



Savinator

Target group: Students

Topics: budget management, moving countries, savings planner

CCU 2022/23

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Afonso Lopes

Francisco Enguita

Hunt statement

We are going to research students' financial goals, challenges and saving techniques in order to develop something that will help them better manage their money, reach their goals and plan their moving abroad.



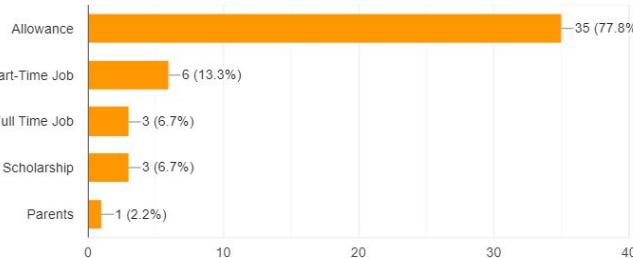
Research plan

Google forms

What is your main source of income?

45 responses

 Copy



Section 4 of 8

Saving Goals

Description (optional)

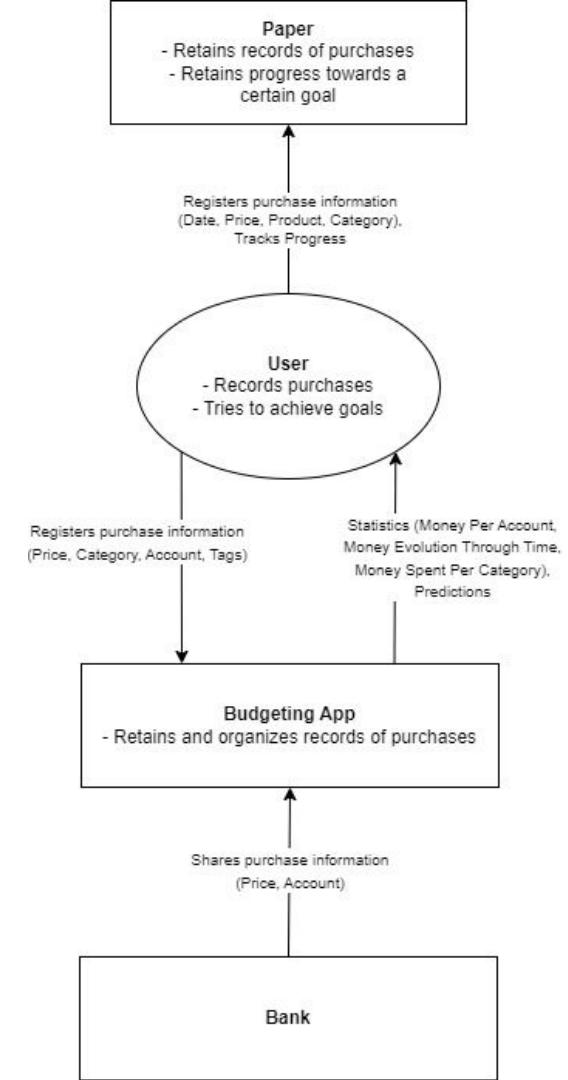
What kind of saving goals do you have? *

- Travels
- Leisure
- Future Family
- Emergency Fund
- Future House
- Education
- Retirement
- None
- Other...

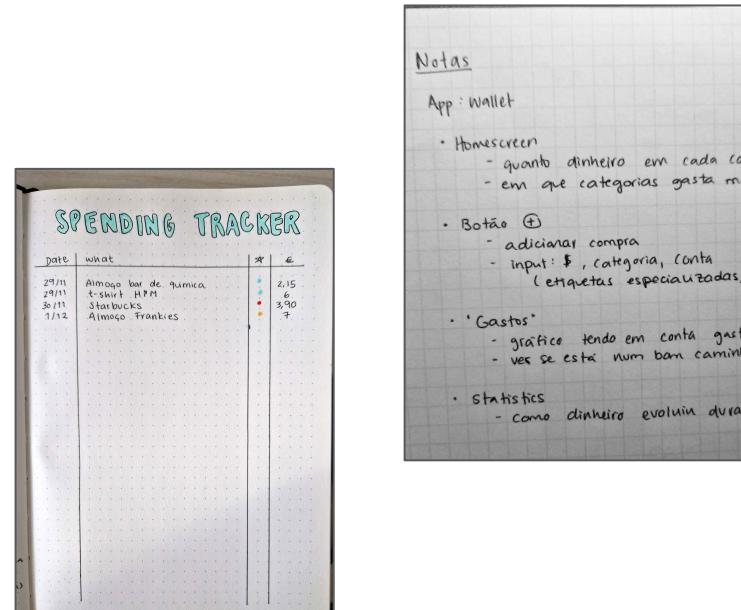
(Optional) What are some saving goals you currently have? You don't need to give exact values

