

Luni

PHASE 3 - SECOND PROTOTYPE AND USER EVALUATION

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Description

LUNI is a mobile and web application gathering all the information and activities necessary to efficiently and comfortably use all of the library's resources. To do so, it gathers multiple functionalities in three domains: the book domain, the space domain, and the event domain.

Book domain

Buy a book

Buy a book from a course I'm enrolled that has a price below 20€

Space domain

Search for a seat

Search for an available seat with computer access on the third floor

Event domain

Register in an event

Register in the spelling contest that will take place next week

Part I – User and Task Analysis

This stage marked the start of the project, therefore its focus was on understanding not only what application we were designing but also its features and requirements.

Through a questionnaire posed to potential users of LUNI we were able to structure our application around these users needs and prioritize the functionalities they felt more attracted to.

Takeaway

This phase's main takeaway was the importance of user input in the design process and the focus on HCD. It shined a light on the strengths of this concept as it guided us towards the user needs rather than solely the team's ideas.

In a more practical analysis the tasks that were defined in this phase and the requirements defined for them were key to successfully build a good prototype

Part II- First Prototype and Heuristic Evaluation

The second stage of this project was focused on the start of the development of LUNI, which entailed the creation of a first prototype.

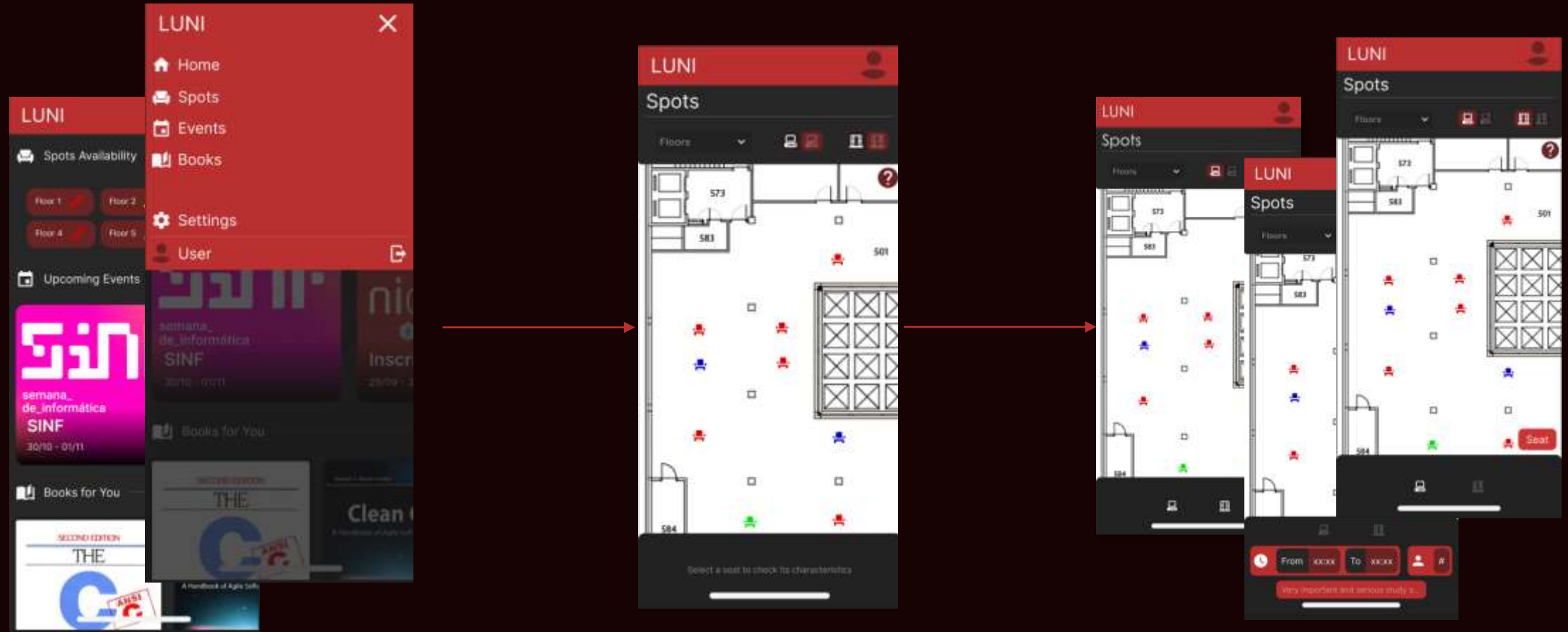
However this wouldn't have been insightful without a proper evaluation of the direction we were heading, that's where the heuristic evaluation made within groups of the class truly helped us.

