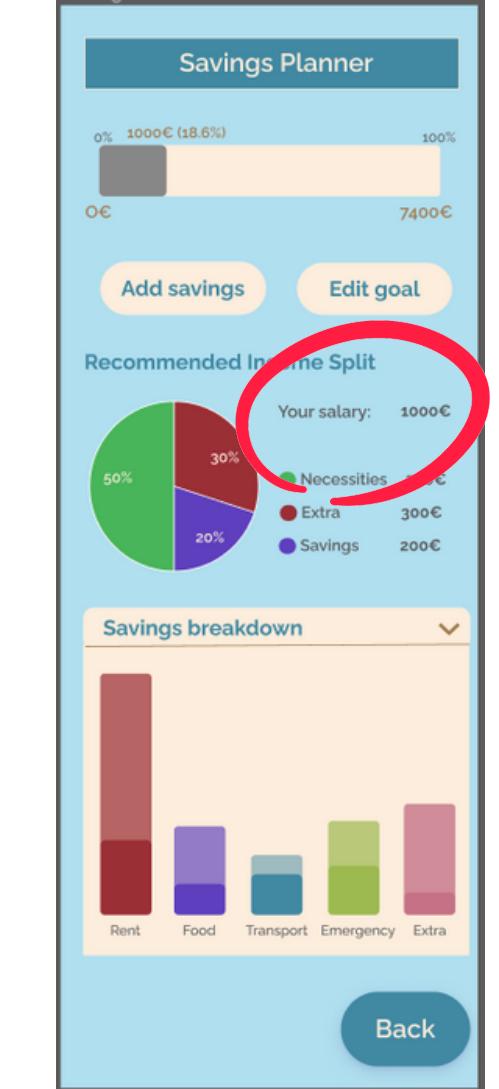


Mid-Fidelity Prototype

- User Evaluation -



"Maybe you could add percentages/values to the top of the progress bars"



*"I think it would be useful to have a "**change salary**" button in this section"*

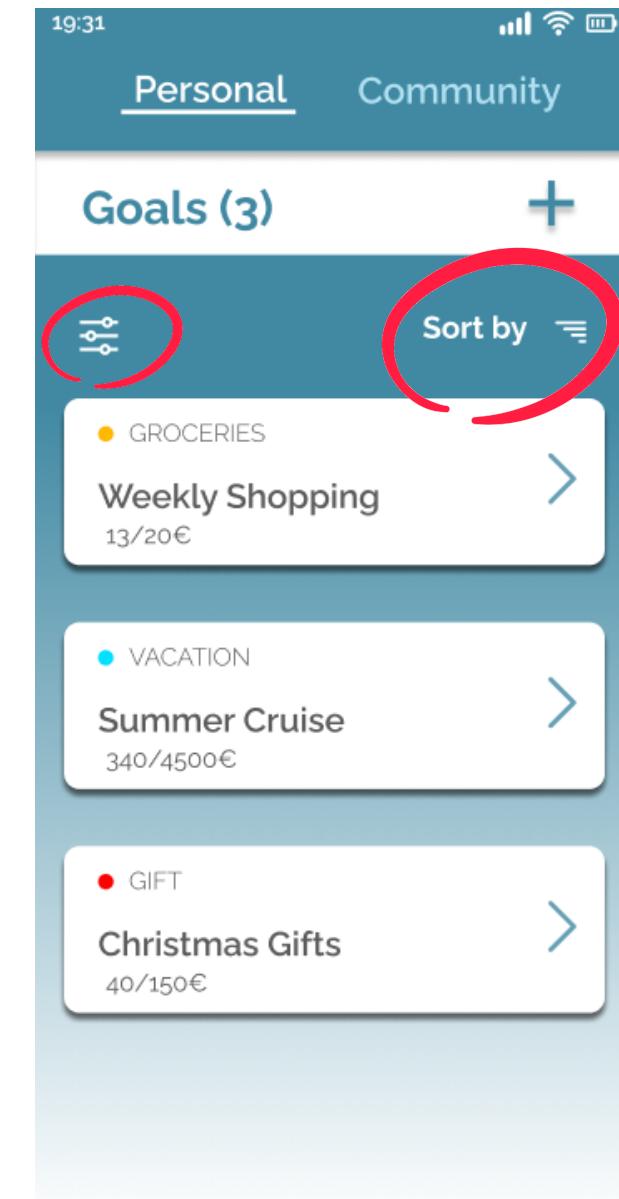
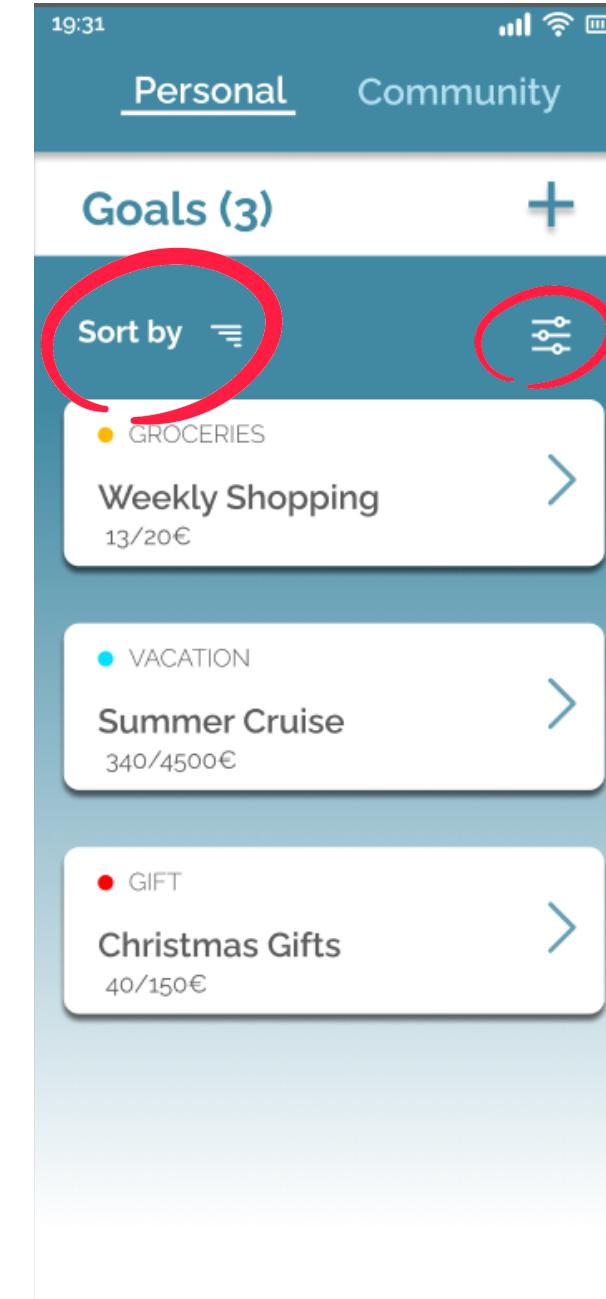
High Fidelity Prototype



