

Final Report

PickUP

Multimodal Interfaces

Group 3

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Phase 1 | Inspiration

Problem Statement

Many students from University of Porto struggle with their daily commute. The lack of public transportation in certain areas, as well as the amount of time these transports take in other areas, are two of the main issues they have to live with. Furthermore, the traffic congestion in the region of Porto exacerbates the time it takes them to reach the University.

These problems affect those living far from campus without nearby housing options. They must contend with long travel times, high transportation costs, and reduced flexibility to attend classes or extracurricular activities. As a result, these difficulties can lead to bad academic performance, reduce student engagement, and affect overall well-being.

To address this issue, we thought about a ride-sharing platform specifically designed for U.Porto students. This project will enable them to share rides, reduce individual expenses, optimize travel time, and foster a more connected academic community. Additionally, by decreasing the number of vehicles on the road, this initiative contributes to lower carbon emissions, promoting a more sustainable environment.

Through this project, we aim to create a cost-effective, time-efficient, and eco-friendly commuting alternative that enhances student mobility and university life.

User research plan and highlights

In order to start exploring our idea and ensure we were prepared and well informed about the perspective of our potential users, we used two research methods: survey and interviews. These methods allowed us to gather attitudinal, qualitative, and quantitative data.

Survey

In this first step, we sent out a 7 question form to 23 students of the University of Porto.

The questions asked in it were as following:

1. What city are you from?
2. What course and college are you in?
3. How do you get to college?
4. Are you satisfied with the time it takes to get to college?
5. Are you comfortable sharing or giving rides to other people?
6. Please tell us a little bit about why you chose your answer
7. Give us your feedback on the survey

Although the survey was somewhat rudimentary, It was an important step. It helped us determine whether our idea was compelling and define the problem statement.

Interviews

After further developing our idea through the Lightning Decision Jam, we moved on to the next phase of our research. We conducted direct interviews with U.Porto students to gain a deeper understanding of our potential users' perspectives.

Introduction

1. What is your current academic status?
2. How often do you travel to your faculty?
3. Have you used any sort of ride-sharing app (such as Uber, Bolt, etc)?
 - 3.1. If so, which ones?
 - 3.2 What are your thoughts and experiences with it?
4. Would you use a ride-sharing service targeted at students of the University of Porto?
 - 4.1 Why? Why not?

Safety concerns

5. Do you think verifying students through SIGARRA would make you feel safer using the service?
6. How important do you think it is to have an in-app chat feature for communication between drivers and passengers?
7. Would you feel more comfortable if users were required to complete a short survey about their intentions before using the service?
8. Would you prefer meeting your ride-sharing partner in person under supervision before sharing a ride?
9. How do you feel about the app tracking ride locations for security purposes?

Final question

10. What features would make you feel safer while using this service?

The interviews were structured to first warm up the interviewed students by asking simple/introductory questions.

Next, we addressed the issue of safety concerns, as it emerged as a key priority during our class exercise on the “How Might We” question. Through this discussion, we concluded that ensuring the safety of both riders and passengers was of utmost importance.

Finally, we ended with an open question so we could gather feedback and receive some suggestions that would make our service even better.

Overall, the interviews provided us with several key highlights, both positive and negative.

Positive Highlights

Most students we interviewed seemed to be on board with some of our functionalities and even suggested some ways in which we could improve them. Out of the few, these were the most supported:

- The SIGARRA verification (question 5) was the most supported feature.
- The in-app chat feature (question 6) was considered important.
- The Location tracking feature (question 9) was widely supported.

Negative Highlights

Not everything we had planned for our service was seen as useful, helpful or righteous. Some of our ideas were not as good as we thought they were and were criticized and/or dismissed by the interviewed students:

- A significant number of students didn't value the idea of meeting the driver/passenger previously (question 8) since they thought it would be time-consuming.
- A small number of students didn't feel comfortable with the idea of sharing a ride with a random student (question 4).
- Some students raised concerns about users providing false information, such as lying on the forms (question 7).

Suggestions

Since the interviews ended with an open question, it allowed us to gather information and recommendations that could improve our service. The ones we found to be the most important were:

- An anonymous rating system for both the driver and passengers.
- Mental health checks also for both the driver and passengers.
- An emergency SOS tracker/button that would track their location and inform the authorities in case something happens.
- Implementing a NFC validation system to verify user identities.

How Might We question

During our brainstorming session (Lightning Decision Jam), we identified several potential challenges for our ride-sharing project, with **safety** emerging as the most significant concern.

While we also discussed topics such as ride organization logistics and potential features like a rating system, our primary focus was on implementing measures to enhance user comfort and safety.

Based on our discussions, we formulated the following “How Might We” (HMW) question to further guide our research and design process:

- ***“HMW ensure a safe and comfortable ride for UP students using a platform to share rides?”***

This question became the core focus of our research and guided our approach during the interviews we conducted.

A dedicated segment of our interviews focused on safety concerns, allowing us to gather insights and suggestions from potential users on how to best ensure a secure and comfortable ride-sharing experience.

These findings will play a crucial role in shaping the development of our platform, ensuring that user satisfaction and safety remain top priorities for those relying on the service to improve their educational commutes.

What If Statements

With this HMW question in mind, we built some solutions, both within our team and among our target audience, on how to ensure safety for potential users of our service. This led us to develop a series of “What If” scenarios to explore potential risks and innovative solutions.

Here are some examples of **What If** scenarios we came up with:

- **What if** we show them the SIGARRA pages to make sure they are real students?
- **What if** they met first with our supervision?
- **What if** the app tracks their location?
- **What if** we made a survey to make sure they had good intentions?
- **What if** we create an in-app chat so they can communicate?

Then we decided on which solutions to execute first, following the graphic below.

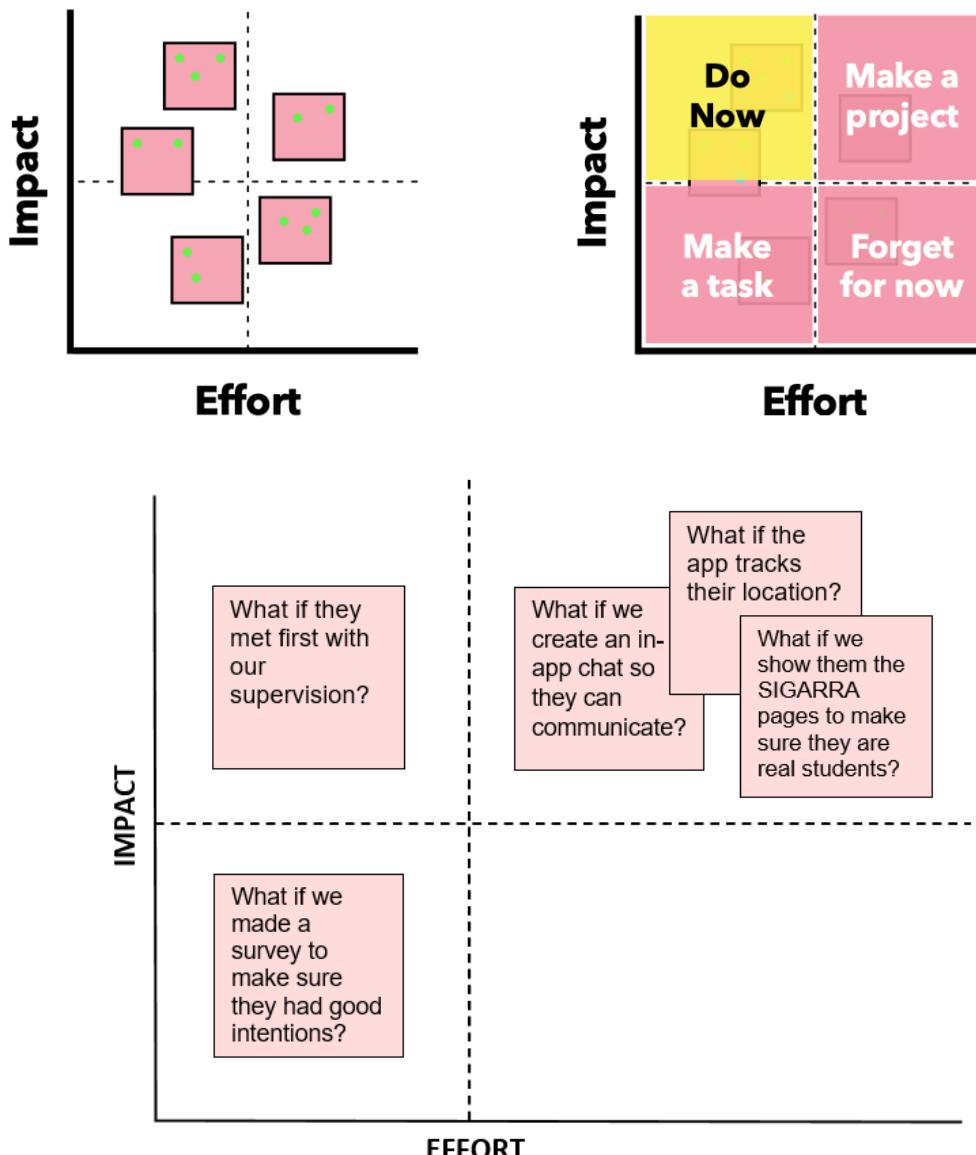


Figure 1 - Graphic based on our opinions before the interviews

Phase 2 | Ideation

Personas

"A Persona is a user archetype you can use to help guide decisions about product features, navigation, interactions, and even visual design" - Perfecting Your Personas by Kim Goodwin

We created three personas, drawing from various insights derived from our surveys and interviews, with the intent of making them distinct and unique to help us understand and address customer needs. However, after the teacher's feedback, we realized that two contained very similar pain points, rendering the existence of both irrelevant, and decided to only maintain two of them that had the most distinct goals.



Mafalda Campos
Master in Law at FDUP



About

Mafalda doesn't like taking public transports, so she always goes to college with her parents. However, she would like to have another method that is economical and comfortable for the times that her parents can't take her. She is also very used to technology and thinks that riding apps are good and relevant for everyone but mostly students. One of her best characteristics is that she learns very easily and is also very smart.

"I would like to not depend
on my parents for every ride"

"I'm a young woman in a society where
I can't be alone with men I don't know".

Goals

- She would like to have more independence and not ask her parents to take her to college every day.
- She would like to get to college safely.
- She would like to have more transport options.

Concerns

- She is scared of sharing rides with people she doesn't know, mostly men (in public transportation or cars).
- She is afraid to be late to college because of her parents.

Experience Level in the area of the product: She has used Uber with their "shared" modality once to go to university.

Context on how they would interact with the product: She would consider using it, specially in those days where she doesn't have her parents' ride, and she doesn't feel like going through 1h of public transports to get to university. She would use it on her phone.



Mateus Lopes
Integrated Master in
Electrical and Computers
Engineering at FEUP



About

Mateus is an open-minded and practical individual. He always drives his 2006 Opel Corsa to university but also enjoys helping others when it can fit in his busy work schedule. As long as there is mutual respect and clear communication, he doesn't mind giving rides to their friends. Mateus is also motivated by convenience and by making even a small impact on others' lives.

"I am already driving to college, why
not help someone out in the way"

"As long as everyone's respectful and
on time, I'm happy to give a ride."