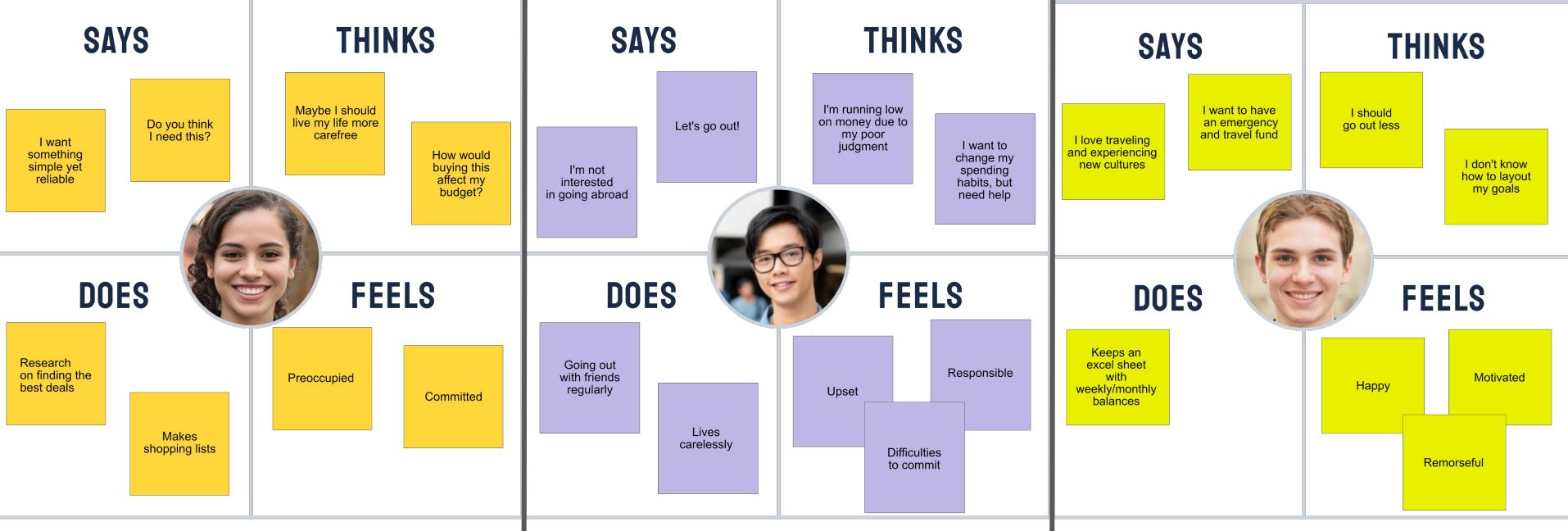
Long answer text

What are you currently doing in order to reach your goals?



Contextual Inquiries





Persona 1: Monica

Student-worker

Persona 2: Renato

Student

Persona 3: Lars

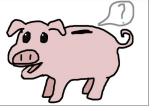
Student from abroad



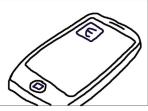
PERSONA: Monica



Monica wants to travel to Paris



but doesn't know how much she will spend, and by proxy how much she will need to save up



Monica downloads the app



Set a travel goal in the app



Adds destination and number of days so that the app can give Monica an estimation, that she can add or cancel



Monica now has a clear and up to date goal she can work towards

PAGE # PROJECT/TEAM: SAVINATOR

DATE: 12/5/22

STORYBOARD INNGROUP.COM



PERSONA: Renato



Due to bad management, Renato ended last month with almost no money.



Because of that, when he received his allowance for the next month, he was sceptical.



Renato downloads the app to aid him.



He sets how much he wants to spend on each category through the month with his budget.



Later that month at a party, the app alerts him that he is close to the limit he set on that category for that month.



Now aware of how much money he still has, he can better control his budget for the rest of the month.

PAGE # PROJECT/TEAM: SAVINATOR

DATE: 12/5/22

STORYBOARD INNGROUP.COM



PERSONA: Lars



Lars just arrived from his semester abroad and wants to start planning his next trip



Traveling is expensive, so he defines a goal he wants to achieve with his money



Lars downloads the app in order to facilitate reaching this goal



He sets his spending goal in the app and syncs it with his bank account



By syncing the app with his bank account, all of his spendings are automatically tracked by the app



Lars now has an easy way to track his spendings and a clearer vision of how to achieve his goal

PAGE # PROJECT/TEAM: SAVINATOR

DATE: 12/5/22

STORYBOARD INNGROUP.COM

Scenario:

Monica is at home when she decides to open the app she regularly uses to track her budget (Wallet by BudgetMakers) to check her progress towards her travel goal (Interrail). She has set a goal to what she thinks is enough, but not knowing precisely makes her anxious. She researches on the internet about the topic for example, the average restaurant meal. What does this mean however? Monica won't eat out everyday. Would there be an app that uses her regular spending habits and average travel location costs to infer the goal value?

Scenario:

Renato is at a party with his friends on a Friday night when he notices that he is running low on money and he has to buy his groceries at least once until he receives his next month allowance. Feeling upset and responsible for bad management of his money, he wonders if there was a mobile app that could help him with his budget management that would alert him of his spendings, in order to not feel choked with the amount of money he still has.

Scenario:

Lars just came back from his semester abroad in Portugal. He loved this experience so much, he wants to travel again soon. Unfortunately however, he spent a little too much money during his time in Portugal so now he has to start budgeting and be more careful about his spendings if he wants to travel again. In order to do so, he defines a goal and creates an excel sheet where he tracks the money he spends and calculates his weekly/monthly balances. He hopes this will bring him closer to his goal. He wonders if there's an app that would make this process easier and more automated.

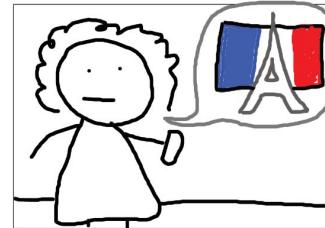


Monica

Scenario:

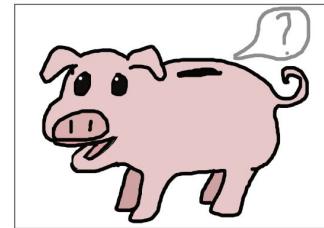
Monica is at home when she decides to open the app she regularly uses to track her budget (Wallet by BudgetMakers) to check her progress towards her travel goal (Interrail). She has set a goal to what she thinks is enough, but not knowing precisely makes her anxious. She researches on the internet about the topic for example, the average restaurant meal. What does this mean however? Monica won't eat out everyday. Would there be an app that uses her regular spending habits and average travel location costs to infer the goal value?

