

Human-Machine Interaction

2017/2018

Study Helper

Stage 3: Paper Prototype

Extended Version (Digital Only)



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Briefing

Oftentimes students suffer from a lack of organization and methodology on their studies. Study Helpers' main focus is to increase these students' productivity and motivation by making their time management easier. It will help planning study schedules and routines as students will be allowed to create tasks and divide them over specific periods of time.

Also, they'll be able to create a calendar with the important dates and will be notified on unfinished tasks, upcoming exams and presentations. Lastly, they won't ever be caught off-guard with deadlines and with regular feedback on their performance over time, there won't be any risk on falling behind schedule throughout the coursework.

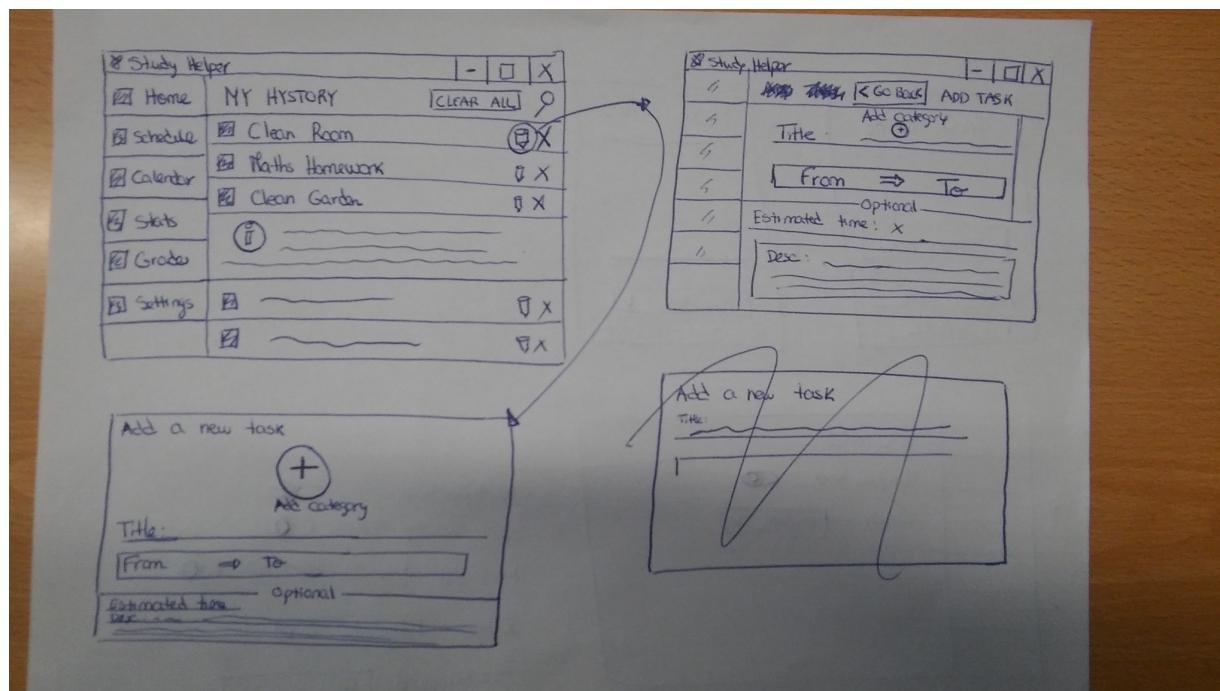
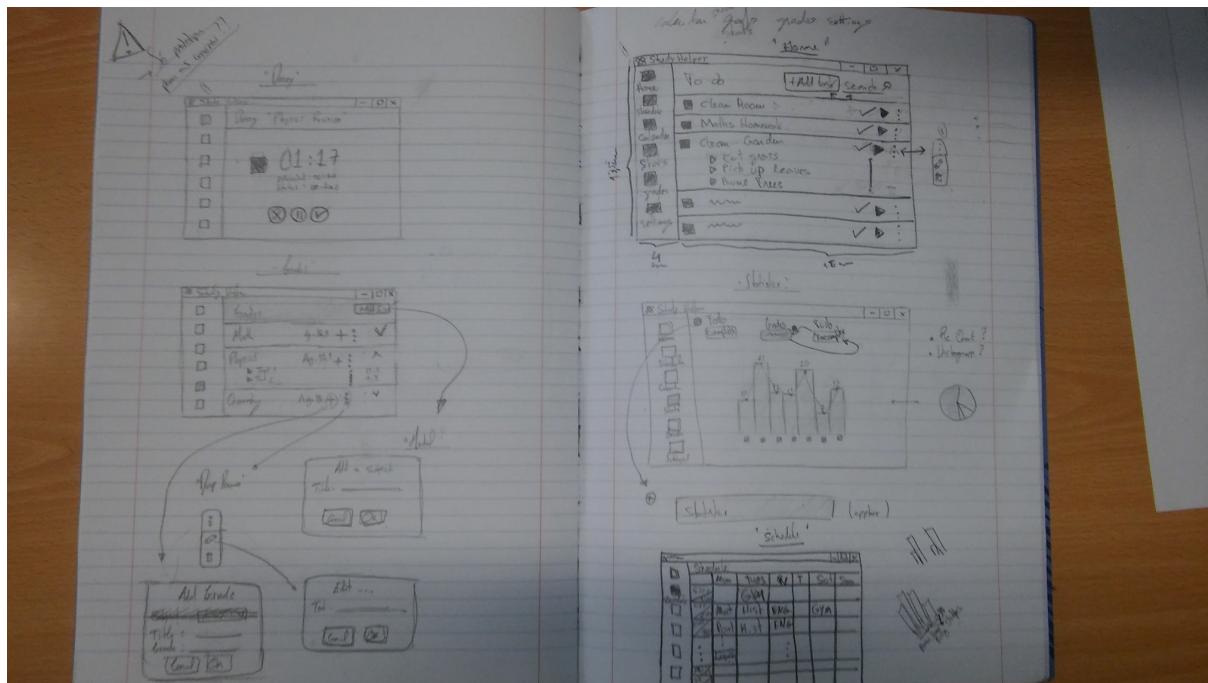
Sketching: Overview