Summative User Evaluation

A-B Comparison

2 users
prefered this
layout



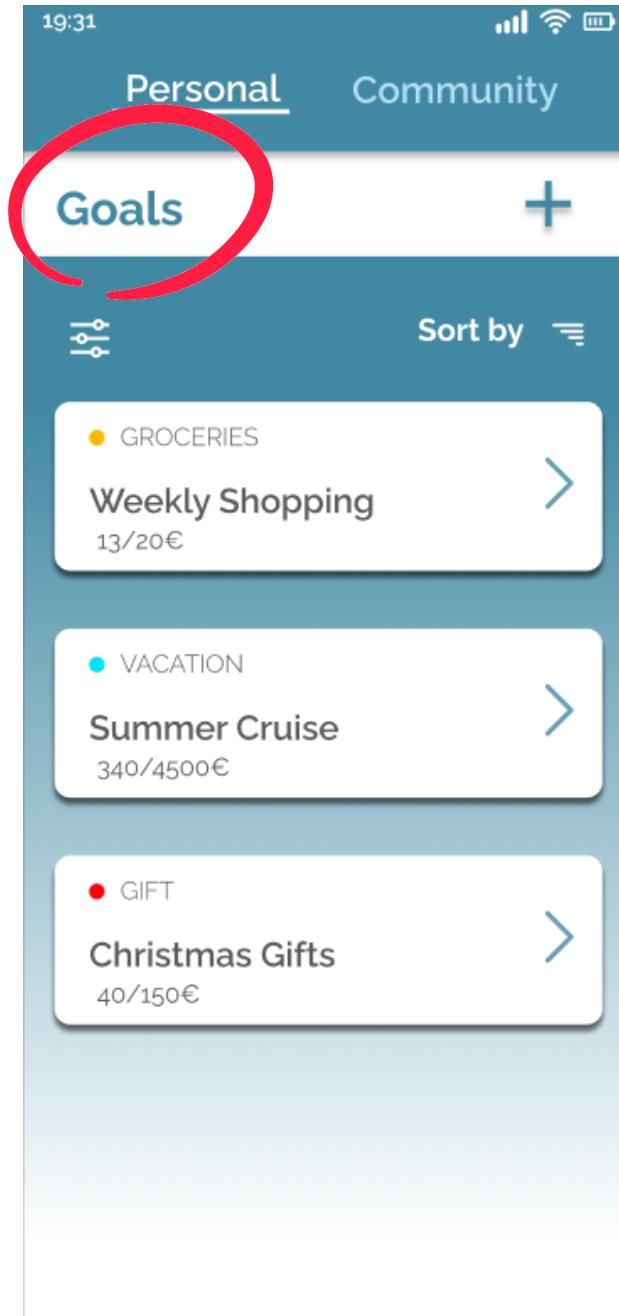
8 users
prefered this
layout

Total users: 10

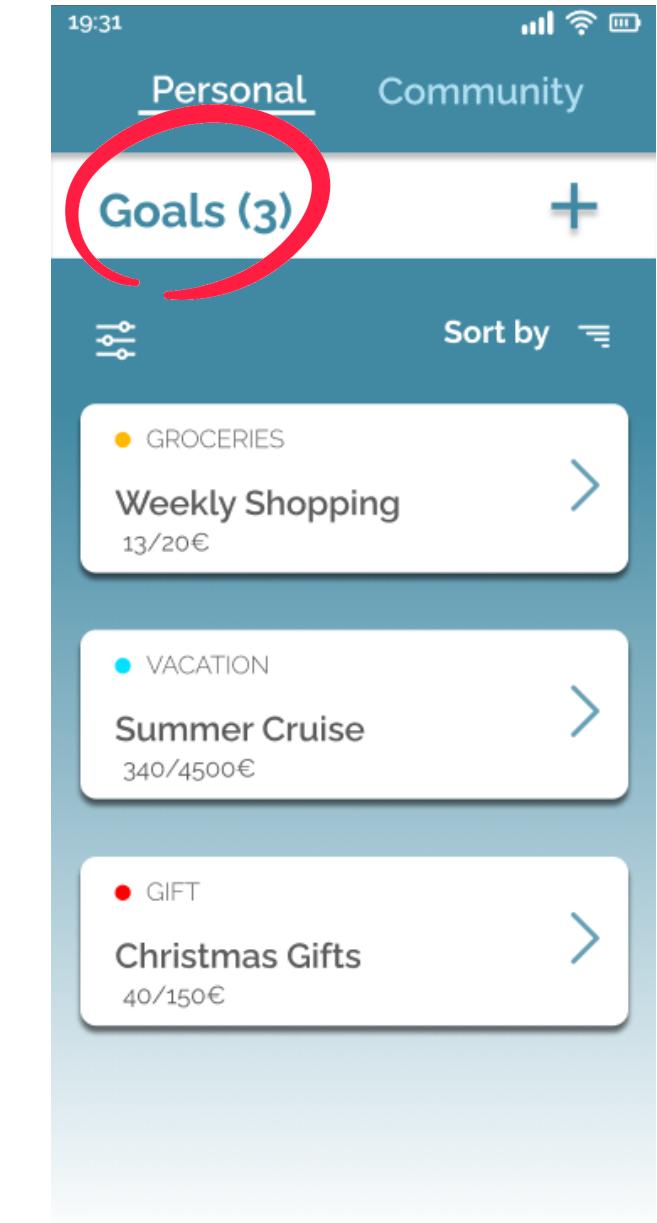
Summative User Evaluation

A-B Comparison

1 user
prefered this