PERSONA: Monica

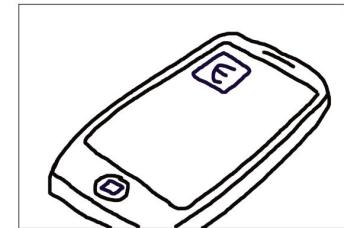


Monica wants to travel to Paris

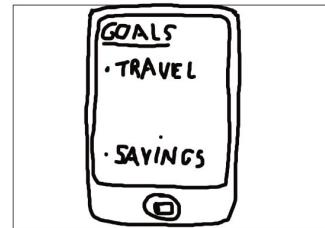
USER STORY/SCENARIO: Goal calculator up for going abroad



but doesn't know how much she will spend, and by proxy how much she will need to save up



Monica downloads the app



Set a travel goal in the app



Adds destination and number of days so that the app can give Monica an estimation, that she can add or cancel



Monica now has a clear and up to date goal she can work towards

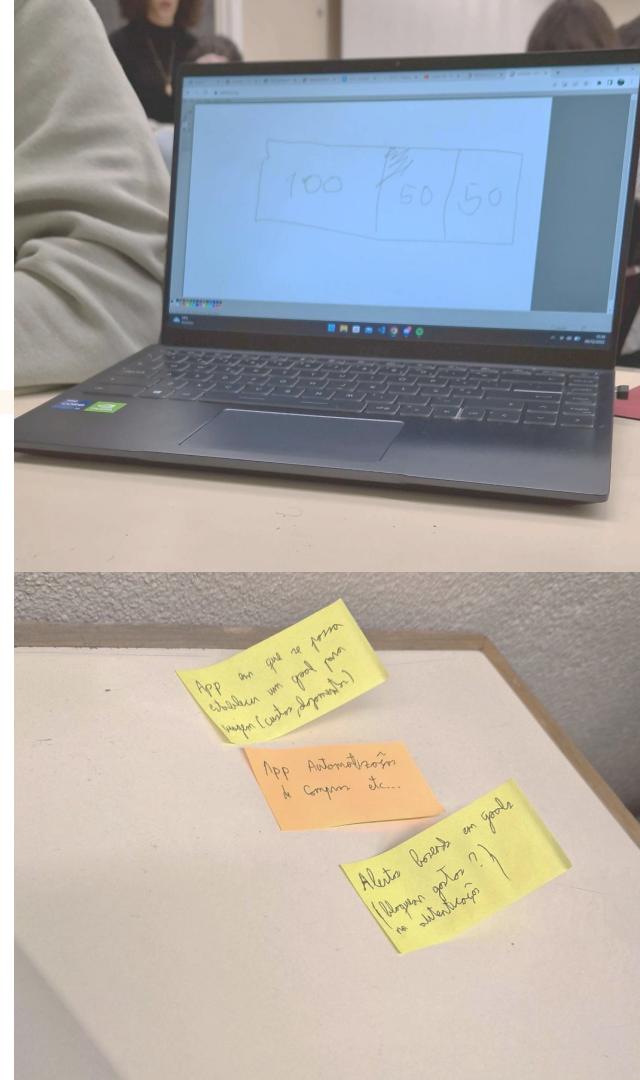
| Clusters | Description | What are you looking for in these kinds of apps? |
|------------------------------|--|--|
| Simplicity | Interviewee requests for a design easy to grasp and comprehend and also not very time consuming. | "Be simple and practical. Short process to file an expense" "practical and straightforward" "attractive and simple design, easy to learn" |
| Sync / Automatization | Interviewee mentions the importance of the app being as automated as possible in order to reduce the amount of work needed to be done by the user. | "Sync with the bank account/card to automatically track purchases" "automatization of data" "having an automatic way to track the money I spend" "Automatic categorization of expenses" "I'd like for it to be connected to my bank app so I didn't have to manually register spendings" "automatic bank tracking" |
| Alerts | Interviewee states the relevance of having the optional alerts in the app to notify the users they are reaching a certain defined budget cap or that they are spending more money than usual on a specific category. | "deciding a weekly/monthly budget and notifying when that budget is reached" "Impose some limits to expenses" "alerting me when I'm reaching my budget maximum" "alerts that I'm spending more money than normal on a specific thing" |
| Trackers | Interviewee brings up the desire to have the app display some trackers so that the user can see his spending over time (e.g. how much he spent in the last week). | "Track your weekly and monthly balance" "track everything and go back in time and see how much I spent last year for example." |
| Statistics | Interviewee hints at the possibility of the app showing the user some statistics that the user can then use to regulate his spending. | "graph with money spent over time" "Statistics" "Illustrative graphs..." |
| Categorization | Interviewee references the categorization of the expenses in order for the user to be able to check in what areas specifically he is spending most of his money on in a quick manner. | "Having different activities where money is expended" "Automatic categorization of expenses" |
| Feedback | Interviewee states the desire for the app to give the user feedback or feedforward on how to manage his money wisely. | "Tips, simulator..." "Get feedback on how to monetize my money" |
| Customization | Interviewee requests for the app to have customization options so that the user can transform the app to his taste. | "ability to customize everything" "modularity/customizability" |
| Safety | Interviewee mentions the necessity of the app being safe in order to protect the users identity and bank accounts away from harm. | "Safety" "ability to link safely to bank accounts" |