For this task, we brainstormed and analysed various designs, workflows and specific features. We started out with very, very rough sketches, discussed them in group, and gradually moved towards more detailed designs.

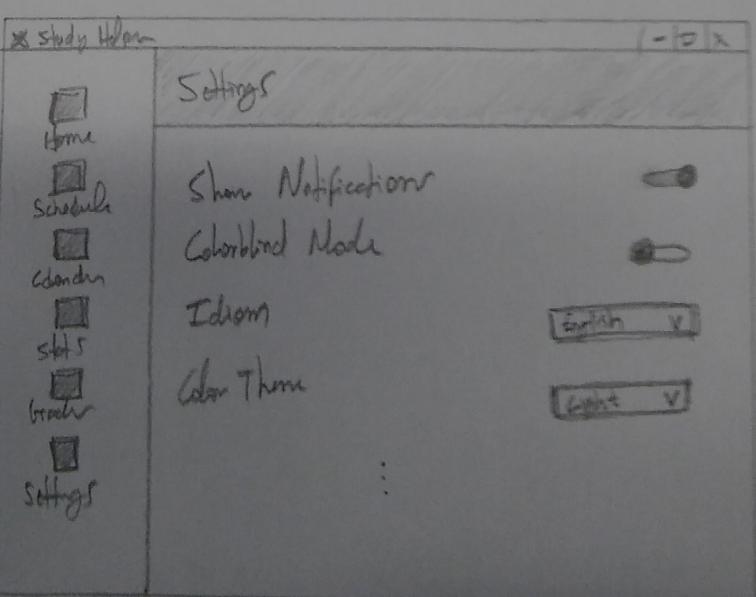
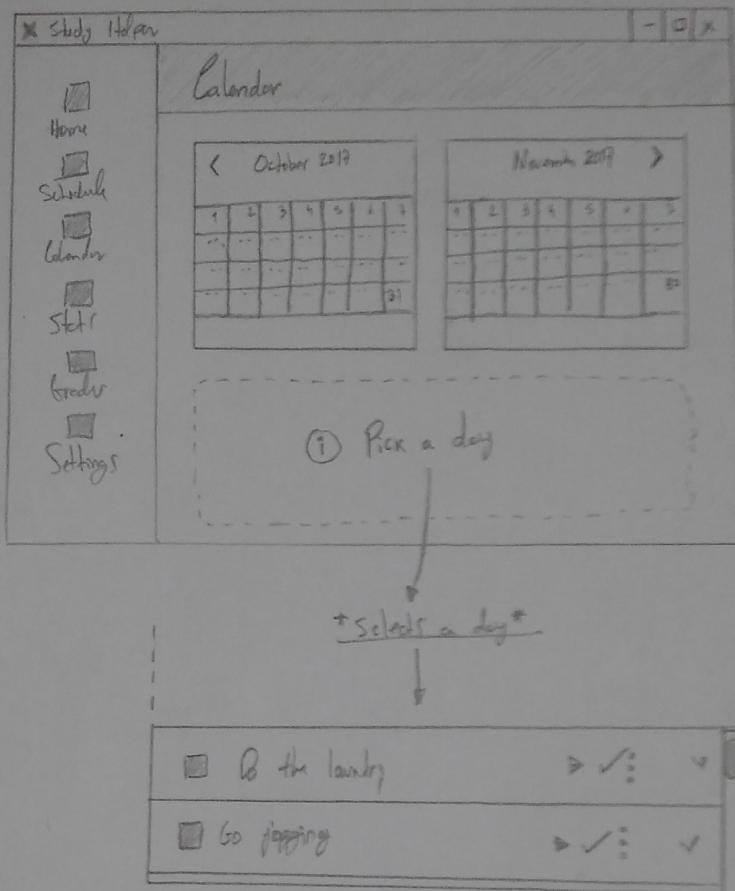
Below you can see an overview of the end result of our sketching phase.



Sketching: In Detail



"Calendor"



"Grades"

Simplenote

Grades		
Maths (avg: 14.8)	+ :	✓
Physics (avg: 12.1)	+ :	✗
• Test 1 = 9.8 • Test 2 = 11.6		
Chemistry (avg: 16.3)	+ :	✓
History (avg: 13.2)	+ :	✓

Add a subject
Title: _____
[Save]

Vertical Snapper

(mobile window)

Add grade
Title: _____
Grade: _____
[Add] [Delete]

(mobile window)

⋮ (edit)
⋮ (delete)