layout



Total users: 10

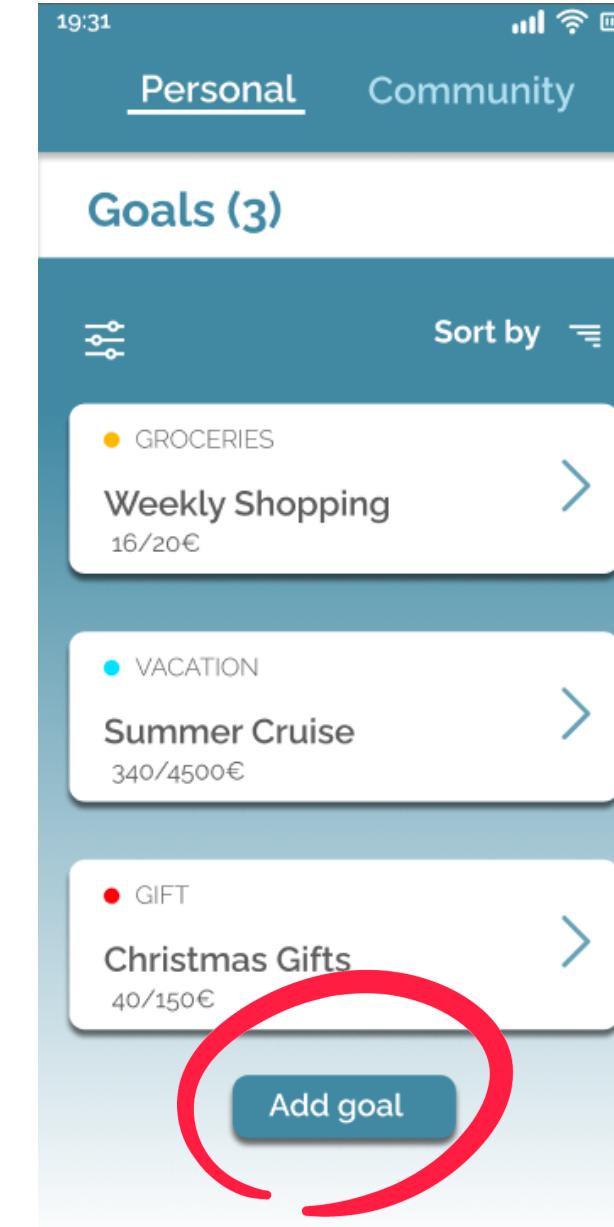


9 users
prefered this
layout

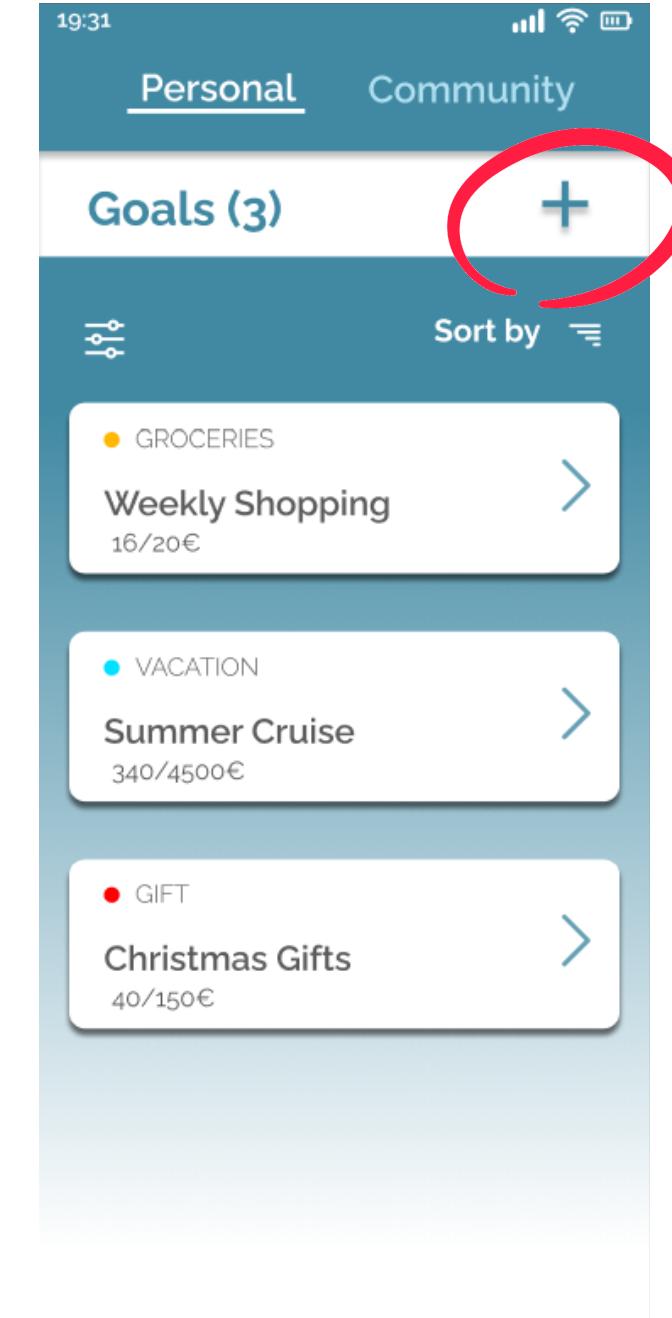
Summative User Evaluation

A-B Comparison

3 users
prefered this
layout



7 users
prefered this
layout

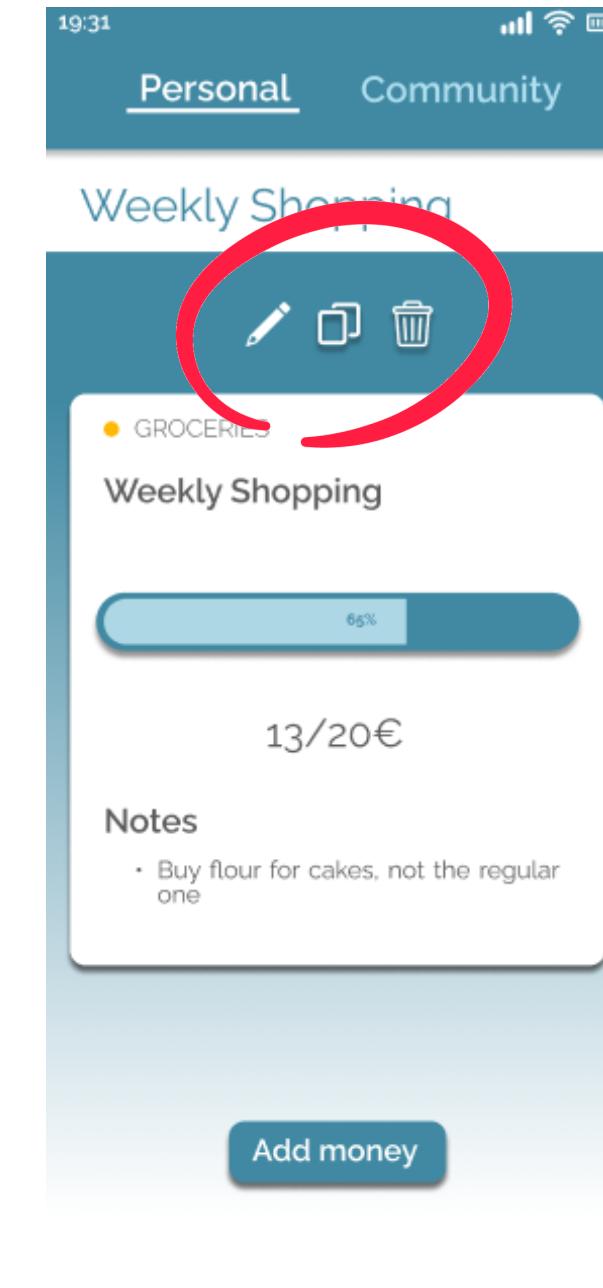