Thematic analysis: codebook

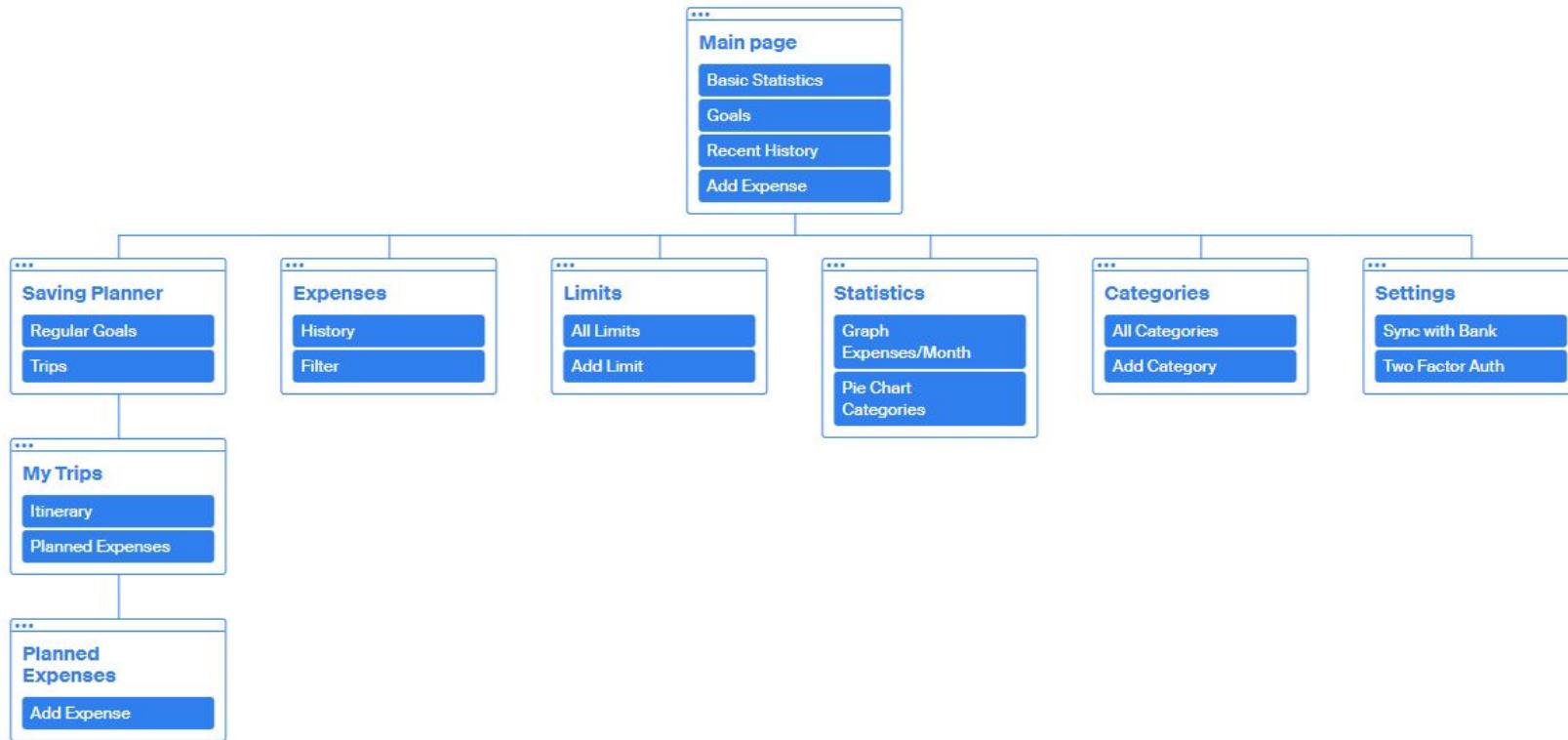
Ideation

Ideas:

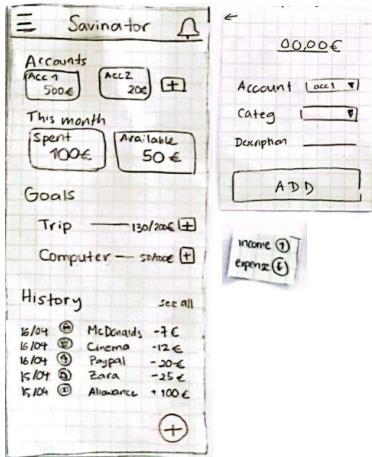
- Statistics dashboards by category
- Establish saving goals (trips, housing, emergency funds, other)
- Goal based alerts by topic
- Sync with bank account