Takeaway

Throughout this entire phase the need for iteration in the design process was a fulcral point of our work, the low commitment to initial ideas and the previous research of our users didn't allow for the stagnation of the process.

The evaluation of our prototype through the lenses of different people, aided by Nielsen's heuristics, also helped us keep our design focused on corresponding to the needs previously defined.

Prototype Flow - Spots



Prototype Flow - Spots



The 'Reserve Seat' modal form is shown. It has a close button (X) in the top right corner. The form contains the following fields and controls:

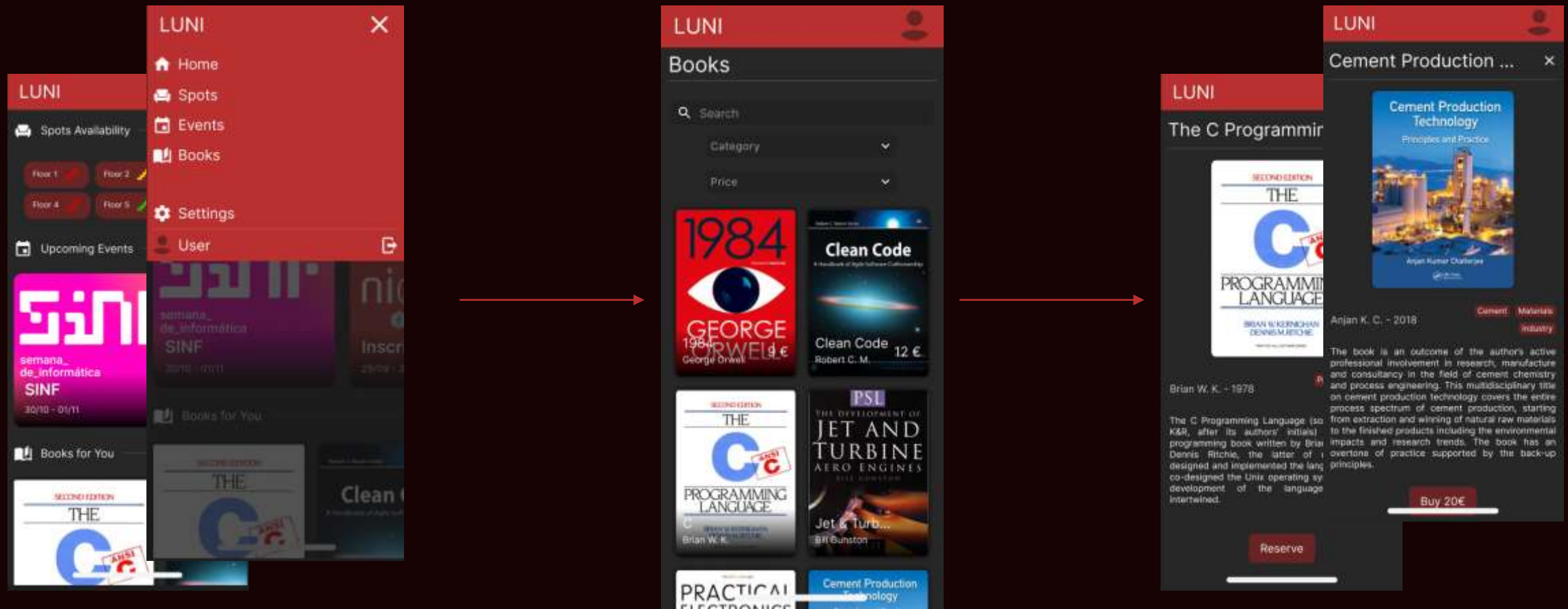
- A clock icon followed by 'From' and 'To' time selection fields, both containing 'xx:xx'.
- A person icon followed by 'No. of People (máx. 4)' and a '#' symbol.
- A 'Notes' text input field.
- A radio button labeled 'Allow "Tag Along"?'. The radio button is currently unselected.
- A 'Reserve Seat' button at the bottom.