Total users: 10

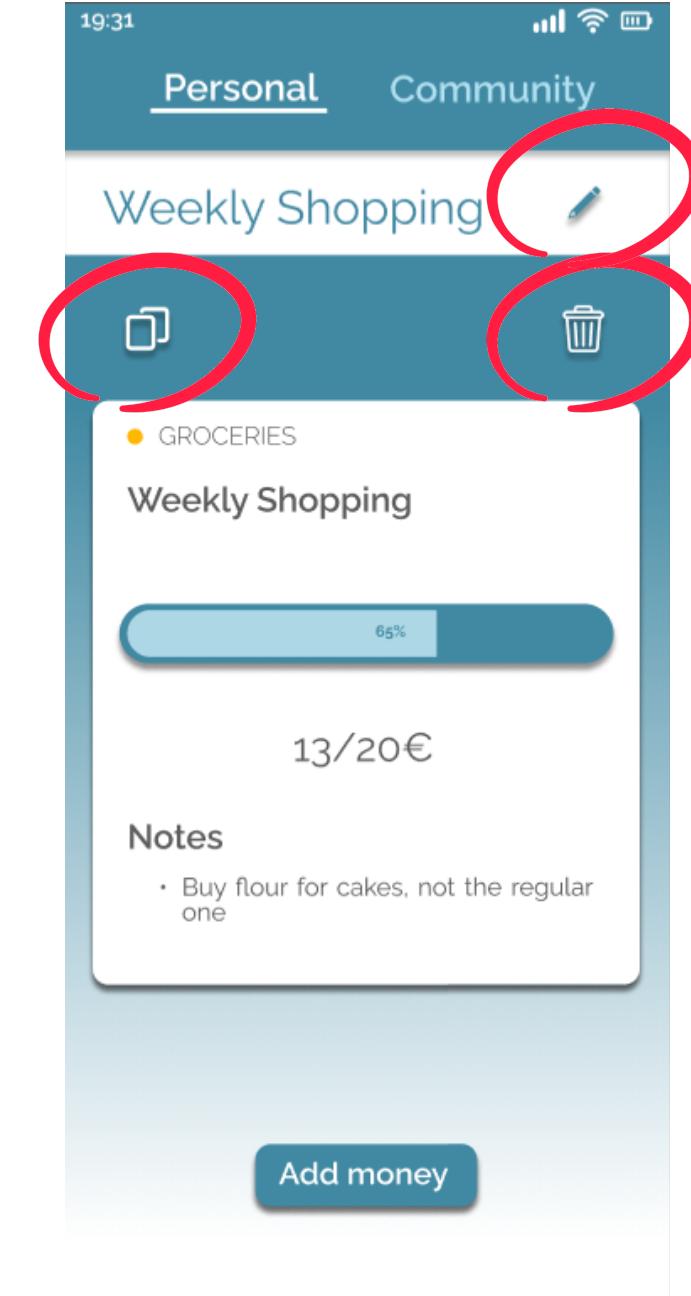
Summative User Evaluation

A-B Comparison

2 users
prefered this
layout



8 users
prefered this
layout

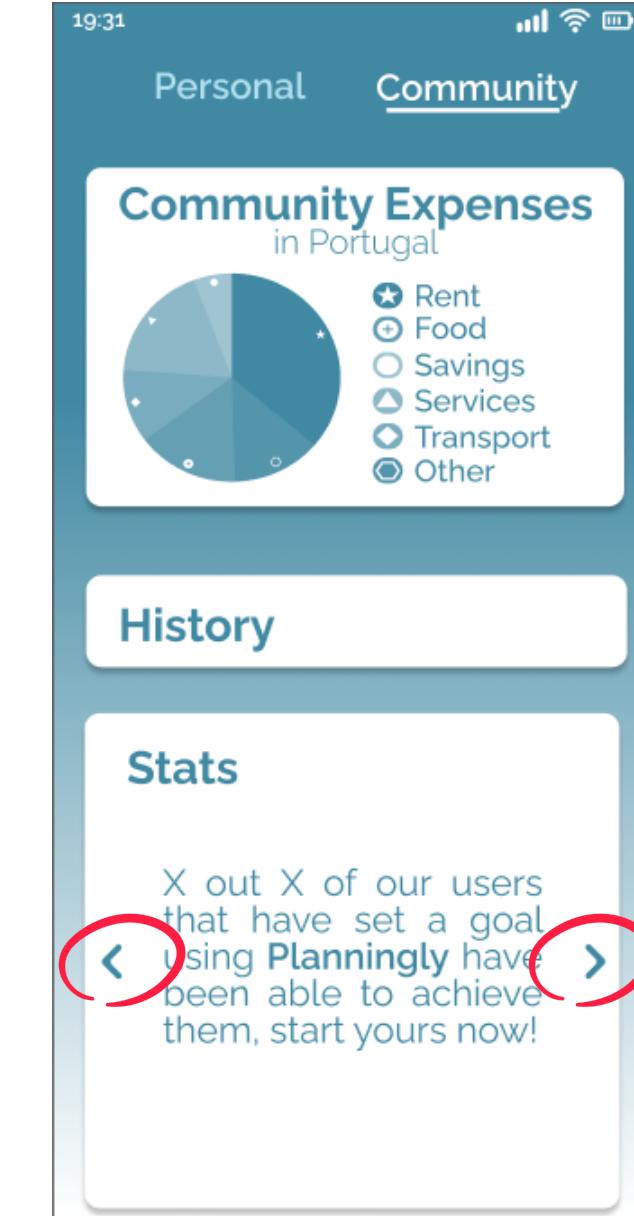
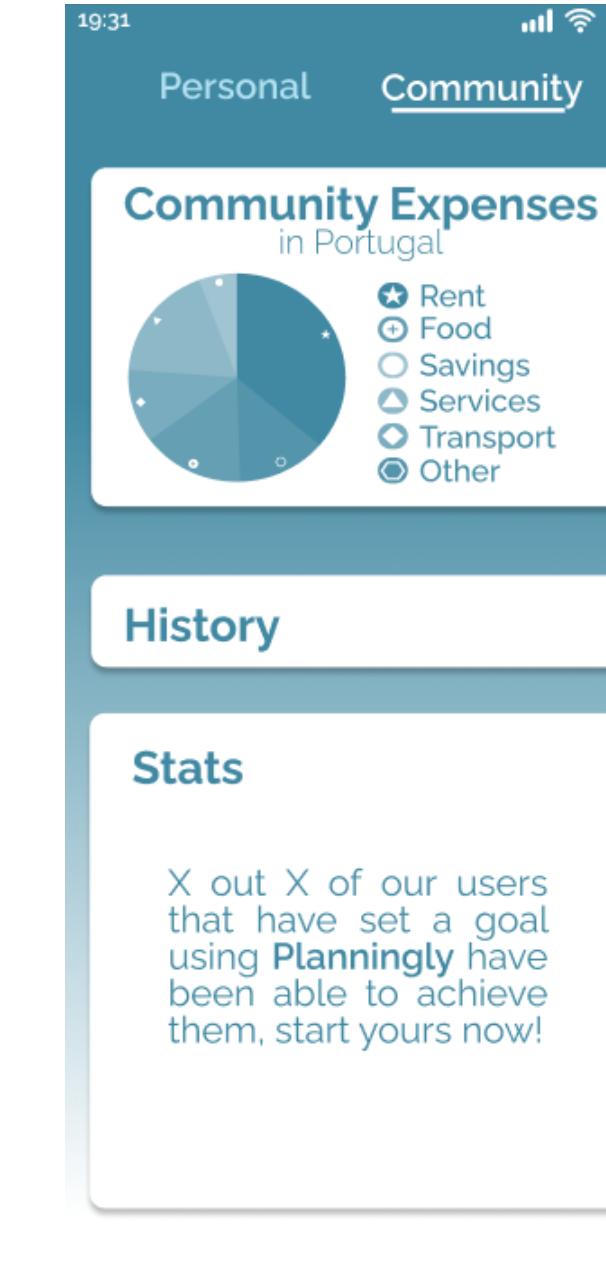


