## UniXChange

# Andrea Buratti, Andrea Musolino, Maura Gallinari, Simone Rufo June 20, 2024

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#### 1 Introduction

Our idea was to resolve the problems of exchanging money between users and finding good notes. We firstly understood the stakeholders of our system:

- Students
- Professors

So we interviewed students to understand if those were real problems or not, and we asked LLMs to simulate an interview to an HCI field expert.

Useful links:

- GitHub repo
- Figma Prototype v1
- Figma Prototype latest update
- Google form Questionnaire

## 2 Interviews and Questionnaire

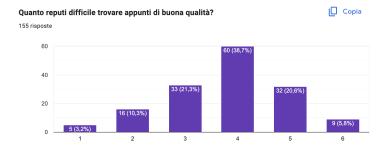
We did some interviews (about 10) to students and used ChatGPT to generate the possible questions to understand user needs and used it too to answer these questions. Then after gathering some informations from interviewed people ,we wrote a questionnaire with the help of ChatGPT and lastly we shared our questionnaire in our Instagram stories and Whatsapp group. After few hours we achieved about 170 replies.

## 3 Needfinding

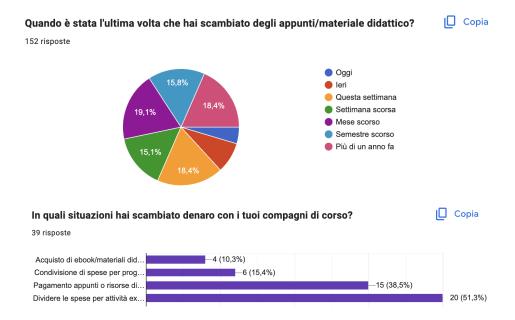
From interviews and questionnaire we discovered the following User needs:

#### 3.1 Notes/Teaching Material

From the questionnaires, clearly results the students' difficulty in finding good notes The notes, or the teaching material, are exchanged very often (as shown in the image below) and are searched principally on:



- Web sites of the professor (Classroom, Moodle, Drive, ...)
- Groups on social media
- Web
- Ask friends

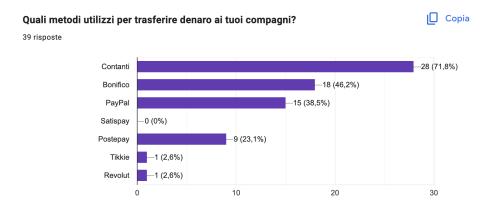


#### 3.2 Money

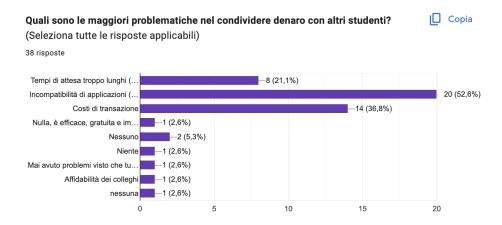
As regards for the money, the students exhange them often and easily. In particular, money is traded in these situations

- Split charges for extracurricular activities 51,3
- Payments for notes or study resources 38,5
- Sharing of project expenses 15,4

Regarding the means, these are the most used: And, the main problems around the exchange of money



are the following:



### 4 Tasks

Finally we've decided to implement the Front-end app on android, but first of all we had to decide what tasks we had in our app derived from user needs and from the first review with professor, infact our initial tasks were different (we had a feedback and refund for the notes, but professor Panizzi told us to concentrate on Financial part of our application, so we removed these tasks)

#### 4.1 Receive/Send Money Storyboards

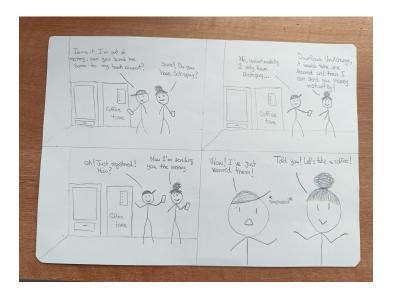


Figure 1: Storyboard referred to Sending and receiving money using the app

## 4.2 Upload/Purchase Notes Storyboards



Figure 2: Storyboard referred to uploading a note interaction

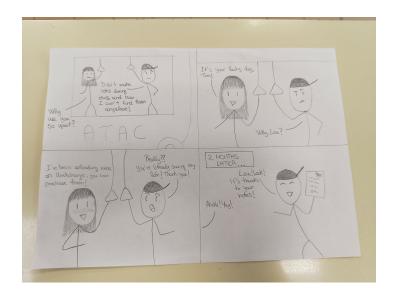


Figure 3: Storyboard referred to purchasing notes interaction

## 5 Prototype V1

We used Figma to realize our app trying to respect the best practices:

#### 5.1 Homepage

It's the main page of the application, where you can navigate to other tabs using the labeled buttons or the dashboard

#### 5.2 Payments

Where you can see the all transactions, send money to others (in there we have two tabs Send, Transaction)

#### 5.3 Notes

Where you can buy notes (or upload using the plus on the dashboard and then completing the associated form), watch the suggested notes and search for notes that you are looking for (using the search bar)

#### 5.4 Personal area

Where you can find all user informations and purchased/uploaded notes

#### 6 Figma review

We had our figma review with Professor Panizzi on the first prototype and we concluded to renew totally our Figma prototype.

Professor Panizzi's corrections:

- Remove first view (Homepage)
- Payment tab it's ok, change "Exchange" because it's ambiguous
- Add a notify when someone send you money
- USE MATERIAL DESIGN
- Insert UPLOAD and DOWNLOAD in Notes tab
- Remove the Plus icon in the Dashboard
- Profile and Wallet has to be added in the right top panel
- An uploaded note is automatically in the shop
- Use more FABs (Floating action button)

## 7 Prototype final version

In this Prototype we applied all the professor's suggestions and that's what we got

#### 7.1 Payments

Now payments tab shows the transactions history, we added a FAB that opens a widget for sending money and we added a notification whenever we receive money.

#### 7.2 Notes

In notes we have two tabs Download and Upload to easily navigate and we have a search bar and a FAB that redirect us to another tab that allows us to upload notes.

#### 7.3 Profile

In here we have informations about our user, number of uploaded and downloaded notes and the earnings from uploaded notes.

#### 7.4 Antiplagium system

We inserted a watermark (User signature) in every photo in the notes preview to secure the notes updated by the user.

#### 8 Evaluation

We tested our prototype with some students, it was very useful to us to understand what problems our UI had. For the tests we asked our testers to do a task and describing loud what they're performing during the task.

Problems we've discovered:

- FAB send icon in Payment tab was confusing
- Notify appeared on click, we fixed it to make it appear after a delay
- They discovered some minor bugs that we later fixed