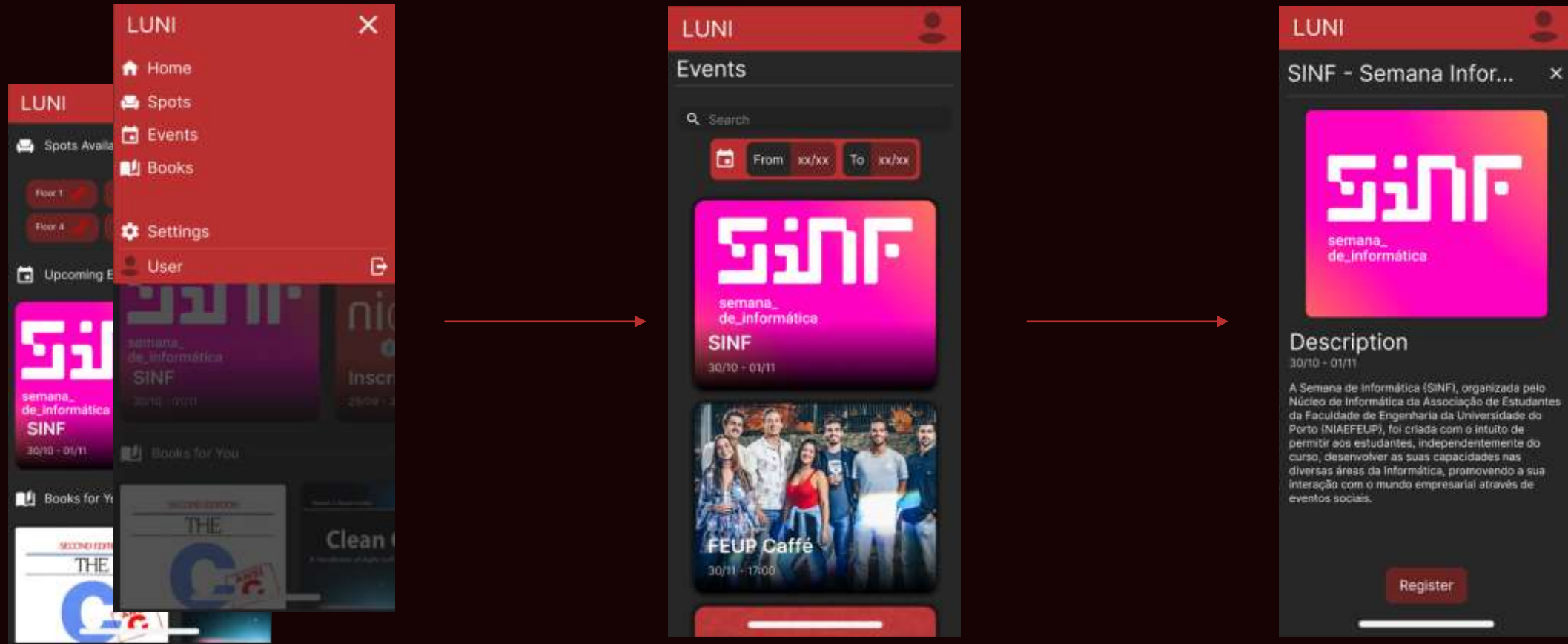
The 'Tag Along' modal form is shown. It has a close button (X) in the top right corner. The form contains the following fields and controls:

- A clock icon followed by 'From' and 'To' time selection fields, both containing 'xx:xx'.
- A 'Notes' text input field.
- A 'Tag Along' button at the bottom.

Prototype Flow - Books



Prototype Flow - Events



User Evaluation - Method

The evaluation was conducted through *Google Forms* and *Maze*. We sent users a form with a link to *Maze* and kept the flow of the evaluation alternating between these two platforms.

The evaluation was divided in 3 tasks:

Buy a book with a price between 15€ and 20€.

“Tag Along” to an occupied seat.