Goals

- Help other students with their daily commute
- Make his routine more social and enjoyable
- Save money by splitting fuel costs

Concerns

- Making sure passengers feel safe and comfortable
- Safety of sharing his car with people he doesn't know well
- Unreliable passengers (e.g., late arrivals, last-minute cancellations)

Experience Level in the area of the product: He doesn't have much experience with ride-sharing apps, as he has his car readily available whenever he needs to go somewhere. However, as an engineering student, Mateus has strong tech skills to navigate any device with ease, making him natural at handling any app.

Context on how they would interact with the product: He would take on the role of a driver in the app. Therefore, he would be available to offer rides to other students who take the same or a similar route and don't have a reliable way to get to campus.

Context Scenarios

Personas are tailored to reflect their personality traits and personal history, illustrating how they engage with our application to fulfill their requirements. In that way, they are complemented by some context scenarios, which serve as depictions of the environments in which a particular task takes place using the product.

Mafalda's context scenario

Mafalda has an early class at university, but today her parents aren't available to drive her. She strongly dislikes taking the subway, especially because it takes over an hour and is often overcrowded. Wanting a faster and more comfortable alternative, she opens the ride-sharing app on her phone. She searches for available rides from Maia to FDUP and comes across another student heading in the same direction around the same time. After checking the user's profile and feeling comfortable with the information provided, she books the ride. Later that morning, she meets the driver at the agreed location and gets to university safely and on time, feeling satisfied with the experience.

Mateus' context scenario

Mateus is an engineering student who commutes daily from his home to FEUP. He usually drives alone but is aware that some of his classmates struggle with unreliable ways of getting to campus. Wanting to make his commute more meaningful and efficient, he downloads the app and sets up his weekly ride schedule. Within a short time, he connects with other students heading the same way. Now, Mateus drives to campus with company, reduces his fuel costs, and avoids the usual stress of coordinating rides manually, all while supporting fellow students who need a better way to get to university.

Journey Maps

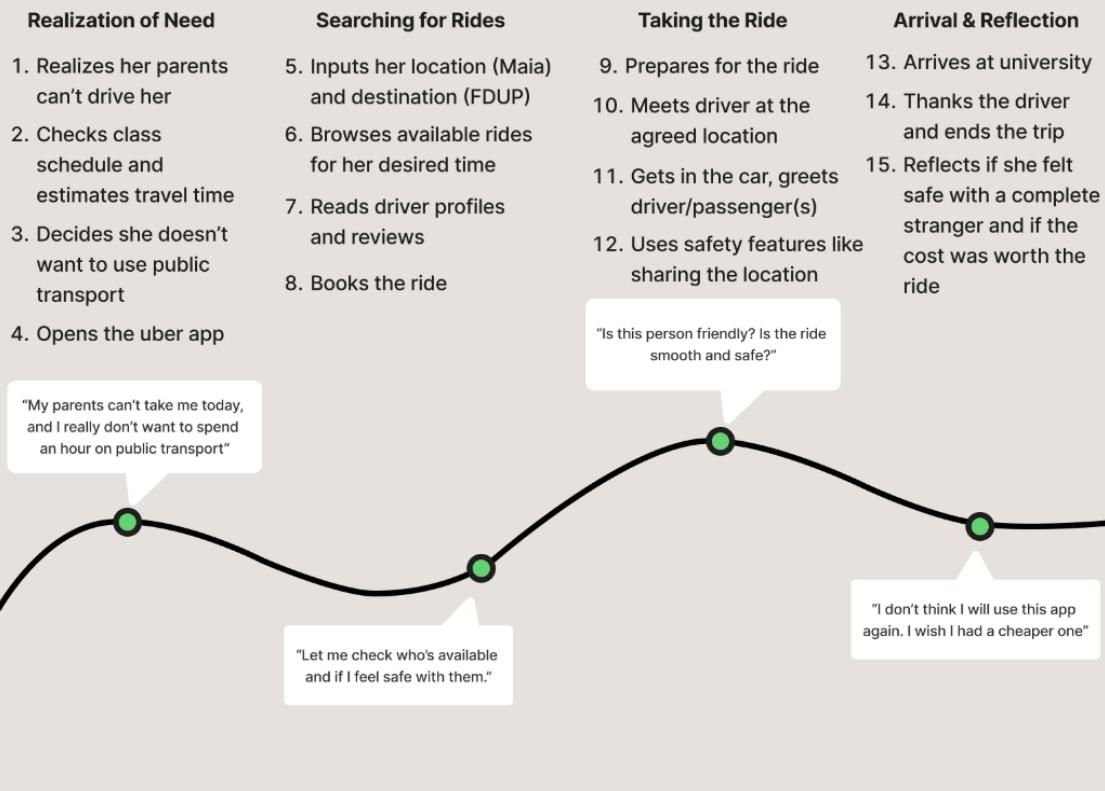


Mafalda Campos | Scenario

Mafalda relies on her parents ride to go to college but she would like to take this weight of them and be more independent

Goals and Expectations

- Be more independent
- Get to college safely
- Have more transport options



Opportunities

- Understand common triggers for commuting needs
- Understand what makes users feel confident or hesitant when evaluating options
- Explore how routines, comfort, or perceived control affect the journey
- Explore how users communicate feedback and whether it impacts future decisions

Internal Ownership

- Identify pain points and commuting patterns
- Gather qualitative data from interviews/surveys
- Define principles for a positive commuting experience
- Track sentiment and experience highlights



Mateus Lopes | Scenario

Mateus drives alone daily to FEUP. He often hears classmates complain about how unreliable public transports can be and occasionally tries to give rides to friends, but coordinating is time-consuming and inconsistent

Goals and Expectations

- Help classmates who struggle with transport.
- Keep control over his routine and avoid unnecessary delays.

Realization of Need

1. Remembers a friend mentioned needing a lift.
2. Contacts the friend who asked for a lift
3. Checks class schedule and estimates travel time and possible detours
4. Decides on a time and place for the pick up to occur

Picking up the person

5. Arrives at the destination around the planned time
6. Waits for his friend at the planned spot
7. Picks up his friend and gets ready to go to FEUP
8. Resumes travel

During the ride

9. Happy to have someone to share his commute with
10. Listen to music and chat together
11. Feels unsure to ask to split costs on fuel

Arrival & Reflection

12. Arrives at university
13. Drops off his friend and heads to his own classes
14. Reflects about the organization of the trip and wonders if the effort was worth

"I remember my friend asking me for a lift. I better start organizing myself"

"I hope they dont take to long to arrive, I don't want to be late"

"It's fun to have someone to share my morning commute with"

"If i could organize things better this could be a fun experience"

Opportunities

- Have ride scheduling tools with recurring trip options.
- Understand what is the normal process people meet and share rides with each other
- Explore ways to make creating routines and meeting points easier
- Explore how users can more effectively share costs

Internal Ownership

- Outline what an ideal ride-sharing journey looks like for the rider
- Understand where and why coordination between driver and passengers sometimes fails
- Identify what makes students hesitant to offer rides or ride with strangers.
- Investigate how students handle gas money sharing and the discomfort involved.

Storyboards

Mafalda's Storyboard



Problem experienced:
Mafalda's parents can't take
her this morning



Solution Search: She needs to
use a ride-sharing app



Product Discovery: She
installs the app that her friend
told her about



Product Experienced:
Mafalda looks for a ride and
finds out a person who is
going from the same location.
So, she checks if this person is
reliable and books the ride

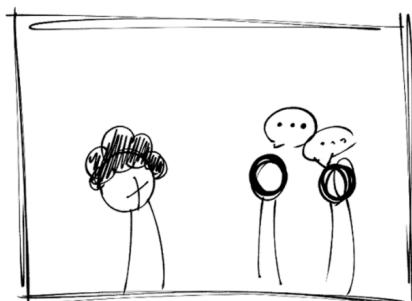


Problem Alleviated: Later that
morning, she meets the driver
and they both go to college



Beneficial Outcome: Finally, she
realizes that the ride was safe and
she managed to get to college on
time. At the end she feels
satisfied with the experience

Mateus' Storyboard



Problem Experienced: Mateus overhears
some of his colleagues talking about how
unreliable public transportation can be



Solution Search: Wanting to make a difference
and help his friends, he thinks of a way that he can
offer to car pool his classmates



Product Discovery: After searching for ways
online, he comes across a ride-sharing app for
students. He easily downloads, configures and
starts finding people



Product Experienced: He finds 2 students who were in
need of a ride that lived relatively close to him and went
to the same stop. So he decides to help them out



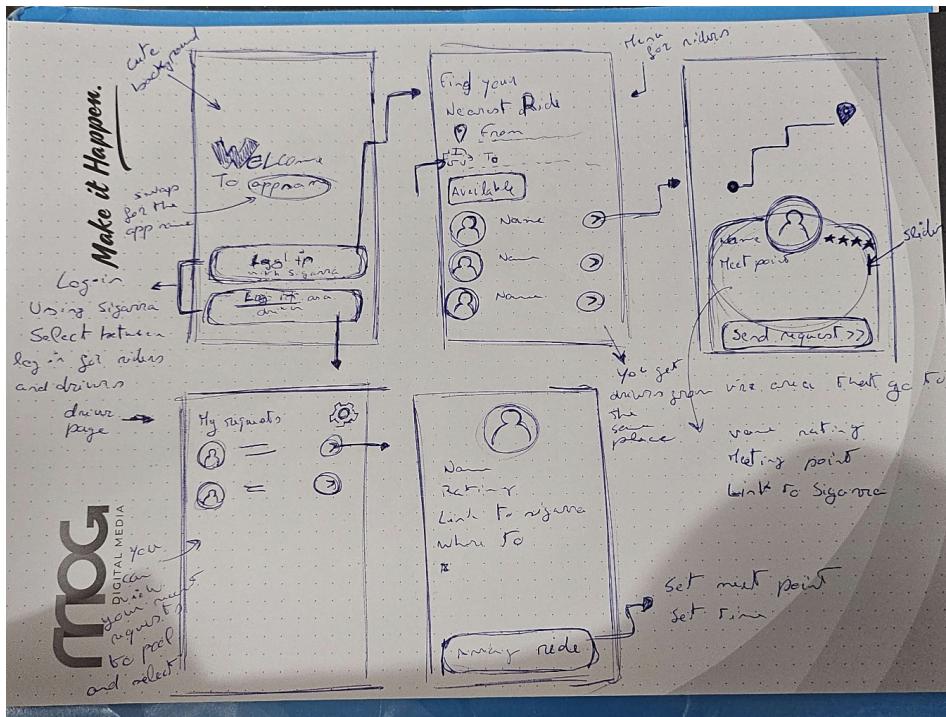
Problem Alleviated: The next day he meets
up with the 2 students in the planned spot
on time and they started their journey