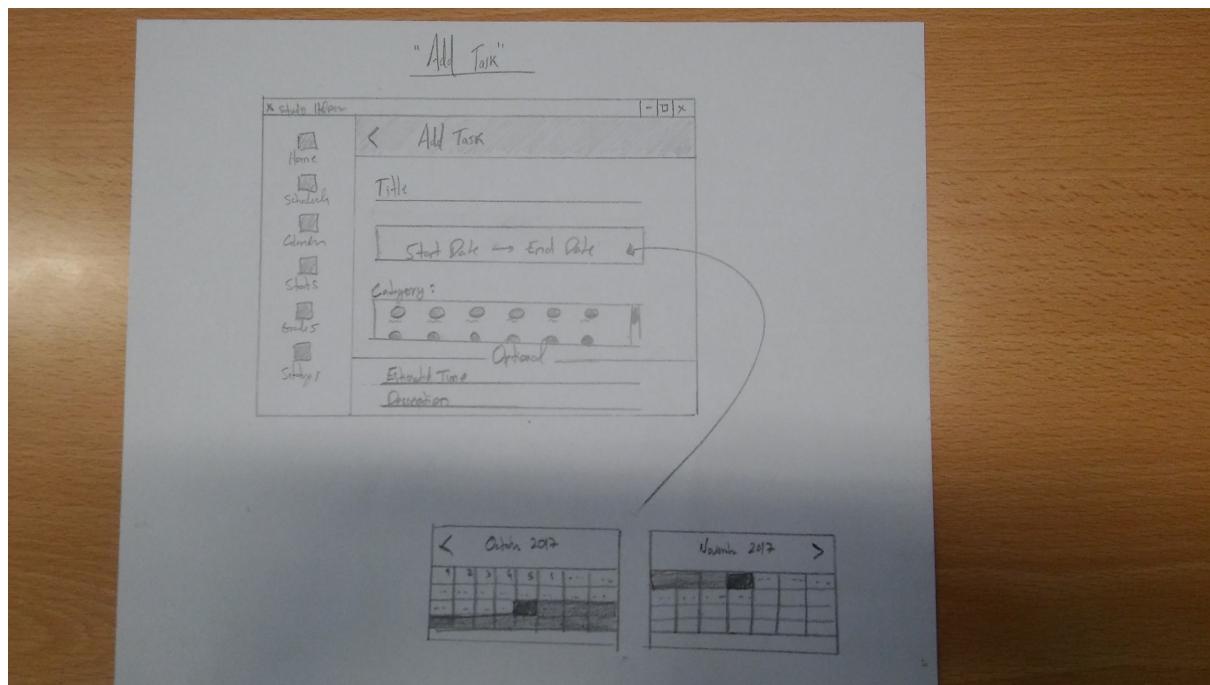
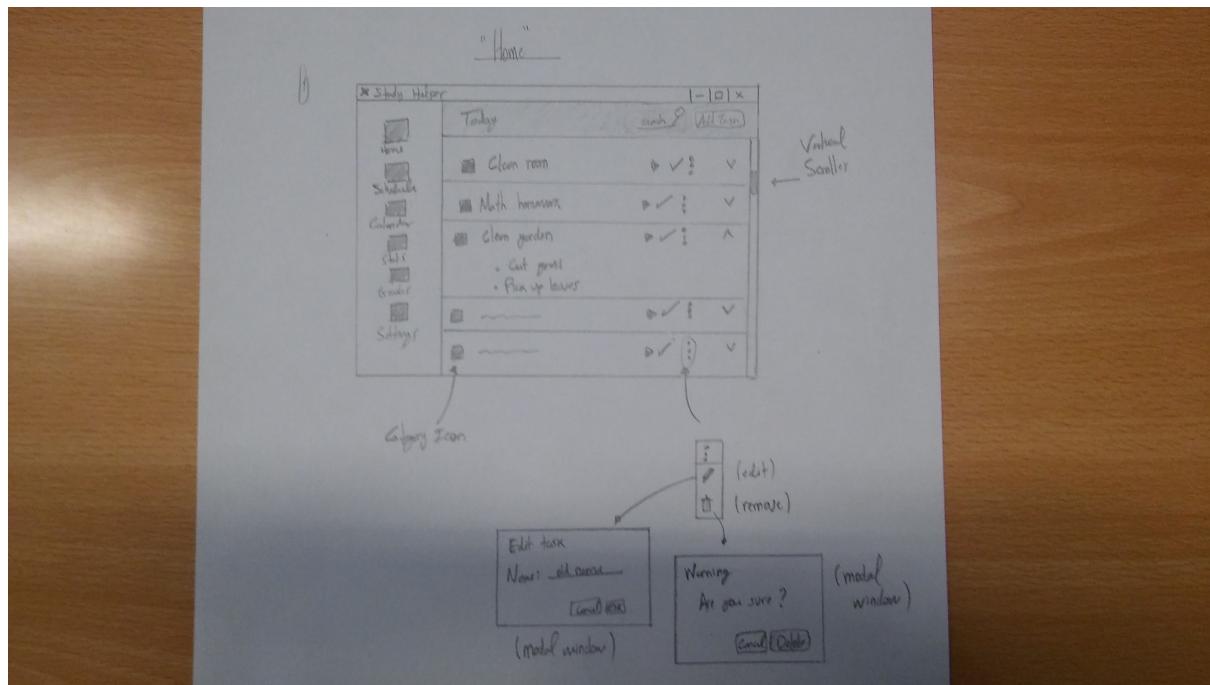
"Task History"