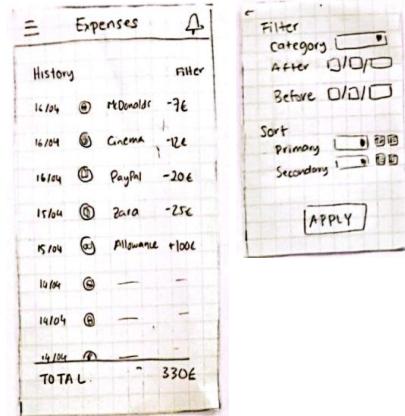
Sitemap



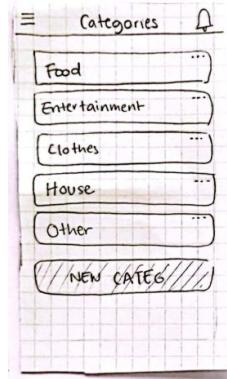
Homescreen



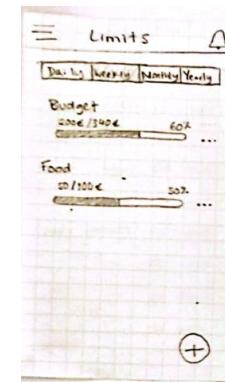
Expenses



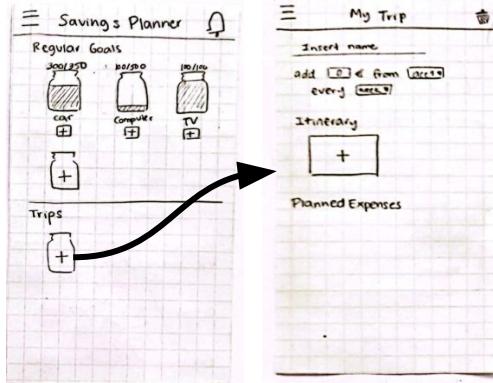
Categories



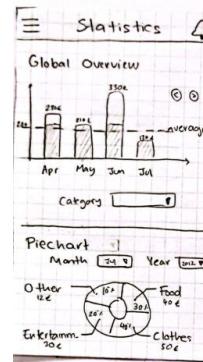
Limits



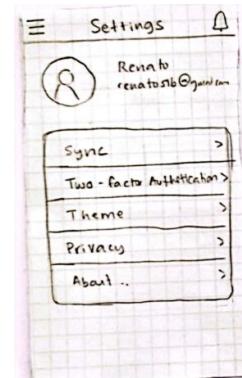
Savings Planner and My Trip



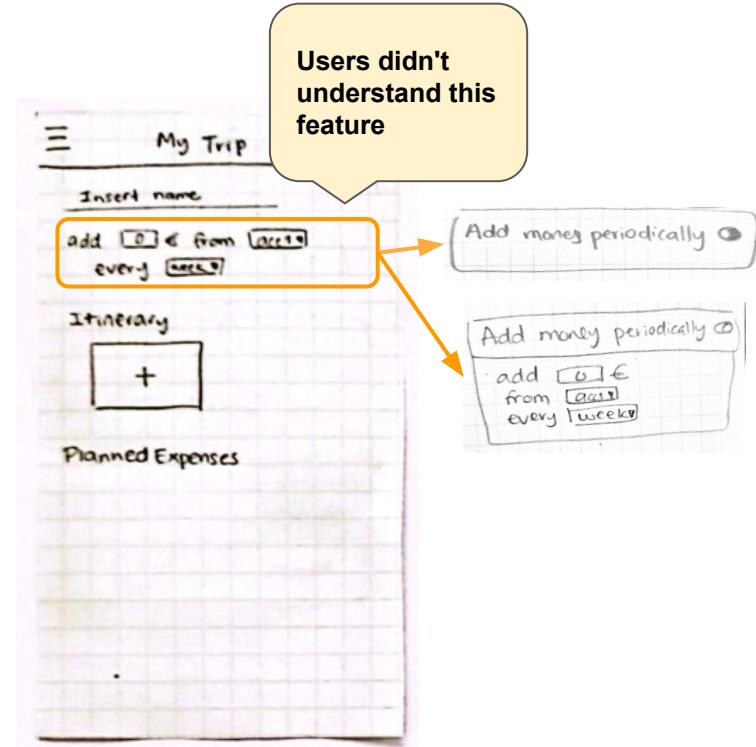
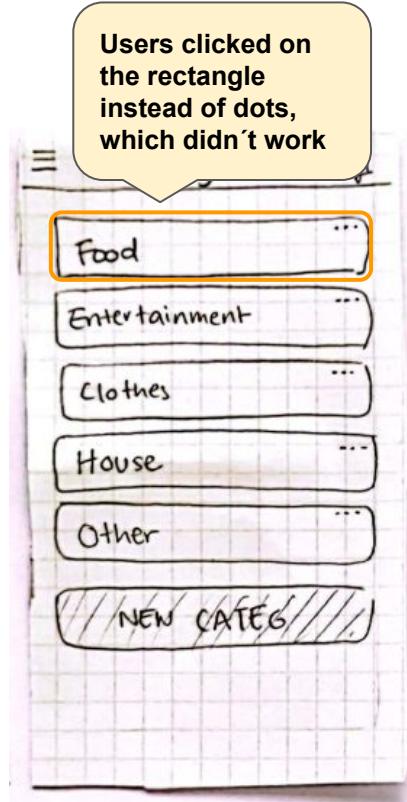
Statistics



Settings



Formative evaluation: Some changes made



Mid Fidelity Prototype

Savinator

Categories

| | |
|---------------|-----|
| Food | ... |
| Entertainment | ... |
| Clothes | ... |
| House | ... |
| Other | ... |

Add category

Expenses

History

Last 30 days

| Date | Category | Description | Amount |
|-------|------------|-------------|--------|
| 16/04 | McDonald's | -7€ | |
| 16/04 | Cinema | -12€ | |
| 15/04 | Paypal | -20€ | |
| 15/04 | Allowance | +100€ | |
| 14/04 | Zara | -25€ | |
| 14/04 | Concert | -35€ | |
| 13/04 | Continente | -42.5€ | |
| 13/04 | MBWAY-Joao | +5.75€ | |
| 11/04 | Civil | -0.55€ | |
| 11/04 | Bowling | -12€ | |
| 11/04 | SportZone | -11€ | |
| 08/04 | PLACARD | +2.5€ | |
| 08/04 | Civil | -1.25€ | |
| 03/04 | Cinema | -12.5€ | |
| 02/04 | Dino Dose | +34€ | |

Total ————— 330€

Add limit

Limits

Limits

Daily Weekly Monthly Yearly

Budget

Spent 200/340€ 60% ...

Food

Spent 50/100€ 50% ...