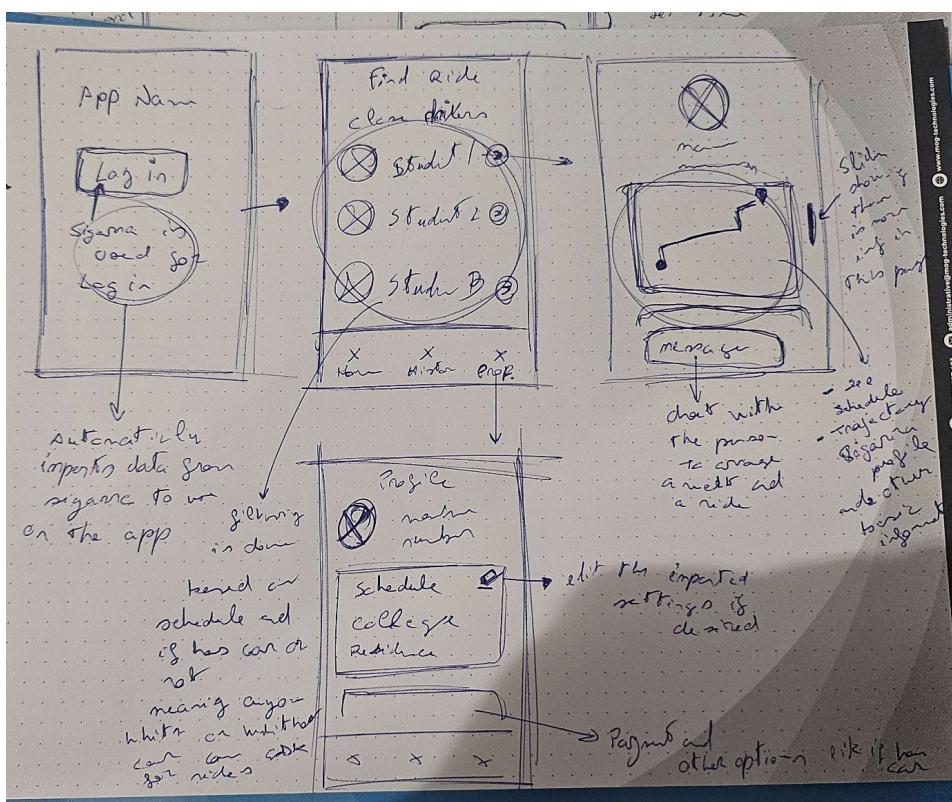
Beneficial Outcome: He gets to enjoy
company on his way to college while helping
his classmates

Paper Prototype

1st draft in paper | Before the teachers suggestions



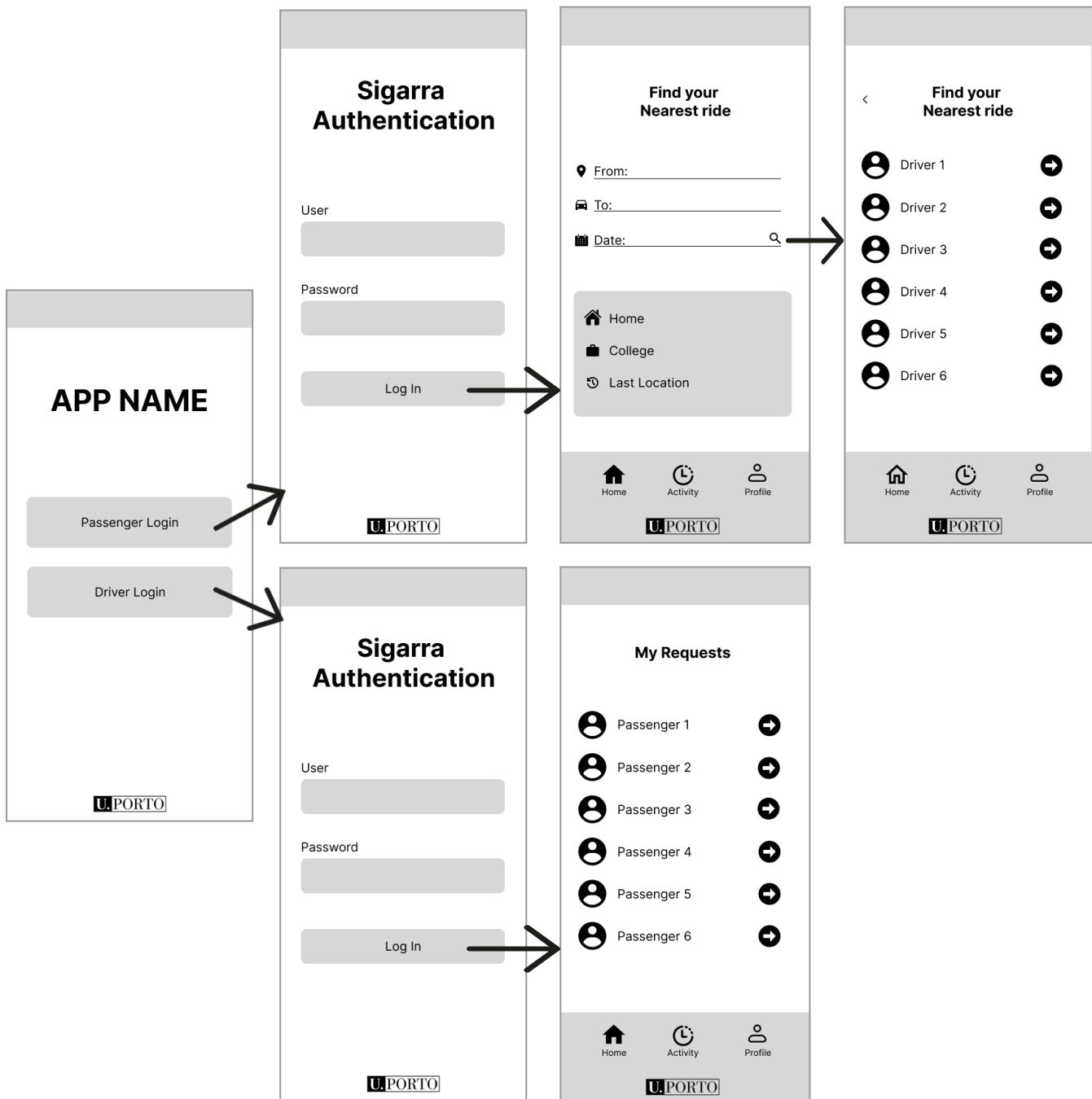
2nd draft in paper | After the teachers suggestions



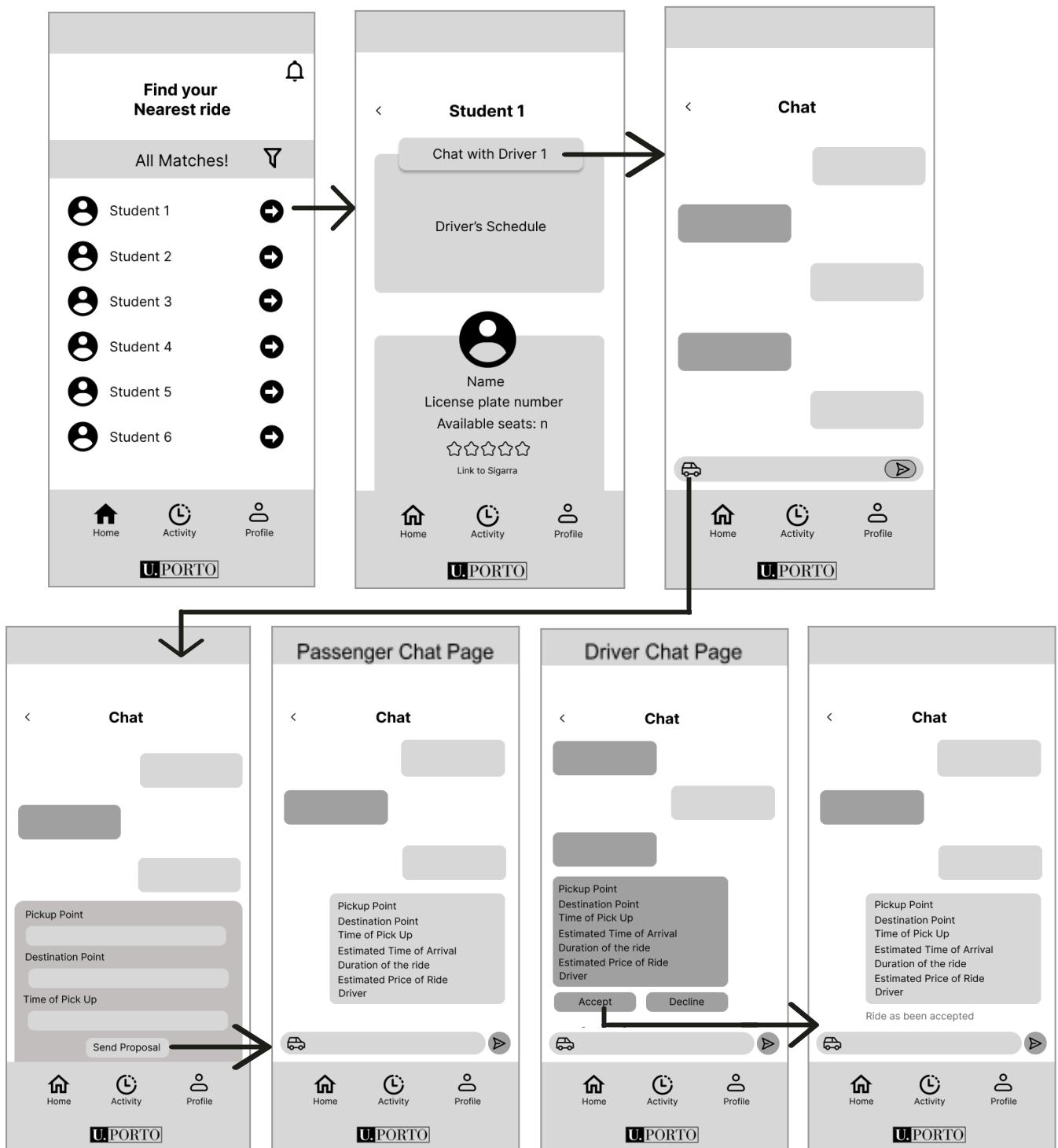
Wireflows

Our initial wireflows had a confusing logic, so with guidance from our teachers, we decided to revise the app's structure and improve its overall flow.

Our initial menu was designed with Uber as a reference, but it ended up too similar to it, which didn't align with our goal of creating a new and innovative platform. Initially, we also separated the login into two user types, drivers and passengers, each with their own homepage. However, this approach proved confusing, so we decided to simplify the structure.