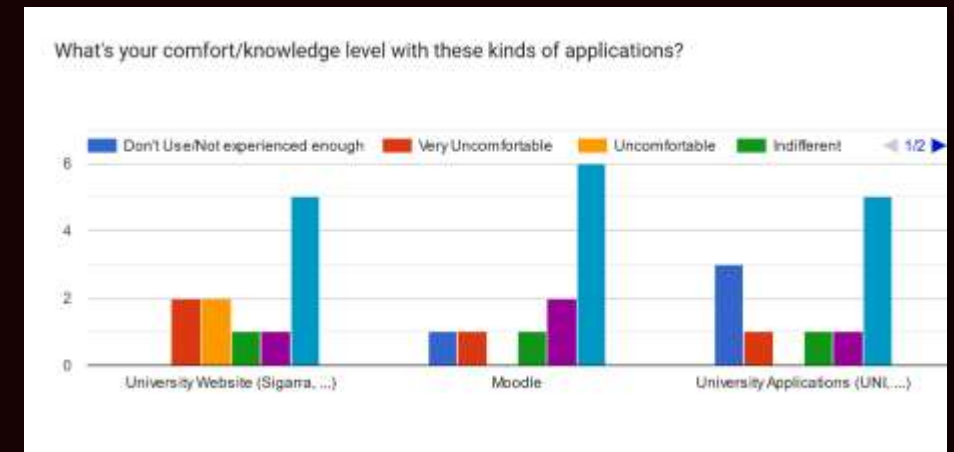
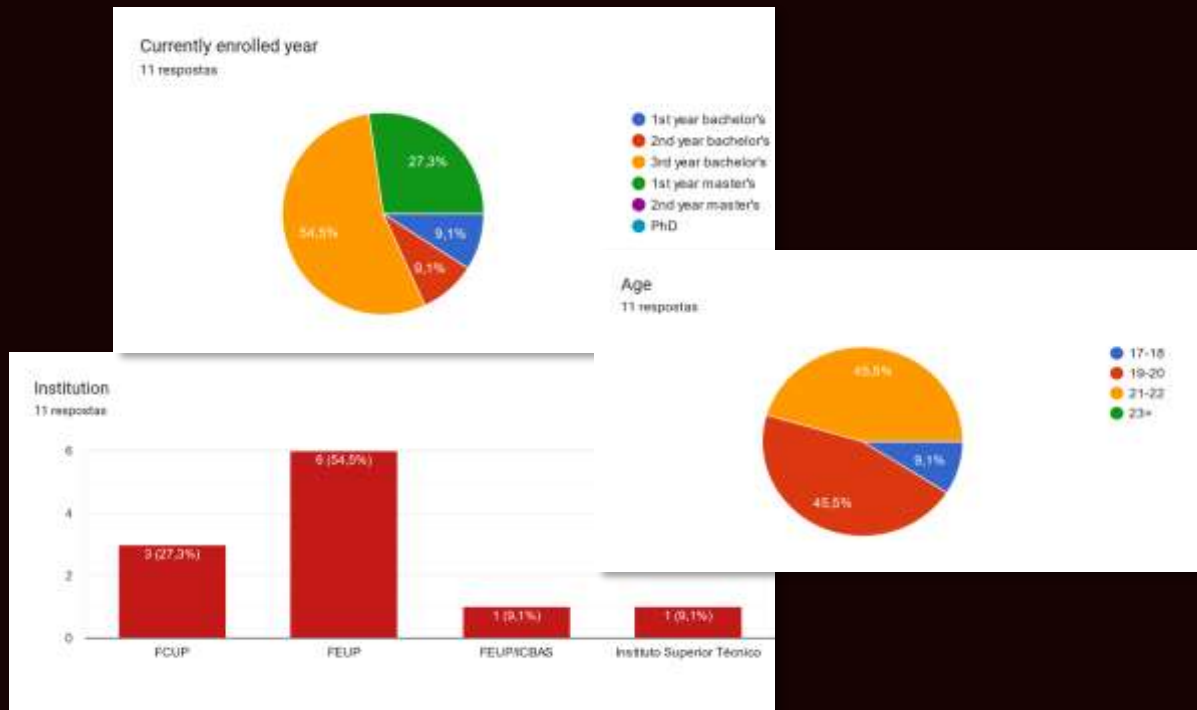
Register in the SINF event

We would have liked these tasks to correspond with the ones initially defined in the first phase however, the final developed prototype did not allow us to efficiently and accurately evaluate one of them.

Looking back and with the results we had maybe we should've added a step at the beginning where the user could interact with the app freely.

User Evaluation - Participants

Our survey received a total of 11 reponses, and was answered for a period of 7 days, from the 2nd of december to the 9th.



Result and Analysis - Books

Buy a book with a price between 15€ and 20€.

Measure	Description
Efficacy	If the book is available, all the users should have a success rate of 96% or above
Efficiency	Average time of processing the transaction below 2 minutes
Satisfaction	90% of the users should be pleased with the filter selection