Total users: 10

Summative User Evaluation

A-B Comparison

3 users
prefered this
layout



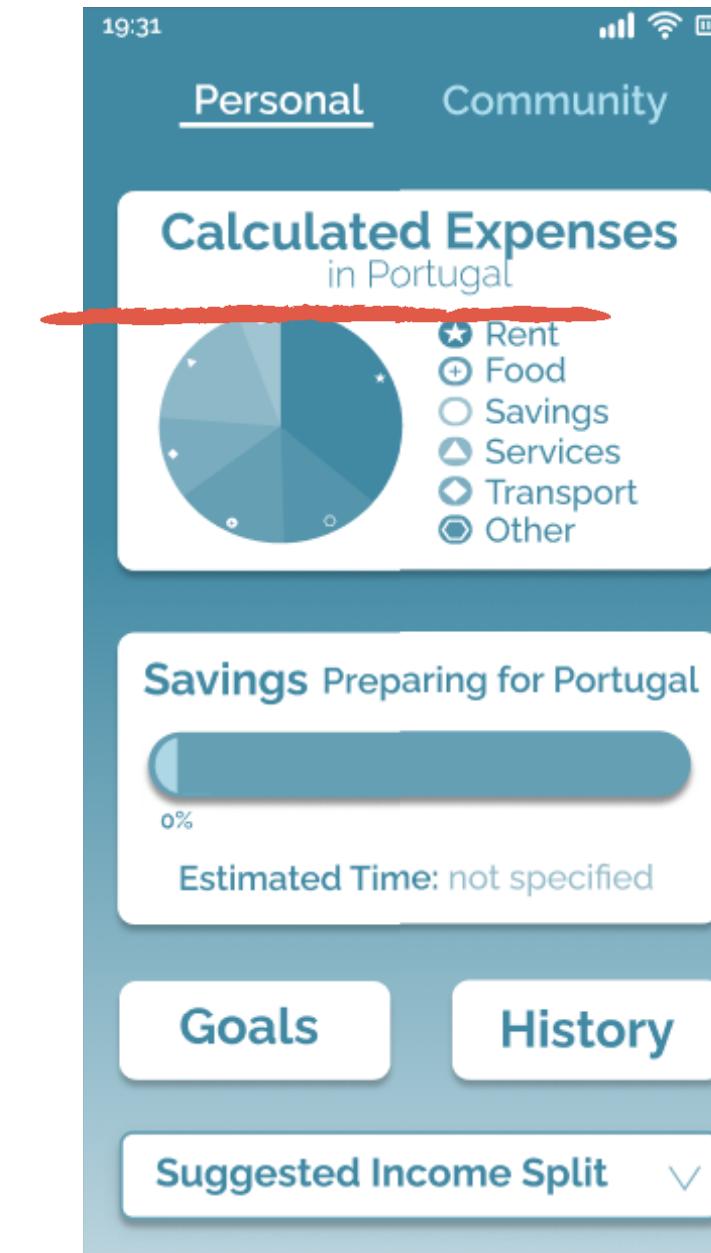
7 users
prefered this
layout

Total users: 10

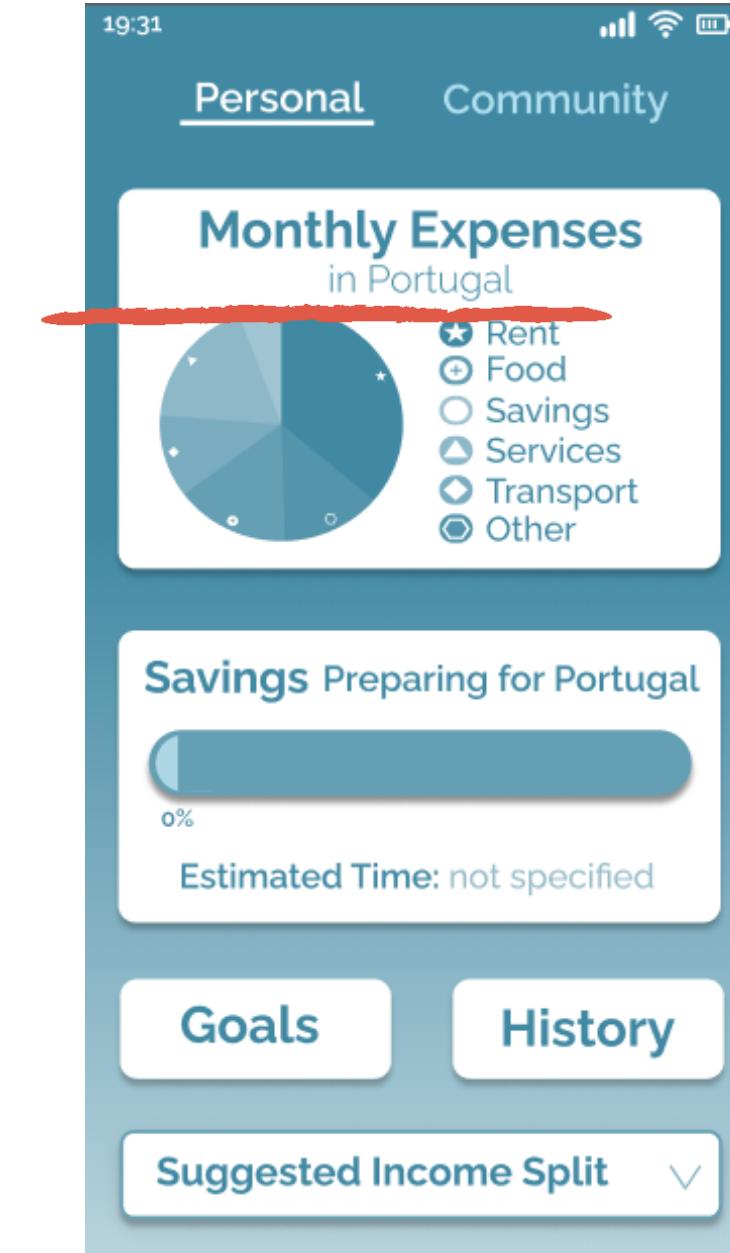