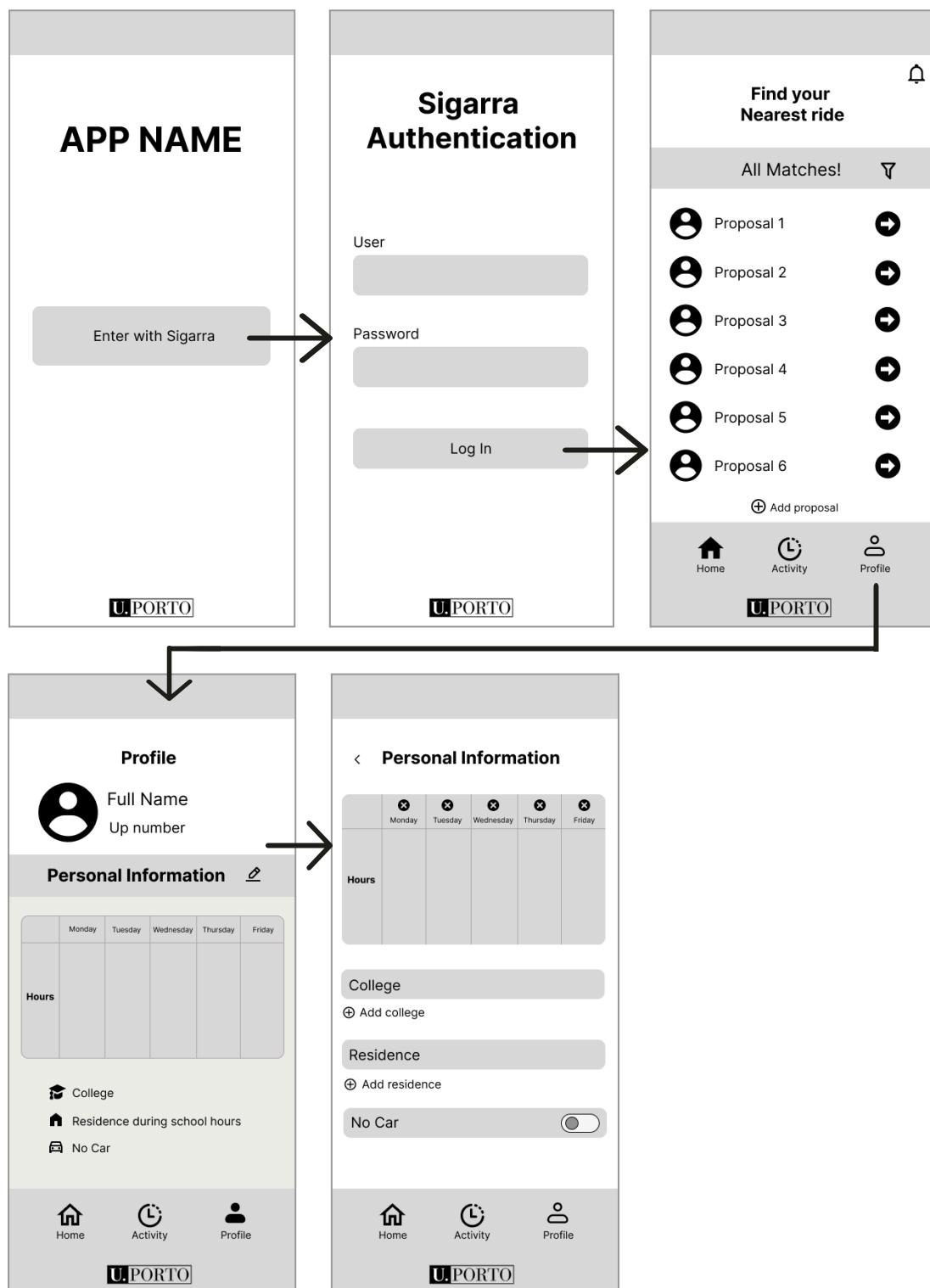


We then decided to take a different approach by combining both user types into a unified experience. This led us to design a single homepage displaying students from nearby areas, whether they are drivers or passengers, making it easier to connect and coordinate rides. However, we then faced new challenges in coordinating ride details between users, such as scheduling and pickup arrangements.

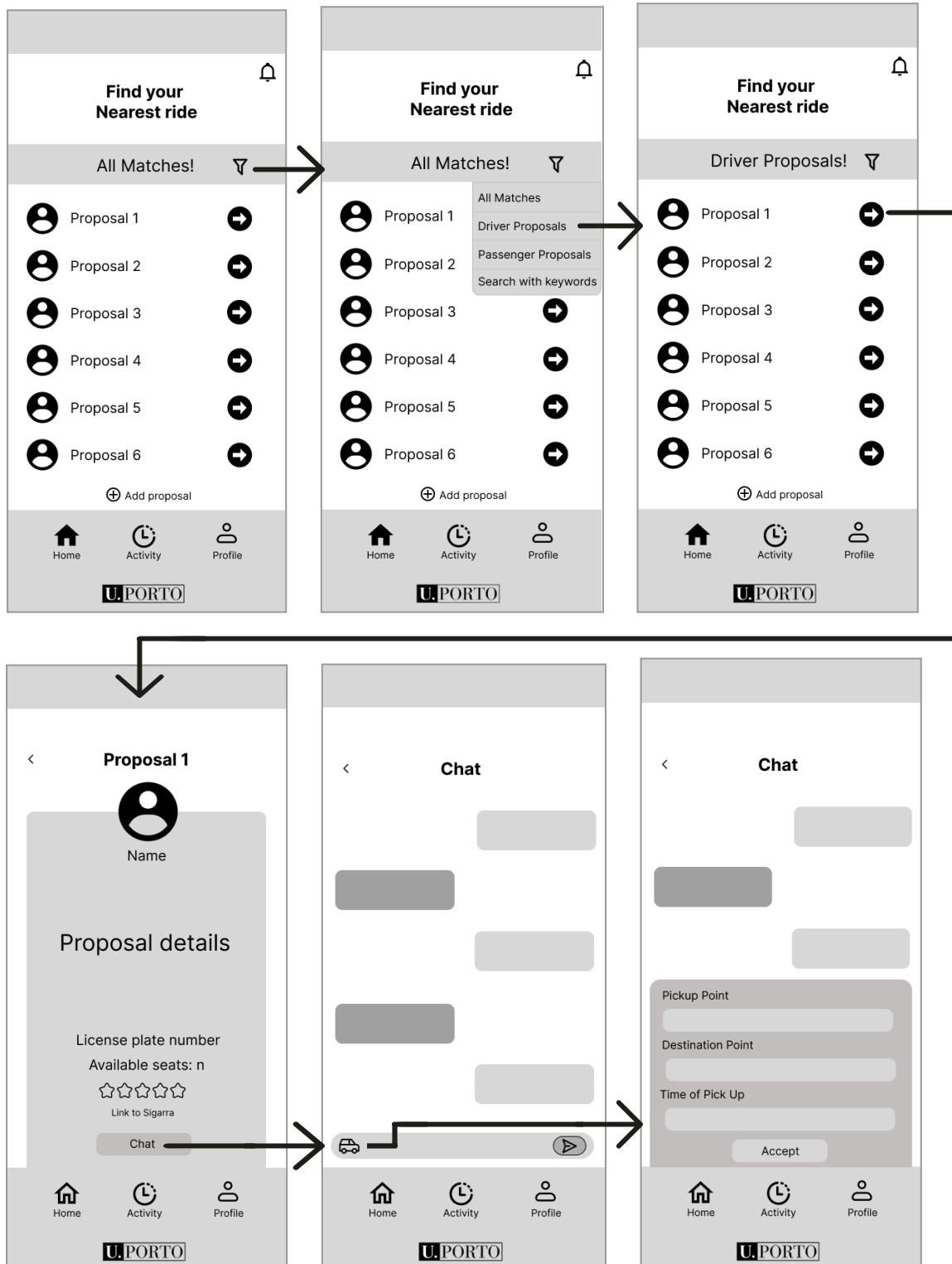


Finally, based on insights gathered through user research, we decided to shift the focus from individual users to ride proposals on the homepage. In this new model, either a driver or a passenger can propose a ride, which other students can then accept and follow up with a chat to coordinate the details.