Add limit

Settings

Settings

Renato
renatoslb@gmail.com

Sync Two-Factor Authentication Theme Privacy About Savinator

Savings Planner

Saving Planner

Regular Goals

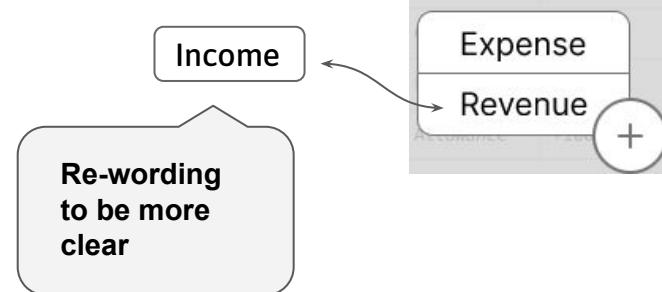
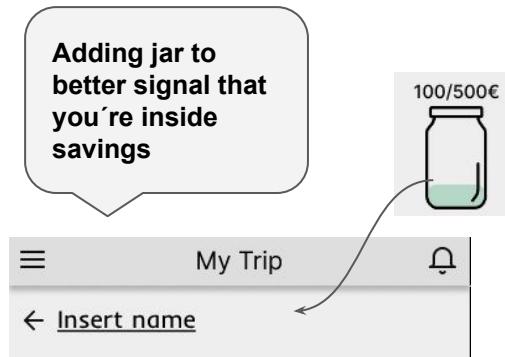
| | | |
|----------|----------|-----------|
| 300/350€ | 100/500€ | 100/1000€ |
| car | computer | TV |

Trips

| | |
|----------|--|
| 100/500€ | |
| Madrid | |

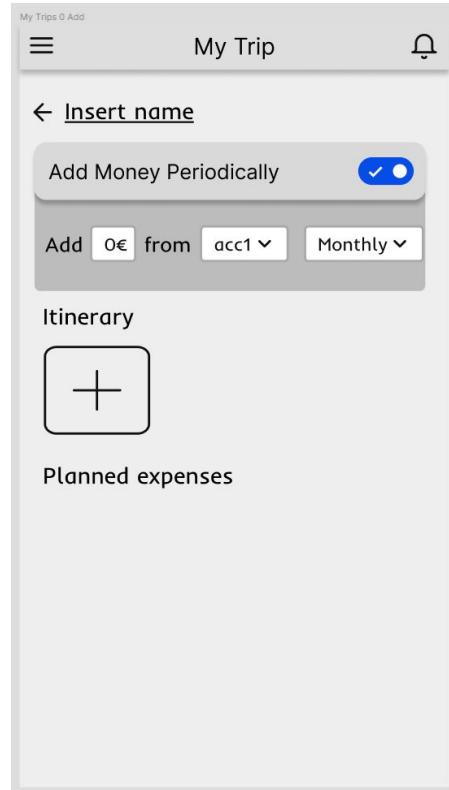
Add goal

Formative evaluation: Mid Fidelity Feedback



What's next...

- Focus on MyTrips screen
- Implement the user feedback
- Finish implementing all features, making the app fully functional



High fidelity (redacted)

The image shows a screenshot of the Savinator app interface, which is a budgeting and financial management application.

Categories: A sidebar listing categories such as Food, Entertainment, Clothes, House, and Other, each with a green rounded rectangle overlay and a three-dot menu icon. A large green plus button is at the bottom.

Expenses: A section titled "History" showing expenses over the last 30 days. The table includes columns for Date, Icon, Description, and Amount. Total expenses are listed as 330€.

| Date | Icon | Description | Amount |
|-------|-------------|-------------|--------|
| 16/04 | McDonald's | -7€ | |
| 16/04 | Cinema | -12€ | |
| 15/04 | Paypal | -20€ | |
| 15/04 | Allowance | +100€ | |
| 14/04 | Zara | -25€ | |
| 14/04 | Concert | -35€ | |
| 13/04 | Continente | -42,5€ | |
| 13/04 | MIRWAY-Joao | +5,75€ | |
| 11/04 | Civil | -8,55€ | |
| 11/04 | Bowling | -12€ | |
| 11/04 | SportZone | -11€ | |
| 08/04 | PLACARD | +25€ | |
| 08/04 | Civil | -1,25€ | |
| 03/04 | Cinema | -12,5€ | |
| 02/04 | Ramen-Dora | -34€ | |

Limits: A section titled "Limits" showing budget and food limits. It includes tabs for Daily, Weekly, Monthly (selected), and Yearly. Budget is set at 200/340€ (60%) and Food at 50/100€ (50%).

| Category | Spent | Limit | Percentage |
|----------|-------|-------|------------|
| Budget | 200 | 340 | 60% |
| Food | 50 | 100 | 50% |

Settings: A section titled "Settings" for user Renato (renatoslb@gmail.com). It includes options for Sync, Two-Factor Authentication, Theme, Privacy, and About Savinator.

Savings Planner: A section titled "Saving Planner" showing regular goals and trips. Regular goals include "car" (300/350€), "computer" (50/500€), and "TV" (100/1000€). Trips include "Madrid" (100/500€).



High fidelity

This high-fidelity wireframe illustrates the user interface of the Savinator application, showing both the main dashboard and detailed modal dialogs for various features.