Summative User Evaluation

A-B Comparison

4 users
prefered this
wording



6 users
prefered this
wording

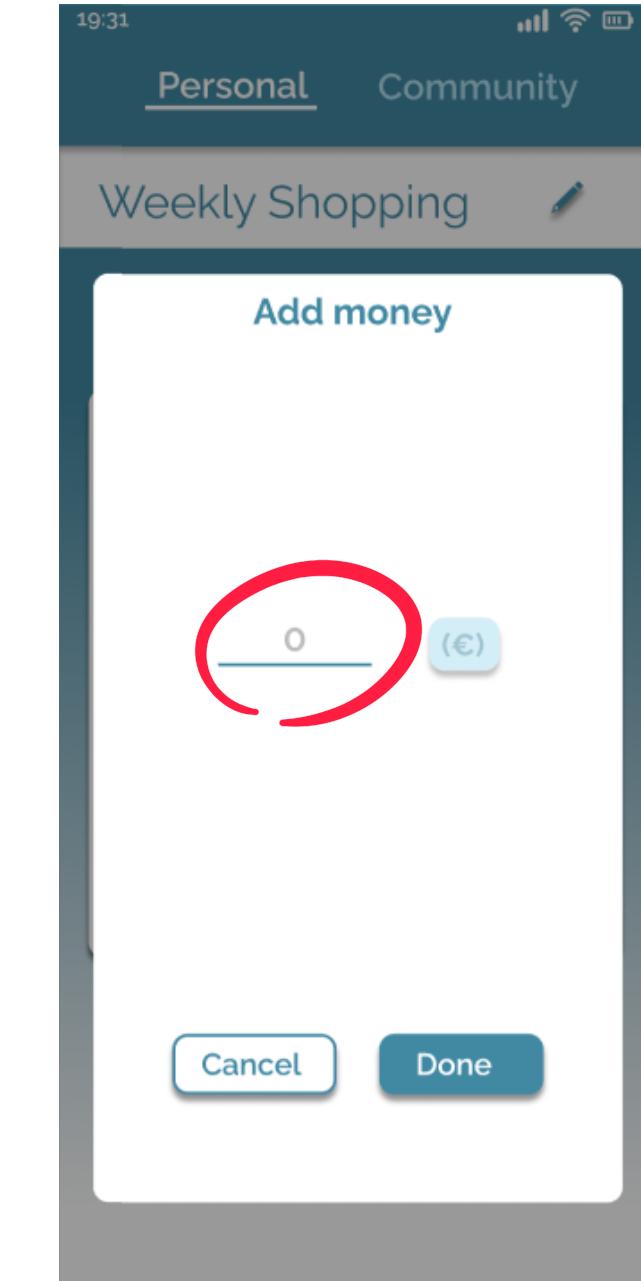
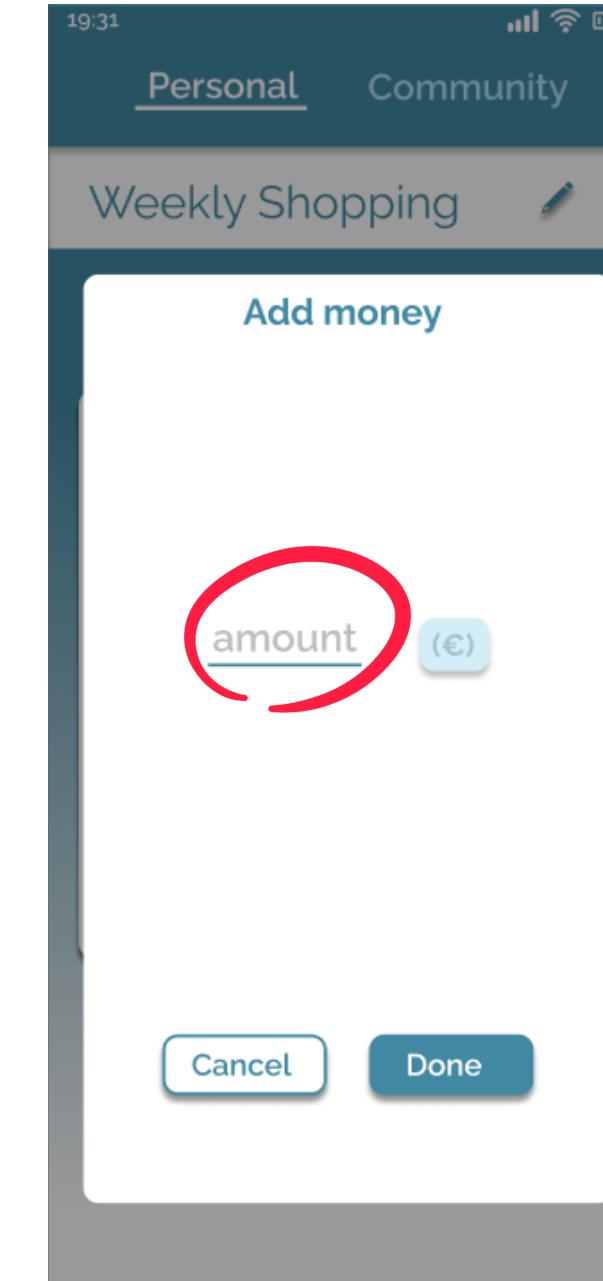