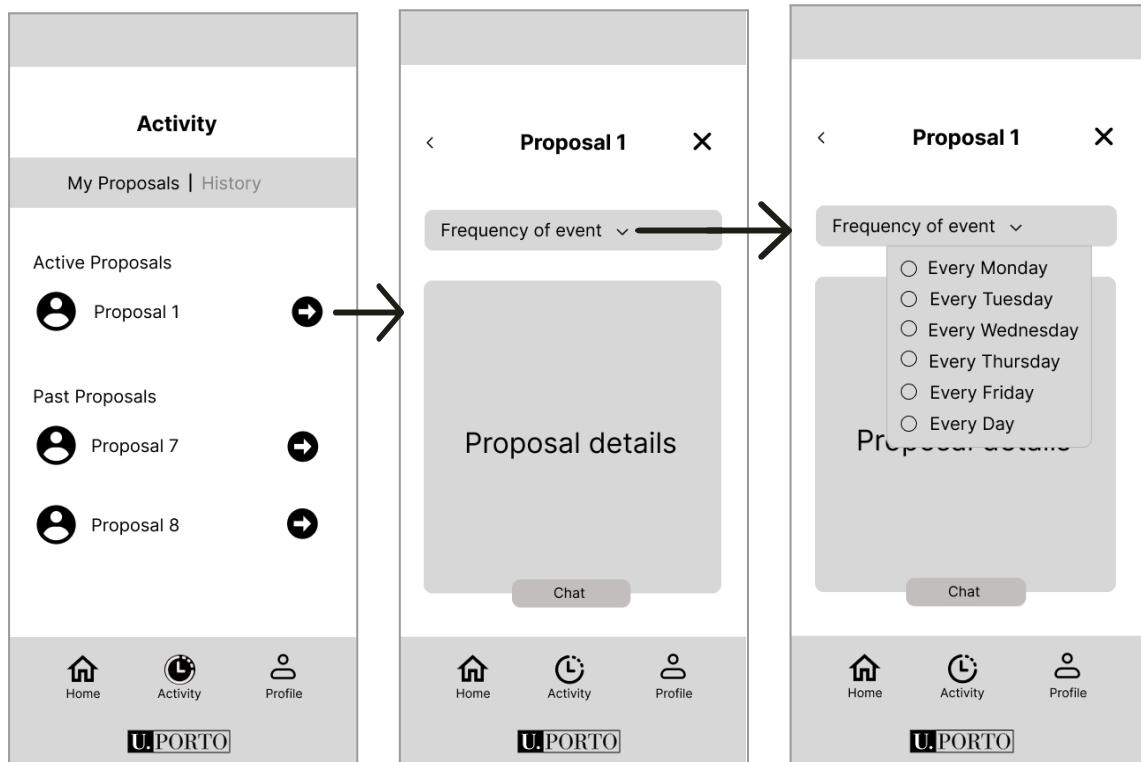
Flow 1: Set up a profile



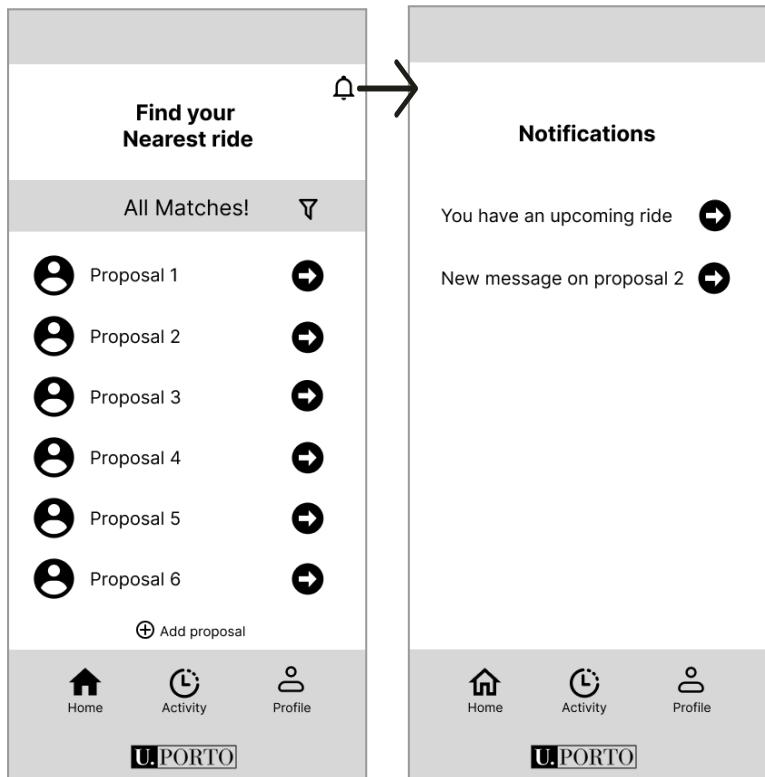
Flow 2: Book a ride



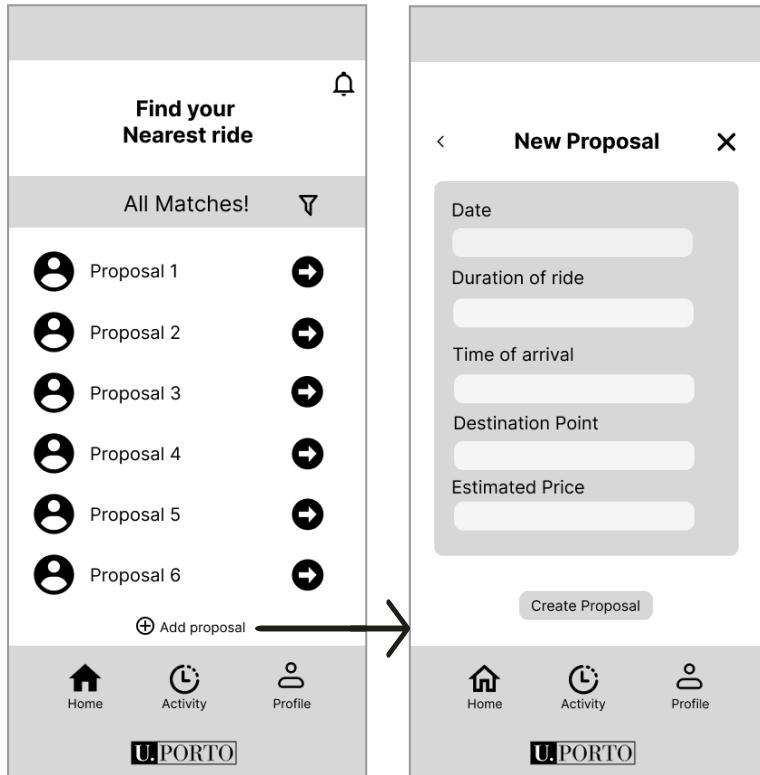
Flow 3: Book multiple rides



Flow 4: See your notifications



Flow 5: Create a new proposal



Phase 3 | Evaluation

Goal

PickUP is a ride-sharing app that allows students from the University of Porto to save time or money by sharing comfortable rides to go to college. Students that live far away and don't have a house near college are the ones that are going to use our app the most.

The goal of this usability test is to understand how effective and efficient our app/service is, to gather some feedback from the user and to evaluate how satisfied they are about it.

Objectives

The objectives of our usability test are to evaluate how users complete tasks in our app, such as booking a ride. In order to analyze these, we will gather both qualitative and quantitative insights through the user research platform, Maze, and later, with a google forms questionnaire.

Research questions

- How easily can users locate and edit their profile settings?
- Can users understand and complete the ride booking process without confusion?
- Do users understand how to manage and edit the frequency of ride proposals?
- Are users able to find and interpret app notifications effectively?
- How intuitive is the overall user experience of the app?
- Are the app's icons, labels, and navigation elements clear and self-explanatory?
- How satisfied are users with their experience using the app?
- Would users consider adopting the app in real-life scenarios?

Through the Maze usability tests, we can collect quantitative data such as task success rates, average time per task, number of errors or misclicks, and navigation paths taken by users.

The feedback form will provide both quantitative data (using rating scales on ease, clarity, and overall satisfaction) and qualitative data, including user comments about confusing moments, clarity of icons and labels, and opinions on the overall experience and potential app adoption.

Location and setup

The tests are gonna be conducted both in person and remotely.

We are going to use the platform Maze to conduct these usability tests since it gives us all the feedback we need.

In the presential format, we will be in a room watching the users perform the test. We will be noting what they do and if they have had any doubts.

In the remotely format, we will rely on the platform Maze to tell us where the users clicked, their error rate, how much time they spent in each task and their successful percentage. At the end of the test it will be a forms so we can collect the feedback directly from the user, regarding their experience using the product.

Participants

We will recruit at least 8 participants.

All of them will be University of Porto students whose majority live far away from college during the study period.

These people will probably be the ones that already were recruited to be part of our initial surveys and interviews.

Methodology

To evaluate the usability of our prototype and gather valuable user insights, we will adopt a three-step methodology:

Background Questionnaire

Before beginning the test, participants will complete a brief background questionnaire. This will allow us to gather contextual information such as their commuting habits, experience with ride-sharing apps, and comfort with mobile technology. These insights will help us frame the usability results according to different user profiles.

Remote Usability Testing via Maze

We will use Maze to conduct task-based tests with our interactive prototype.

Participants will be asked to complete specific tasks, such as editing their profile or booking a ride. Maze will allow us to collect both quantitative data (success rates, time-on-task, and click paths) and behavioral insights that will help us understand the overall flow and intuitiveness of our design.

Post-Test Feedback Form

After completing the Maze test, participants will be asked to fill out a feedback form.

This form will include both scale questions and open-ended questions to allow users to freely express their thoughts, difficulties, and suggestions. This step will provide us with qualitative data to complement the metrics from Maze, giving us a deeper understanding of users' expectations and pain points.

Session outline and timing

The whole session will take an average of 12 minutes.

Pre-test arrangements (1 minute)

- Users confirm if they have access to the Maze link and access it

Introduction to the session (1 minutes)

- Users read a brief explanation of the test goal and what is the app about

Background interview (2 minutes)

- Users answer some questions about their profile

Tasks (5 minutes)

- Users complete the tasks in our prototype

Post-test debriefing (3 minutes)

- Users give us feedback about their usage through the app

Session schedule

The remote sessions will be self-guided by each participant. The test link will be shared on May 21, 2025, exclusively with those who completed our most recent survey, excluding participants selected for in-person testing.

Session	Date	Time slot	Mode
Session 1	21/05/2025	Morning	Presential
Session 2	21/05/2025	Morning	Presential
Session 3	22/05/2025	Evening	Presential
Session 4	22/05/2025	Afternoon	Presential
Session 5	23/05/2025	Morning	Presential
Session 6	23/05/2025	Afternoon	Presential

Measures

Effectiveness

To determine the effectiveness of tests, the following data will be collected:

- Task completion success rate - Measures the percentage of users who are able to successfully complete a given task.
- Error rate - Tracks the number of mistakes users make while performing tasks, indicating usability issues or confusing elements in the interface.

Efficiency

To assess efficiency, we will measure the following categories:

- Task Completion Time - Records how long it takes users to complete each task.
- Time per Successful Completion - Total time spent divided by the number of successful completions.

Satisfaction

To evaluate user satisfaction, participants will fill out a post-test questionnaire including:

- System Usability Scale (SUS) - A standardized Likert scale questionnaire to measure overall usability, including satisfaction, usefulness, and ease of use

- Post-Test Feedback Interview - Participants will be asked open questions like: What features did you like the most about the app; What did you find most confusing; How would you improve the experience

Report contents

The usability test results will be presented in a structured report that will include both quantitative and qualitative data. Results will be organized under the categories of effectiveness, efficiency, and satisfaction. For effectiveness, metrics like task completion rate, error frequency, and assistance requests will be shown using charts and tables. Efficiency will be measured through average task time and number of steps. Satisfaction will be assessed using Likert scale ratings and participant comments, summarized with visual aids and thematic analysis.

Project schedule

Planning meeting / kickoff

- We chose Maze for remote usability testing
- We chose Google Forms for post-test feedback collection
- Target participants: Students who responded to the previous survey
- The sessions will be both remote and in-person
- We defined the tasks to be tested
- We defined the questions for the forms

Test Plan

Objective: Testing the ease of use, navigation and user understanding of the core features of the app

Participants: Mix of students who either have a difficult time reaching college or ones who drive themselves alone to college

Tasks:

- Edit Profile
- Book a Ride
- Change Proposal Frequency
- Check Notifications
- Add Proposal

Metrics:

- Effectiveness
- Efficiency
- Satisfaction

Environment: Remote unmoderated test conducted via Maze using a clickable Figma prototype and an in-person moderated test also using Maze and the Figma prototype. Participants complete the test on their own devices (mobile).

Session Script

Introduction

"Thank you for helping us test PickUP, a prototype for the first ride-sharing app only for UP students. PickUP is a unique ride-sharing app that lets students find and offer rides to improve their daily commute. If you're a student who needs an easier way to get to college or is looking to reduce your travel expenses, PickUP is the app for you!"

This user test has two parts:

1. A short interactive prototype test
2. A quick feedback questionnaire in Google Forms

Completing both parts is mandatory for your feedback to count. Don't worry—it's simple and will only take about 5 - 7 minutes in total."

During the test: Observers will not interfere unless absolutely necessary, notes will be taken on errors, hesitations and verbalized confusion.

Conclusion: Participants will complete a short survey with their opinions and feedback.

Materials

- Maze
- Figma prototype
- Questionnaire

Test environment

The tests are gonna be conducted both in person and remotely.

In the presential format, we will be in a room watching the users perform the test in the app Maze. We will be noting what they do and if they have had any doubts.

In the remote format, we will rely on the platform Maze to tell us where the users clicked, their error rate, how much time they spent on each task, and their successful percentage.

Moderator role

The moderator plays a central role in guiding and observing the usability test.

Session Introduction

- Welcome the participant and explain the purpose of the session
- Ensure consent is given
- Set expectations and clarify that the product is being tested, not the user

Conducting the Background Interview

- Make sure the participant answered the background forms
- Ensure the participant remains comfortable

Task Introduction & Guidance

- Present each task clearly and neutrally without leading the participant
- Remind them to "think aloud" as they interact with the interface
- Avoid interfering unless deemed absolutely necessary

Note Taking & Observations

- Record key behaviors, reactions, hesitations, or confusion points
- Track completion times, errors, and unexpected navigation patterns

Asking Unscripted Questions

- Ask follow-up questions based on the user's actions
- Explore pain points or misunderstandings in real time

Reviewing, Tabulating, and Analyzing Data

- After the session, compile observations and responses
- Organize findings into themes (usability issues, positive feedback)
- Identify trends across participants to inform design improvements

Deliverables

The usability tests will generate the following deliverables:

MazeTest Report: Quantitative data such as task success rates, completion times, misclicks, and drop-off points

Completed Feedback Forms: Qualitative and quantitative data from users, including ratings, open-ended responses, and suggestions about the app's usability and design