Main Dashboard (Top Row):

- Side Menu:** Includes options like Homescreen, History, Categories, Savings Planner, Statistics, Limits, and Settings.
- Homescreen:** Overview of Accounts (Avail: 500€, Avail: 20€), Goals (Trip: 120/200€), and Expenses (Last 30 days: Total 200€).
- Categories:** A list of categories: Food, Entertainment, Clothes, Household, and Other.
- Expenses:** History of expenses (e.g., Rent, Groceries, Dining, etc.) with a total of 500€.
- Limits:** Settings for Budget, Food, and Spending.
- Settings:** General settings for Sync, Two-Factor Authentication, Theme, Privacy, and About Savinator.
- Savings Planner:** Saving Planner section with goals for Retirement, House, and Vacation.
- My Trips 4:** My Trip section with a trip named "Italy" and a button to "Add Money Periodically".
- Statistics:** Global Overview and a chart showing spending by category.

Modals and Input Fields:

- Revenue/Expense ...**: Add revenue or expense forms with fields for Account, Category, Description, and Amount (00,00€ or -00,00€). Buttons include "Expense", "Income", and "Add".
- Add revenue keyboard**, **Add expense keyboard**, **Add category keyboard**, **Filter numkeyboard**, **Add limit keyboard**, **Add limit keyboard**, **Add goal keyboard**, **Add name itinerary...**, **Add number itinerary...**: Various input keyboards for different data entry fields.

High fidelity



Renato

- Homescreen
- History
- Categories
- Savings Planner
- Statistics
- Limits
- Settings

Overview

Accounts

| | |
|------|------|
| Acc1 | 500€ |
| Acc2 | 20€ |

+ This month

| | |
|-----------|------|
| Spent | 500€ |
| Available | 50€ |

Goals See more

| | |
|----------|----------|
| Trip | 130/200€ |
| Computer | 50/500€ |

Last 4 Expenses See more

| | | | |
|-------|----|-----------|------|
| 16/04 | ☕ | Mcdonalds | -7€ |
| 16/04 | 🎟️ | Cinema | -12€ |
| 15/04 | 🛒 | Paypal | -2€ |
| 15/04 | \$ | Allowance | +10€ |

+

High fidelity: Adding income/expense

Users needed an intuitive and rapid method to add their expense/income.

The wireframe shows a mobile application interface for managing finances. At the top, there's a navigation bar with three horizontal lines, the word "Overview", and a bell icon. Below the navigation, the screen is divided into several sections:

- Accounts:** Shows two accounts: "Acc1" with a balance of "500€" and "Acc2" with a balance of "20€". There's also a small "+" button to add more accounts.
- This month:** Shows spending and availability. It says "Spent 500€" and "Available 50€".
- Goals:** Displays two financial goals: "Trip" at 130/200€ and "Computer" at 50/500€, each with a "+ See more" button.
- Last 4 Expenses:** Shows the most recent expenses: 16/04 (McDonald's, -7€), 16/04 (Cinema, -12€), 15/04 (Paypal, -20€), and 15/04 (Allowance, +10€). A large green "+" button is located at the bottom right of this section.

The first iteration of the income method, did not have the ability to add the **category**. Users however requested this feature for more control into their budgeting.

High fidelity

≡ Categories ☺

- Food ...
- Entertainment ...
- Clothes ...
- House ...
- Other ...

+

≡ History ☺

Last 30 days Filter

| Date | Icon | Description | Amount |
|-------|------|-------------|--------|
| 16/04 | ☕ | Mcdonalds | -7€ |
| 16/04 | 🎟️ | Cinema | -12€ |
| 15/04 | 🛒 | Paypal | -20€ |
| 15/04 | \$ | Allowance | +100€ |
| 14/04 | 🛒 | Zara | -25€ |
| 14/04 | 🎟️ | Concert | -35€ |
| 13/04 | 🛒 | Continente | -42.5€ |
| 13/04 | \$ | MBWAY-Joao | +5.75€ |
| 11/04 | ☕ | Civil | -0.55€ |
| 11/04 | 🎟️ | Bowling | -12€ |
| 11/04 | 🛒 | SportZone | -11€ |
| 08/04 | \$ | PLACARD | +25€ |
| 08/04 | ☕ | Civil | -1.25€ |
| 03/04 | 🎟️ | Cinema | -12.5€ |
| 02/04 | 🏓 | Pinga-Dance | -34€ |

Total ————— 330€

High fidelity: Seeing History

Users wanted a way to see their movements in **more detail** than what was provided in the homescreen

Originally, movements in History were ordered only in chronological order

The wireframe shows the 'Overview' screen with the following sections:

- Accounts:** Displays two accounts: Acc1 (500€) and Acc2 (20€). A green '+' button is located to the right.
- This month:** Displays 'Spent' (500€) and 'Available' (50€).
- Goals:** Shows two goals: 'Trip' (130/200€) and 'Computer' (50/500€), each with a green '+' button. A 'See more' link is present.
- Last 4 Expenses:** Shows four recent expenses: 16/04 McDonald's (-7€), 16/04 Cinema (-12€), 15/04 Paypal (-2€), and 15/04 Allowance (+10€). Each expense has a small icon (coffee cup, movie ticket, shopping cart, dollar sign) and a green '+' button.