Total users: 10

Summative User Evaluation

A-B Comparison

2 users
prefered this
wording



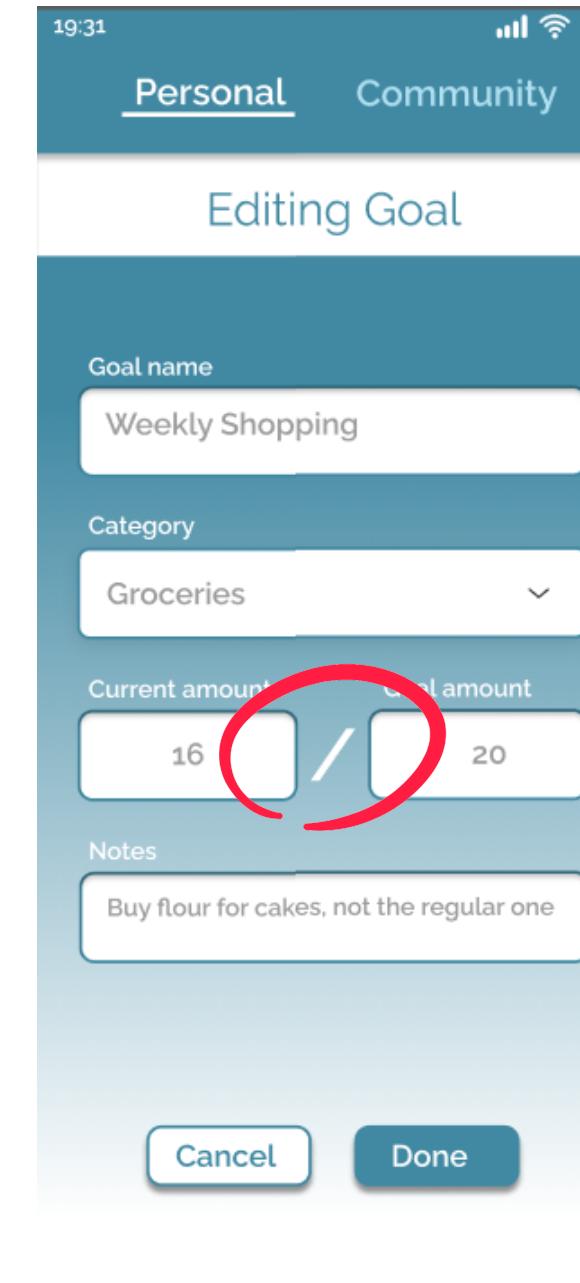
8 users
prefered this
wording

Total users: 10

Summative User Evaluation

A-B Comparison

5 users
prefered this
presentation



19:31 Personal Community

Editing Goal

Goal name: Weekly Shopping

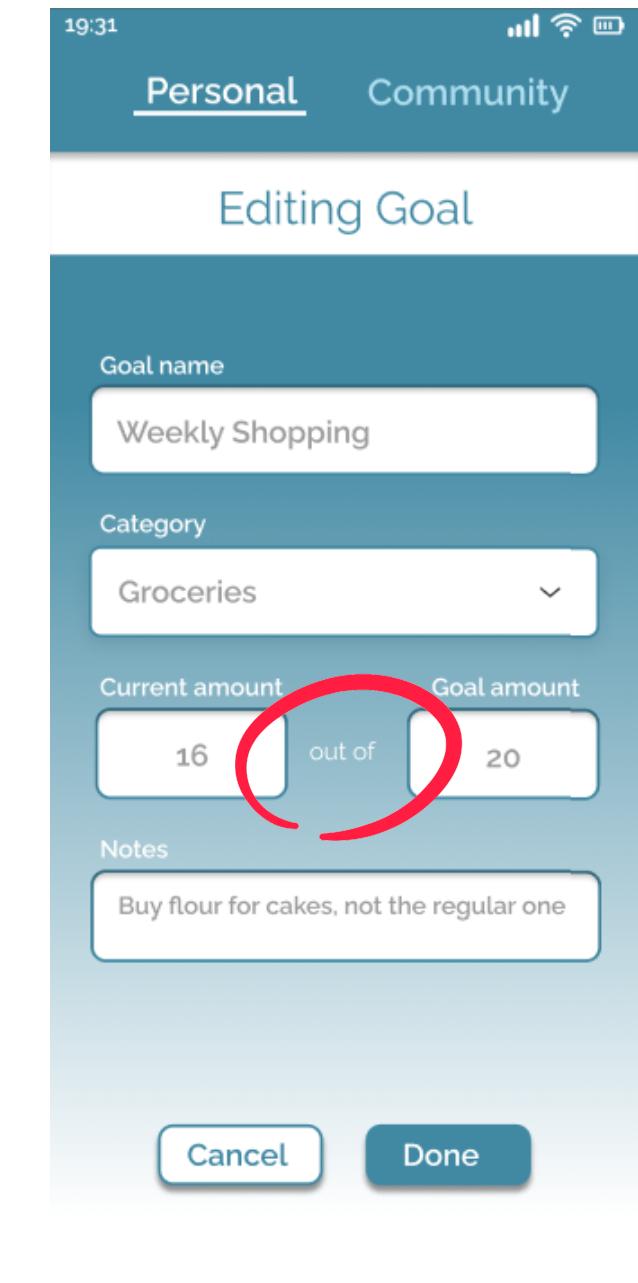
Category: Groceries

Current amount: 16 / Goal amount: 20

Notes: Buy flour for cakes, not the regular one

Cancel Done

A red circle highlights the floating decimal point between the current amount (16) and the goal amount (20).