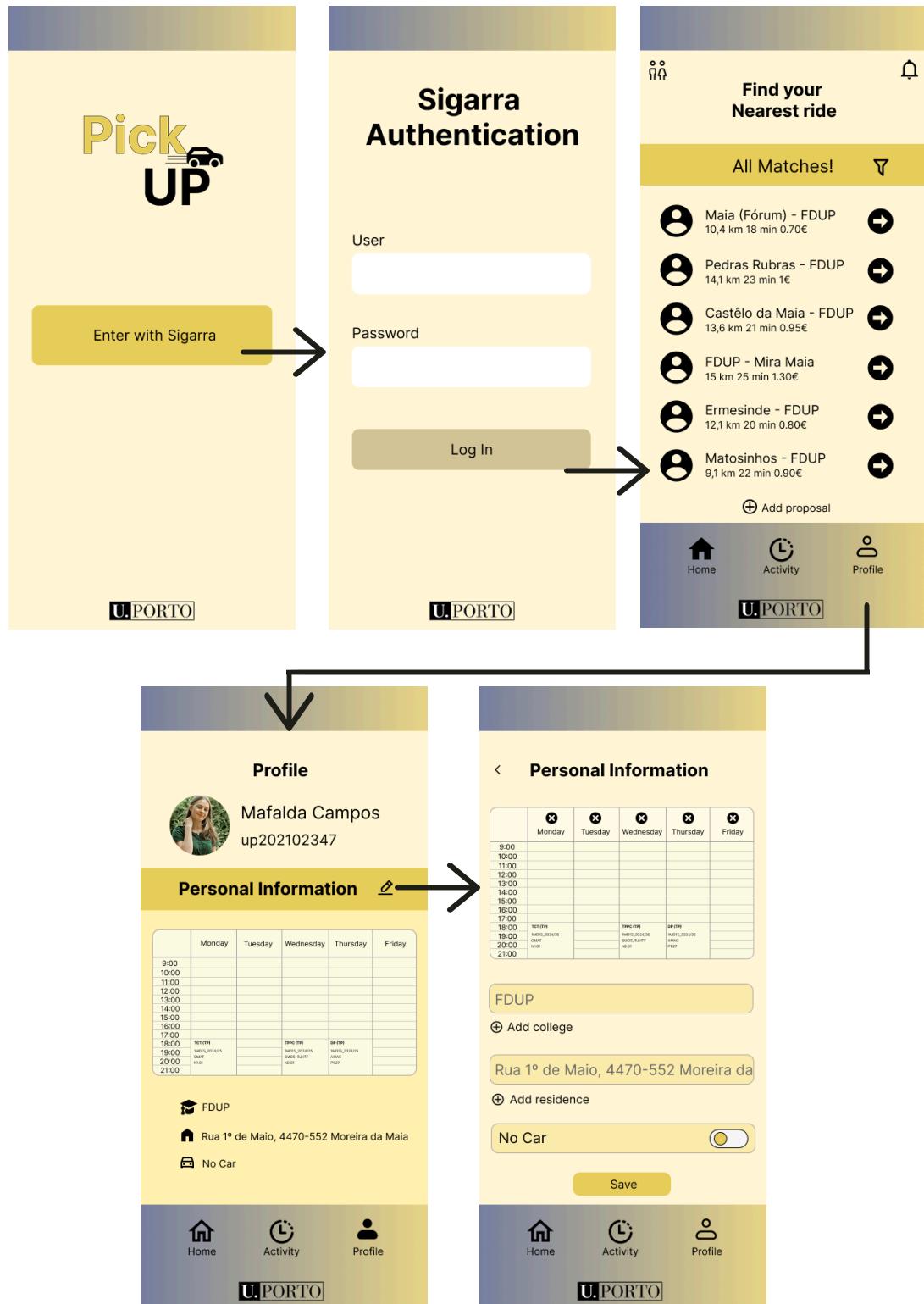
Observation Logs: Notes taken by the moderator (in the case of in-person sessions), highlighting user behavior, verbal feedback, confusion points, and usability issues

Final Usability Report: A structured document with key findings, categorized usability issues, and patterns across participants.

Tasks

Edit Profile

The user needs to login into the app through their sigarra account. This will redirect them directly to the home page where they can switch to the profile page. After the switching, the user has to click on the edit icon to complete the task.



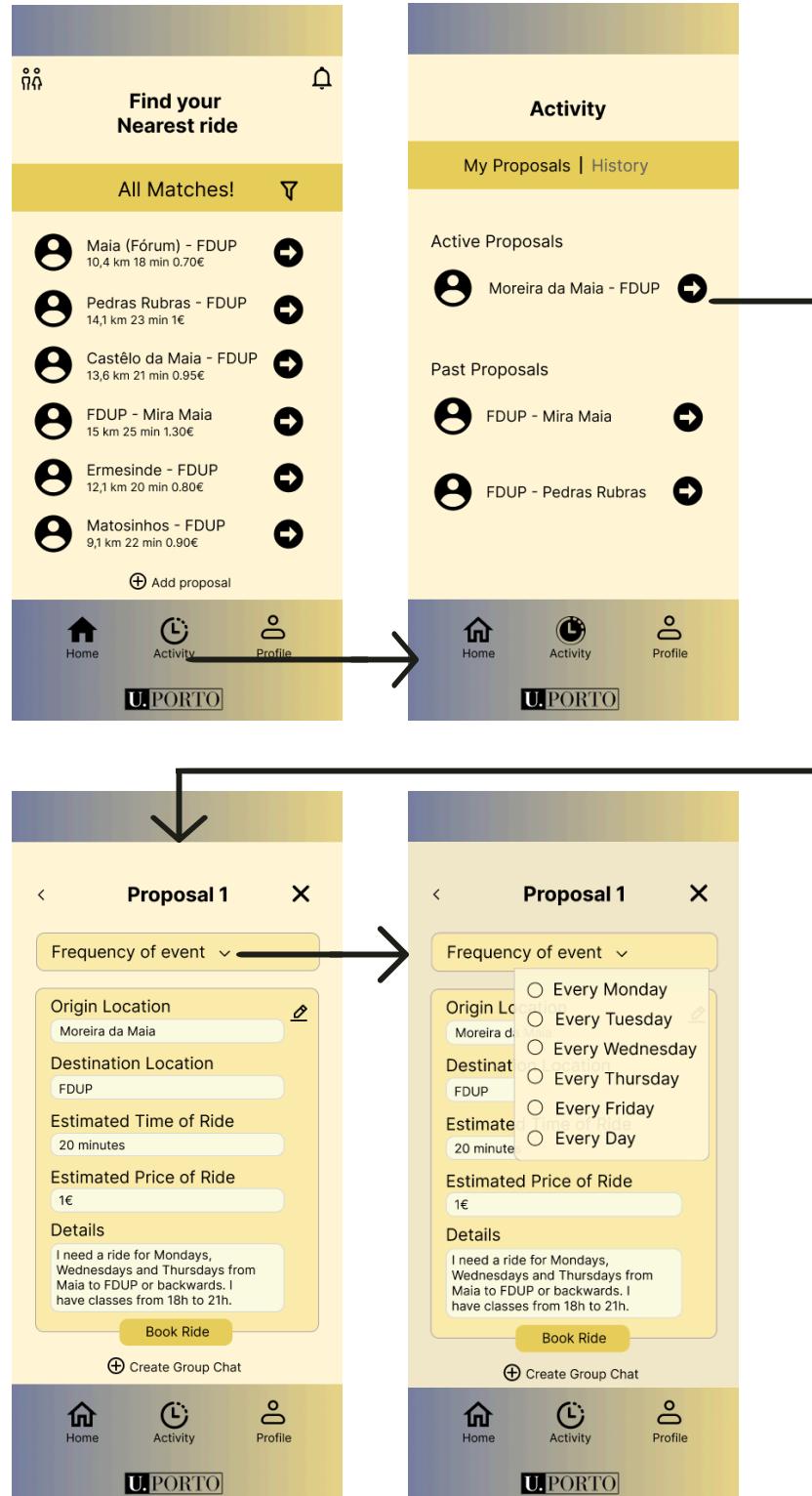
Book a Ride

When on the home page, the user needs to filter the proposals in order to only be left with the driver proposals. Then, they need to open the first proposal and click on the “book a ride” button after reading the information about the ride. Finally, in the chat, the user has to click on the car icon to schedule the information discussed and accept it.



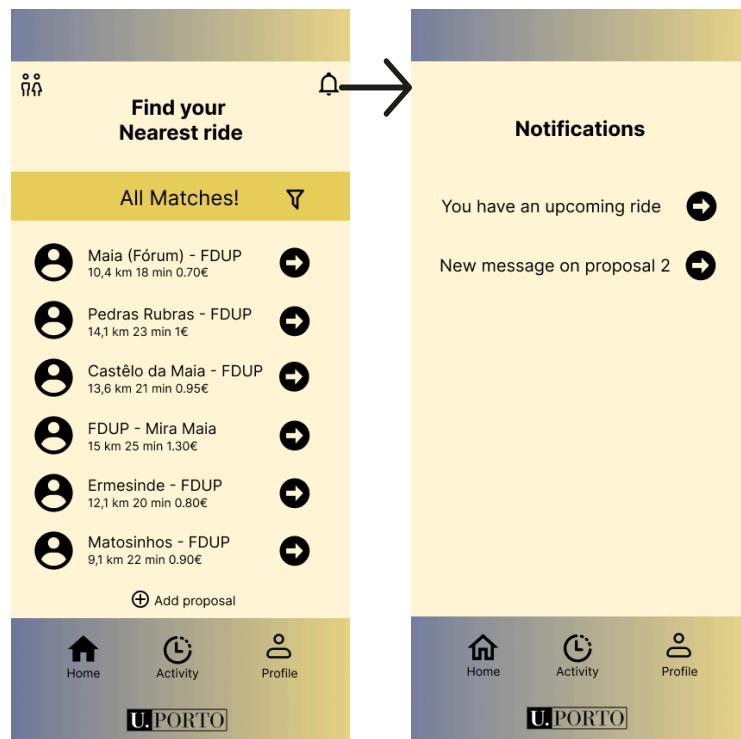
Change Proposal Frequency

The user needs to switch to the activity page in order to see their own proposals. After being on the 'My Proposals' section, they have to open the active proposal and change its frequency.



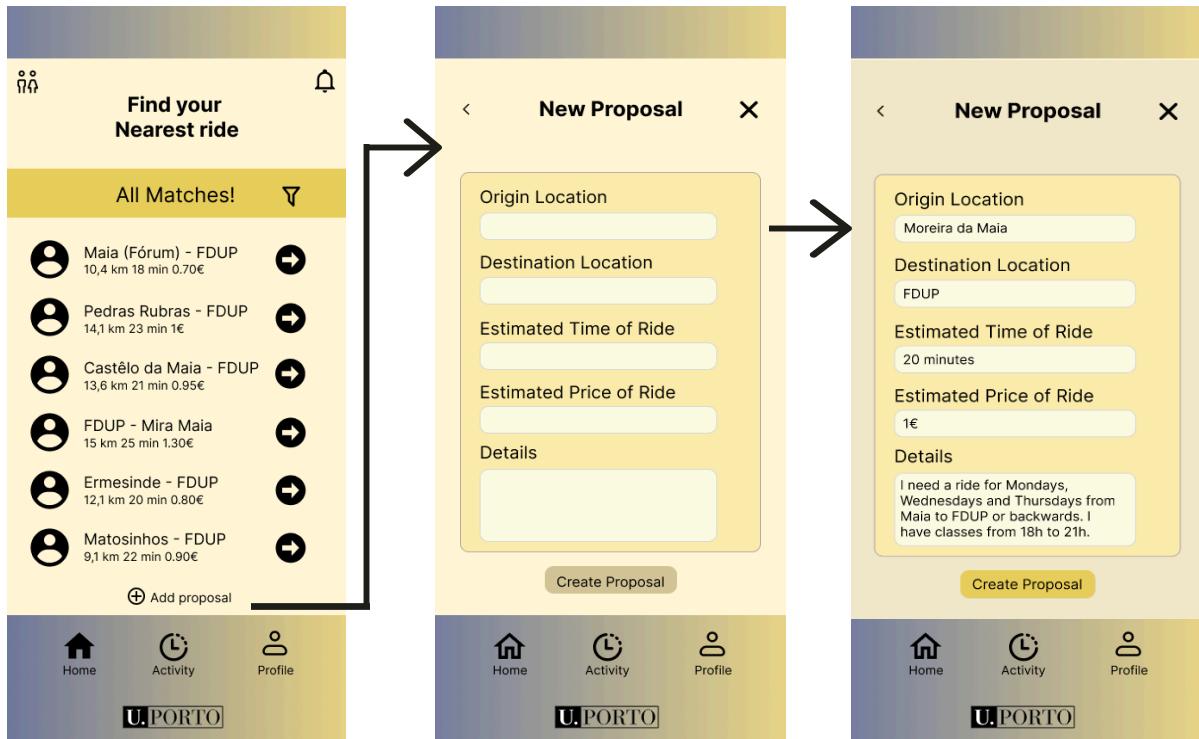
Check Notifications

On the home page, the user has to click on the bell icon to see their upcoming rides and new messages on active proposals.