Users requested more flexibility after using the first iteration, so a **Filter** and **Sort** tab was added

Now it allows full control over the timeline and which category it displays

High fidelity

≡ **Settings** ⚡



Renato
renatoslb@gmail.com

Sync >

Two-Factor Authentication >

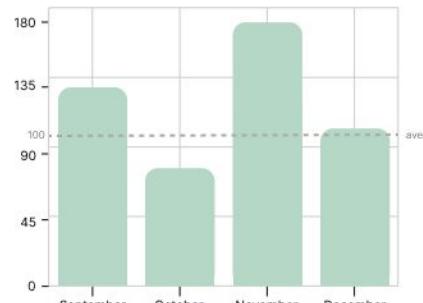
Theme >

Privacy >

About Savinator >

≡ **Statistics** ⚡

Global Overview

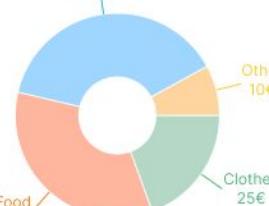


| Month | Spending |
|-----------|----------|
| September | ~135 |
| October | ~85 |
| November | ~180 |
| December | ~100 |

Category **All** ▾

Pie Chart

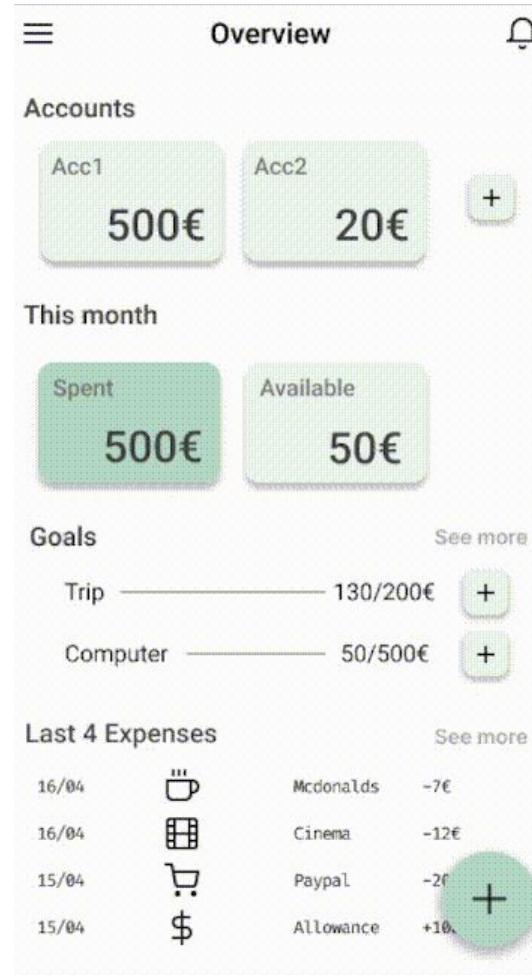
Month **Oct** ▾ Year **2022** ▾



| Category | Spending |
|---------------|----------|
| Entertainment | 55€ |
| Food | 50€ |
| Clothes | 25€ |
| Other | 10€ |

High fidelity: Seeing Statistics

During the first iteration,
Users requested for the
global overview and **pie chart** to have a category and date tab respectively



High fidelity

Limits

Budget

Spent 200/340€ 60% ...

Food

Spent 50/100€ 50% ...

+

Daily Weekly Monthly **Monthly** Yearly

Saving Planner

Regular Goals

| | | |
|-----------------------------------|---------------------------------------|-----------------------------------|
| 300/350€ car + | 50/500€ computer + | 100/1000€ TV + |
|-----------------------------------|---------------------------------------|-----------------------------------|

Trips

| | |
|--------------------------------------|----------------|
| 100/500€ Madrid + | + |
|--------------------------------------|----------------|

My Trip

← Insert name ...

Add Money Periodically

Itinerary

+ Paris 5 days

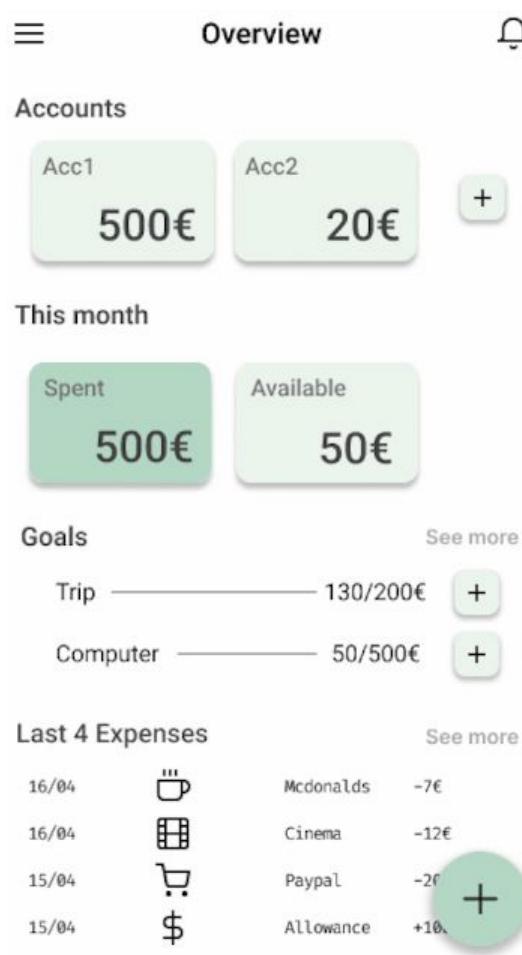
Planned expenses

| | |
|------------------|------|
| ▼ Transportation | 120€ |
| Flight LIS-PARIS | 120€ |
| ▼ Food | 250€ |
| Paris | 250€ |

Total 370€

High fidelity: Planning a trip

Initially, there was only the possibility of adding the estimate for food and transportation



Users liked the estimate feature, but also wanted the freedom to **modify** the value if they thought it wasn't right

One of the major features, is the ability to add **multiple destinations** to one trip

A **planned expenses** tab was also added, to give the User a better overview on what is planned to be spent

High fidelity: Final remarks

- Users were happy with the final product, as they felt the usage was intuitive for a budgeting app.
- Users found some of our distinguishing features very useful, like the My Trips savings planner
- Overall given the timeframe available, we had multiple rounds of testing for the low, mid and high fidelity, and felt like we did a good job understanding our user's needs and demands