19:31 Personal Community

Editing Goal

Goal name: Weekly Shopping

Category: Groceries

Current amount: 16 out of Goal amount: 20

Notes: Buy flour for cakes, not the regular one

Cancel Done

5 users
prefered this
presentation

Total users: 10

Summative User Evaluation

A-B Comparison

The image displays two side-by-side mobile application screenshots for a budgeting app. Both screens show a monthly expense breakdown with a total of XXXX€ and a pie chart. A red circle highlights the refresh icon (a circular arrow) in both cases.

Left Screen (A):

- Header: Personal, Community
- Title: Your Calculated Expenses (Monthly)
- Text: Total: XXXX€
- Pie Chart
- Bottom: Back button
- Bottom Left: Category list:
 - Rent (XXXX€)
 - Food (XXXX€)
 - Savings (XXXX€)
 - Services (XXXX€)
 - Transport (XXXX€)
 - Other (XXXX€)

Right Screen (B):

- Header: Personal, Community
- Title: Your Calculated Expenses (Monthly)
- Text: Total: XXXX€
- Pie Chart
- Bottom: Back button (circled in red)
- Bottom Left: Category list:
 - Rent (XXXX€)
 - Food (XXXX€)
 - Savings (XXXX€)
 - Services (XXXX€)
 - Transport (XXXX€)
 - Other (XXXX€)

2 users
prefered these
icons

8 users
prefered these
icons

Total users: 10

Summative User Evaluation

Usability Metrics

	Completion Rate	Errors per Task
User 1	100%	0
User 2	100%	0.4
User 3	100%	0.2
User 4	100%	0
User 5	100%	0
User 6	100%	0

Time-Based Efficiency =
0.13 tasks / second

Overall Relative Efficiency =
100%

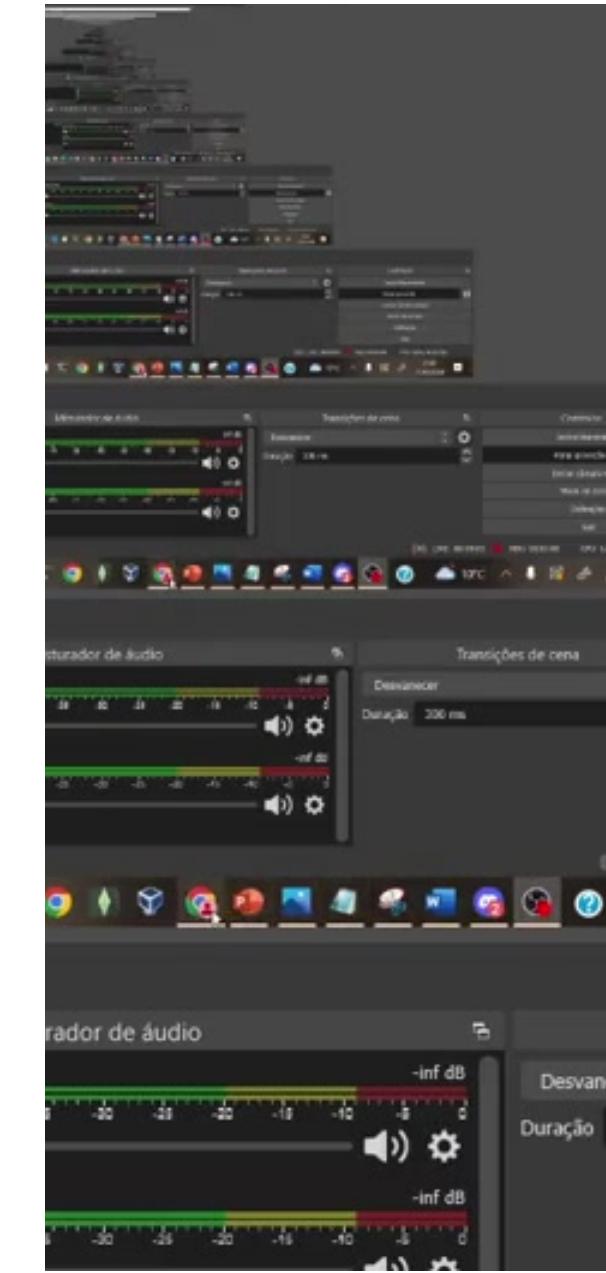
Summative User Evaluation

System Usability Scale

Number	Question	User1	User2	User3	User4	User5	User6	Result
1	I think that I would like to use this system frequently.	3	4	3	5	4	5	4
2	I found the system unnecessarily complex.	1	1	2	1	1	1	1.16667
3	I thought the system was easy to use.	4	4	4	5	5	4	4.33333
4	I think that I would need the support of a technical person to be able to use this system.	1	1	2	1	1	1	1.16667
5	I found the various functions in this system were well integrated.	4	4	3	5	4	3	3.83333
6	I thought there was too much inconsistency in this system.	2	2	2	1	1	2	1.66667
7	I would imagine that most people would learn to use this system very quickly.	3	3	3	4	4	3	3.33333
8	I found the system very cumbersome to use.	1	1	1	2	1	1	1.16667
9	I felt very confident using the system.	5	4	3	5	5	4	4.33333
10	I needed to learn a lot of things before I could get going with this system.	1	1	1	1	1	1	4

$$\begin{aligned} \text{Score} &= \text{Sum} \times 2.5 \\ &= 84.1667 \end{aligned}$$

High Fidelity Prototype - Refinement



Thank you for your attention!