Add Proposal

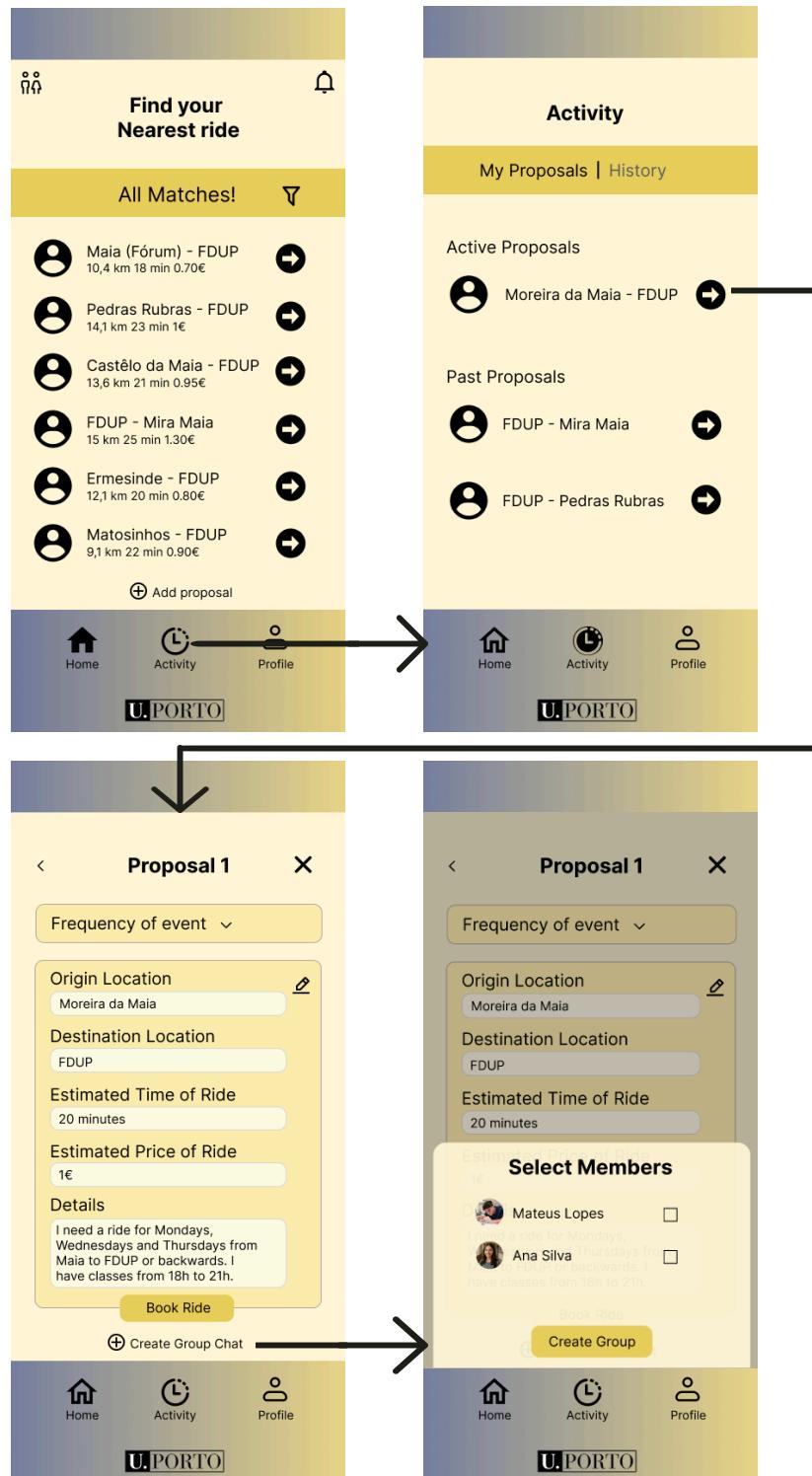
The user needs to be on the home page. Then they have to click on the plus button next to the “add new proposal” message. Finally, they need to fill the proposal by clicking on it and then clicking on the “create proposal” button.



These were the original tasks we used during our testing phase. However, after the feedback provided by the users, we implemented two new features.

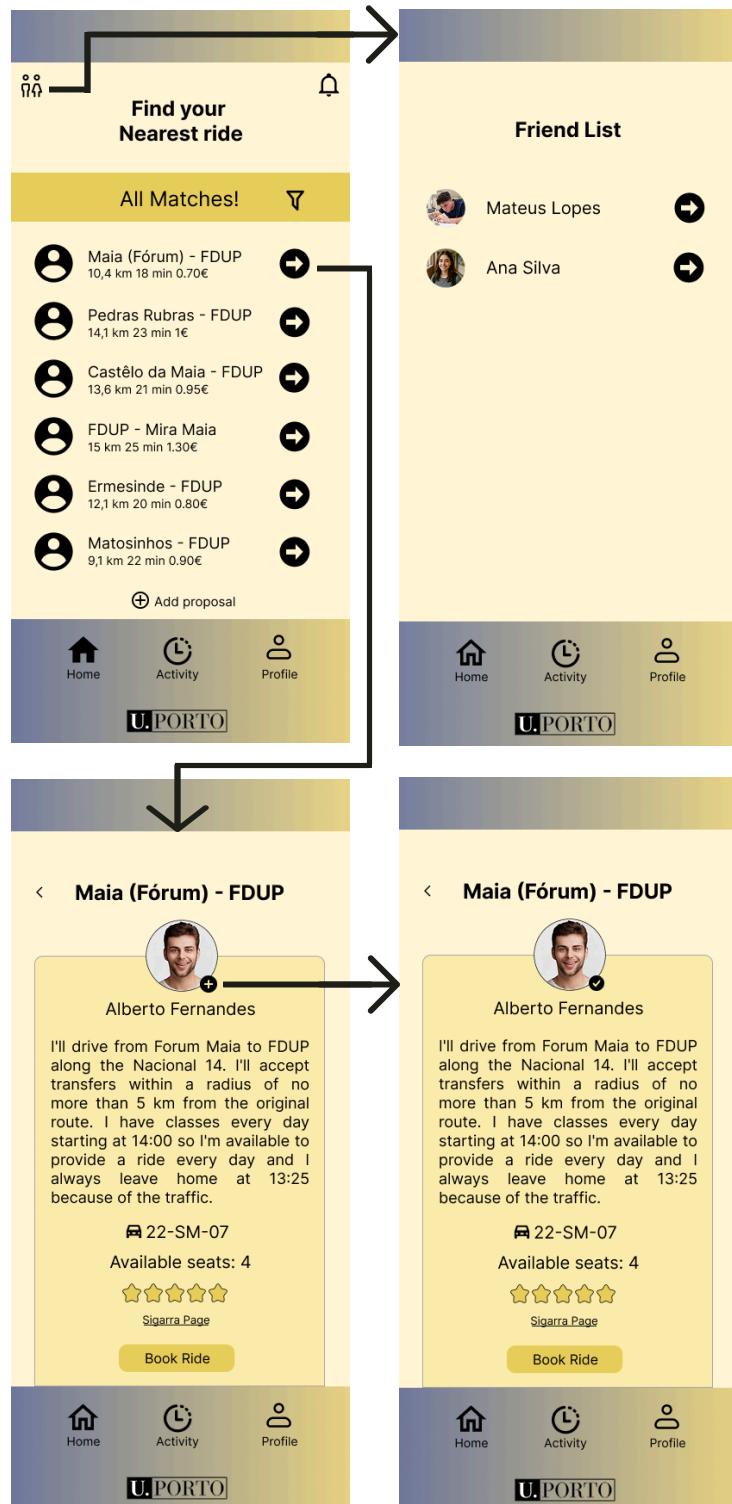
Create a Group Chat

The user has to switch to the activity page and open the ‘My Proposal’ section. After entering the active proposal, the user needs to click on the “Create Group Chat” button. A pop-up will appear with all the users who accepted the proposal, and the user can freely select who they want to create a group with.



Add/View Friend List

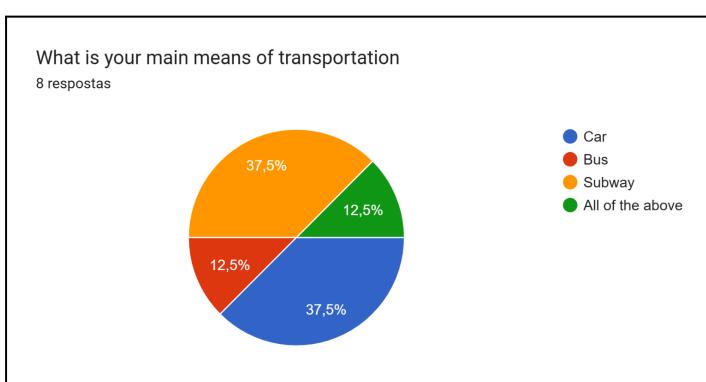
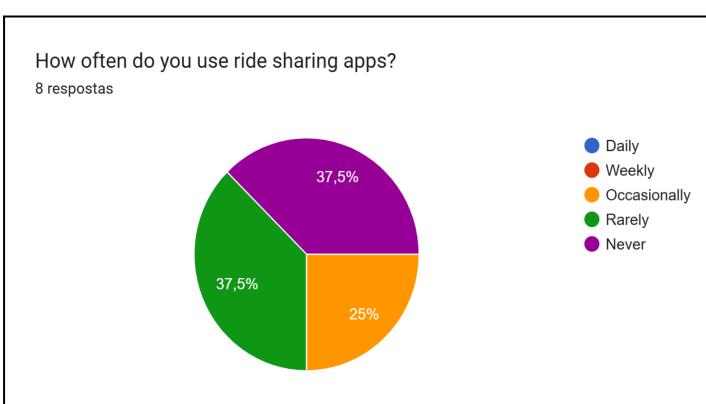
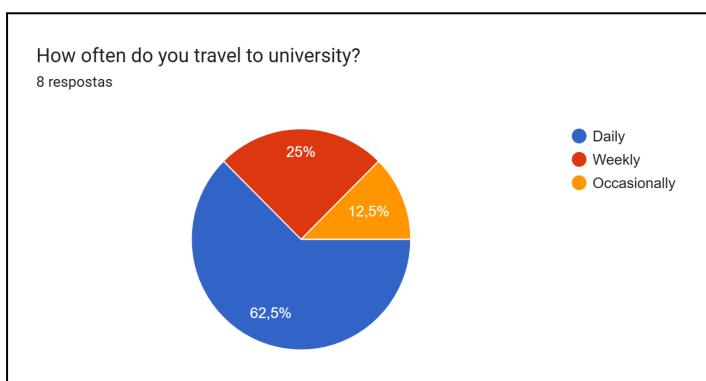
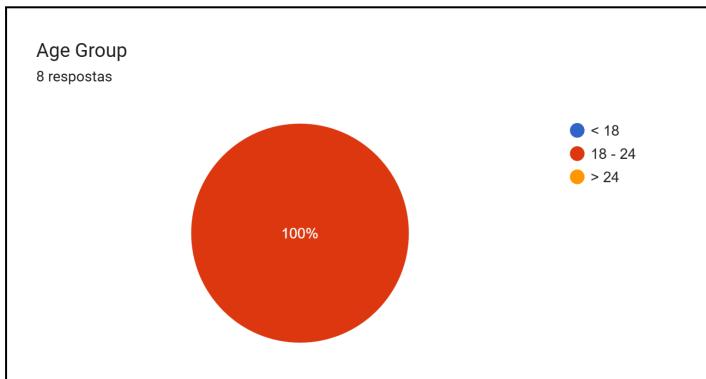
On the home page, the user needs to click on the friends icon to view their current friend list. If they go to the first proposal page, it is now also possible to add people to their friend list by clicking the new plus button next to their picture.