Task completion time

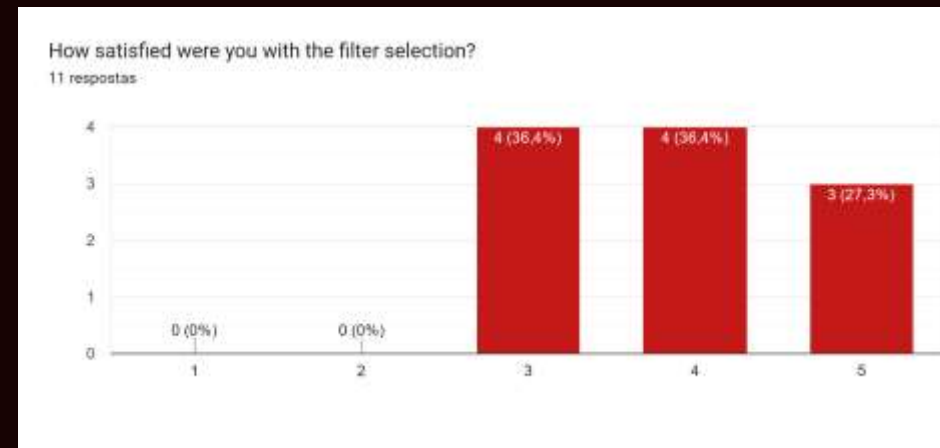
CI $38.85 \pm 17.2s$

Filter satisfaction

CI 3.9 ± 0.47

Comparing the results with our requirements we are able to see that the satisfaction goal was not met, by roughly 10%.

However, users were able to finish the task quickly, which means that efficiency was not a barrier.



Result and Analysis - Spots

“Tag Along” to an occupied seat.

Measure	Description
Efficacy	80% of the users reached a valid seat in their first try
Efficiency	Average time of finding a seat with that criteria below 1 minute
Satisfaction	Less than 15% of users unsatisfied with map display

Task completion time

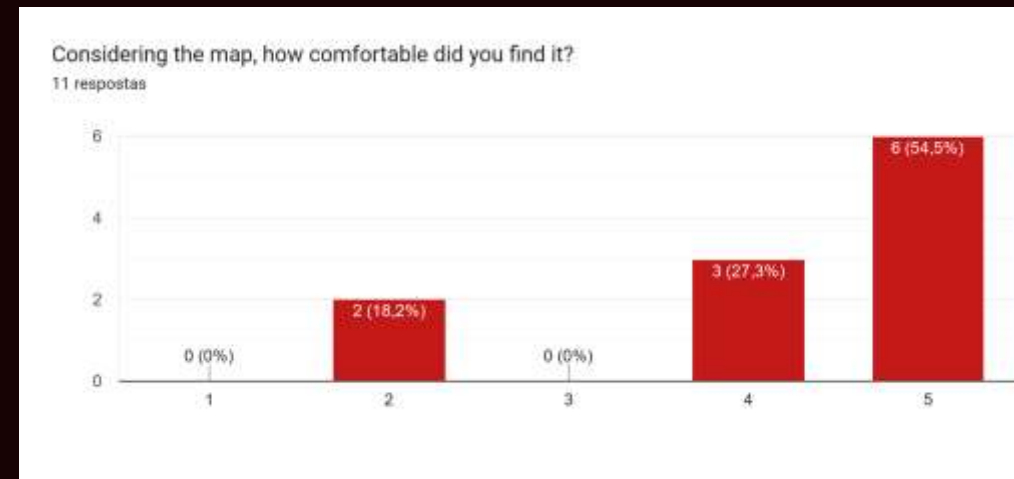
CI $33.90 \pm 16.6s$

Map comfort

CI 4.2 ± 0.69

Through the confidence interval above, we are able to conclude that in both the efficiency and satisfaction measures, the requirement was met.

However, when reviewing the heatmaps of clicks of each user through Maze it is clear efficacy is not being met.



Result and Analysis - Events

Register in the SINF event

Measure	Description
Efficacy	The registration process has to be completed within 3 tries
Efficiency	The searching process should be possible to do with 6 or less click
Satisfaction	95% of the users should consider the registration process to be practical

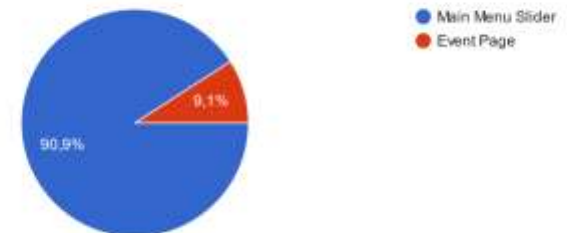
Task completion time

CI

5.87 ± 3.18s

Most likely due to its simple nature, this task was finished by all participants extremely quickly and without any missclicks by the large majority of them.

Did you access the event by the slider on the main menu or by the event page?
11 respostas



Conclusion

Regarding this phase of the project there were some problems that we would have liked to have fixed such as, the inclusion of a SUS-like questionnaire and a “playground” part of the quizz for familiarization of the user with the application.

However we are happy not only with our final product but also the answers and the journey that we took to build it.

In conclusion, we believe the developed prototype to be a potential solid beginning to a larger product and were able explore and develop our understanding of the large UI and UX world.

THE END

Thank you for your time!