Results

Background Questionnaire

Before beginning the usability tasks, participants were asked to complete a short background questionnaire. This aimed to gather contextual information about their experience with ride-sharing apps and their commuting habits. These insights helped us better understand user profiles and interpret usability results in light of their previous experiences and expectations.



Statistical analysis

Statistics may have errors due to two problems.

First, we used the iPhone16 for the prototype in *Figma* and the users with a smaller phone can't see all the features without scrolling.

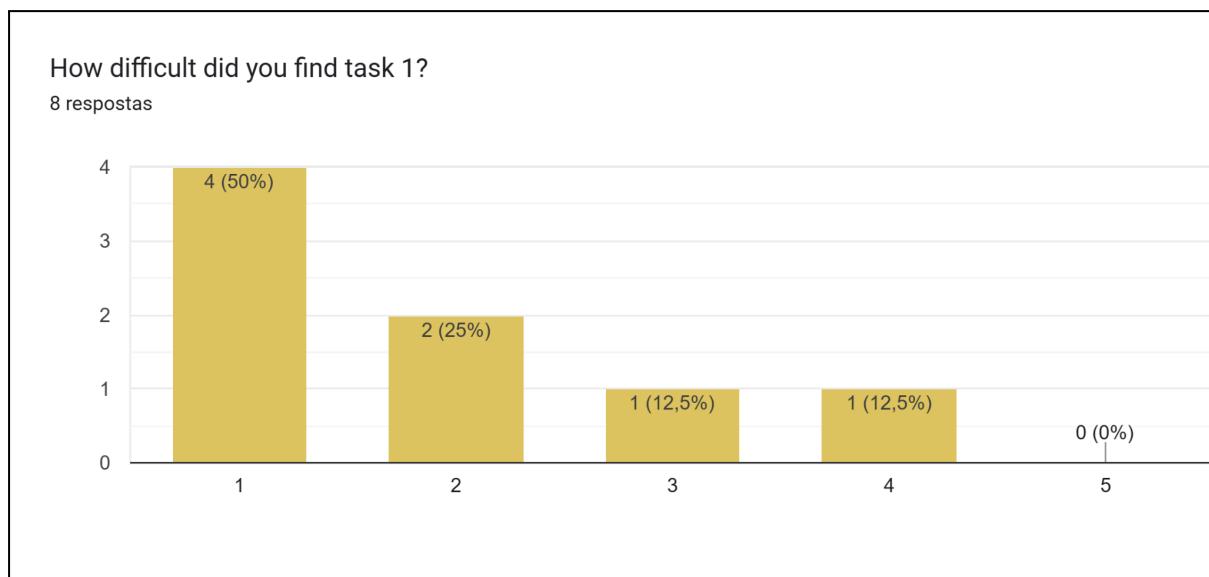
Second, the *Maze* app itself sometimes rejects clicks that are correct, probably due to holding the screen for too long, resulting in *Maze* considering it a hold instead of a tap.

In order to evaluate our prototype with the users, we applied the usability metrics previously explained: Task completion success rate, Error rate, Task completion time and Satisfaction questionnaire. We also added the direct and indirect success rates to enrich our evaluation.

Task	Task Completion Success Rate	Direct Success Rate	Indirect Success Rate	Error Rate (Misclick Rate)	Task Completion Time
Edit Profile	100%	62.5%	37.5%	60.8%	44.6s
Book a Ride	100%	12.5%	87.5%	56.4%	35.9s
Change Proposal Frequency	100%	37.5%	62.5%	56.6%	25.2s
Check Notifications	100%	62.5%	37.5%	41.9%	13.1s
Add Proposal	100%	100%	0%	11.1%	5.0s

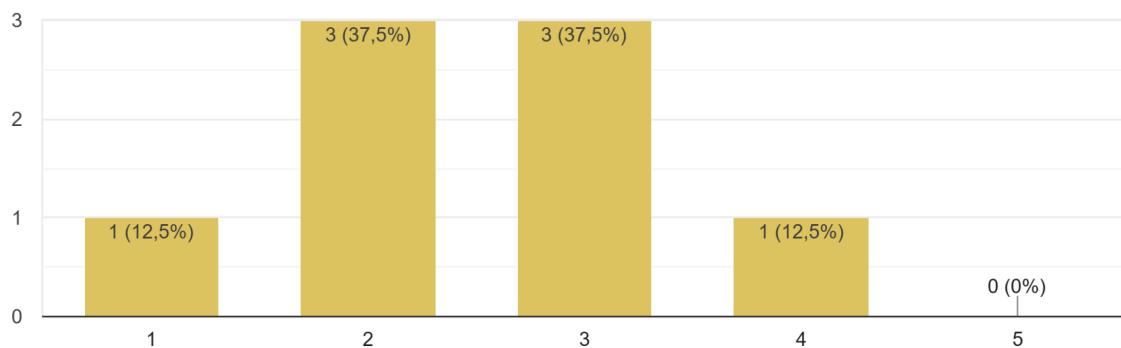
Satisfaction Questionnaire

After completing the usability tasks, participants were asked to fill out a brief satisfaction questionnaire. The goal was to collect qualitative feedback on their overall experience using the prototype, including perceived ease of use, clarity of the interface, and their likelihood of using the app in real-life scenarios. This helped us identify areas of strength and potential improvement from the users' perspective.



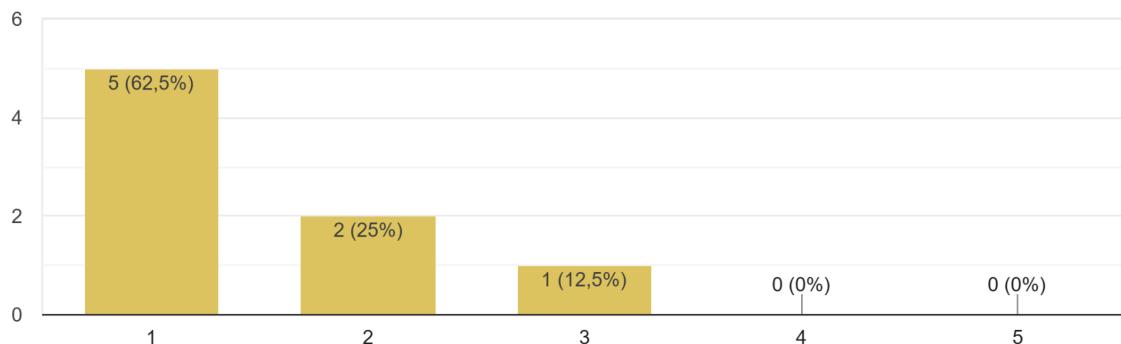
How difficult did you find task 2?

8 respostas



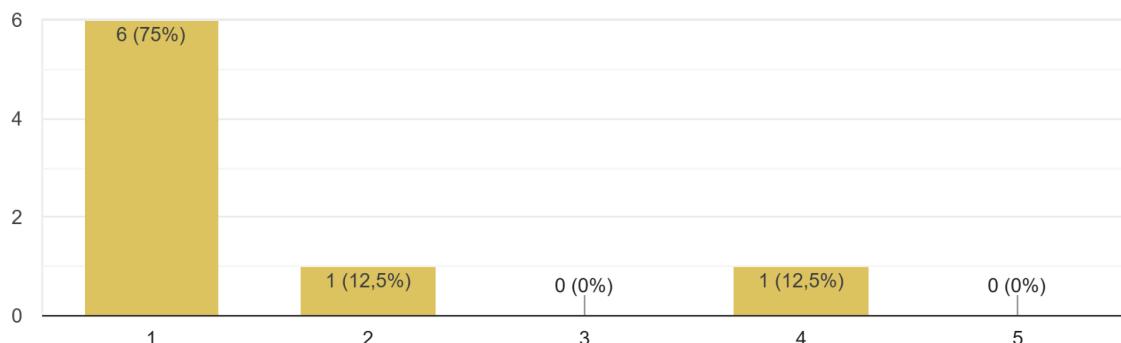
How difficult did you find task 3?

8 respostas



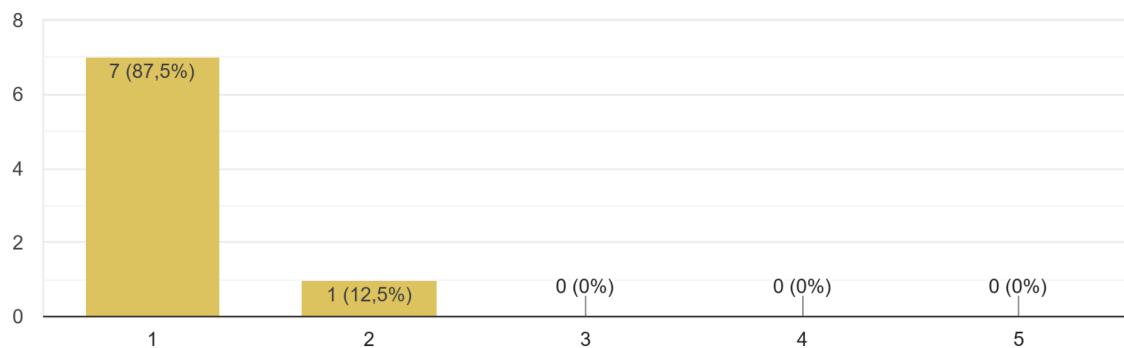
How difficult did you find task 4?

8 respostas



How difficult did you find task 5?

8 respostas



How would you rate the prototype overall

8 respostas

Average rating (3.88)



How did you like the concept of our app?

8 respostas

Average rating (4.38)



What was for you the best feature of the app?

The fact that it is integrated with Sigarra

Frequency changes

Book a ride by chat. Personal info

I thought grouping proposals was really clever

Booking rides

Me volunteering to be a driver

Easy to use

What did you find most confusing about our app?

The book a ride button

To change the frequency I was confused about having to go to the activity

I did not really understand the choice of terms (for example, why 'proposal' instead of 'ride')

How to actually book a ride. When choosing a proposal, the chat button wasn't super clear that it was the step needed to book a ride

The recurring weekly scheduling of proposals

Notification icon it's small

If you could, what would you change or add to make this experience even better?

I'd like to have instructions in the first use, with arrows pointing to specific details/buttons and telling me what they do

Change the book a ride button

Being able to rename the proposals

Instead of calling it a proposal, maybe calling it another thing. Or even being able to choose where the people are going to (to chose people from the same campus)

Add shared rides with friends (being able to pick up friends along the way)

More information about the ride companions

Add a friends section