Simplenote

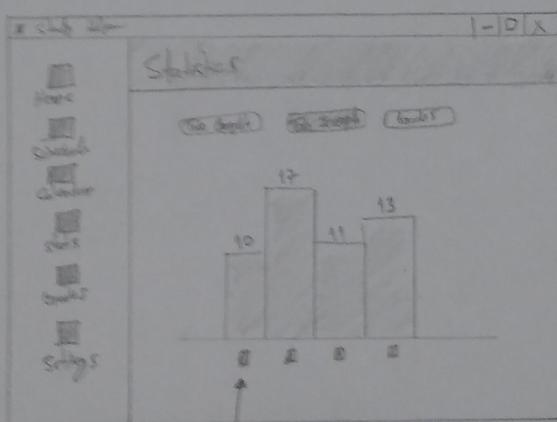
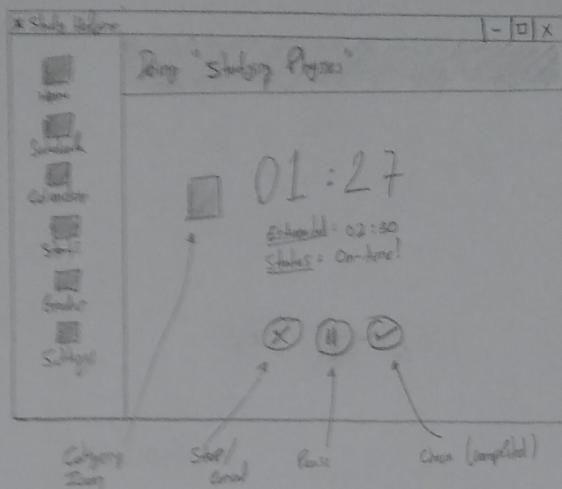
Task History		
Go shopping	⋮	✓
Clean room	⋮	✓
~~~~~	⋮	✓
~~~~~	⋮	✓

[Clear All]

⋮ (edit)
⋮ (delete)



"Pong"



Also use pic
charts:



"Statistics"

The 3 Scenarios

Here we display the three scenarios that we're going to present to our application's testers (in separate cheats, of course). The reason why we show them here again is because they've been slightly modified since Stage 2, in order to avoid ambiguities and make them as clear as possible.

Scenario 1

Johnny was surfing the web when he thought to himself "*I should be more productive today...*". He stopped for a while and tried to think about the main tasks that he should add to his to-do list and complete for the day, coming up with the following two:

"I need to study one hour for the upcoming Geography exam."

"I also need to email over my Physics report."

He started the first task, paying close attention to the time elapsed. Because of how focused he was, he got all his studying done in much less time, and so happily proceeded to check off the task.

With all the excitement, he did the mistake of checking-off his second task as well...! What a bummer!

Shaking his head, he went to the all-time task history and recovered the task.

Scenario 2

After his afternoon math class, Josh was super happy because he had received an 18 in the maths exam. So, he decided it would be a good idea to update his grades cheat with his latest math grade.

Afterwards, while on the bus, Josh decided to check his performance statistics throughout the last month, and realised how much his math grade had increased his overall performance.

Scenario 3

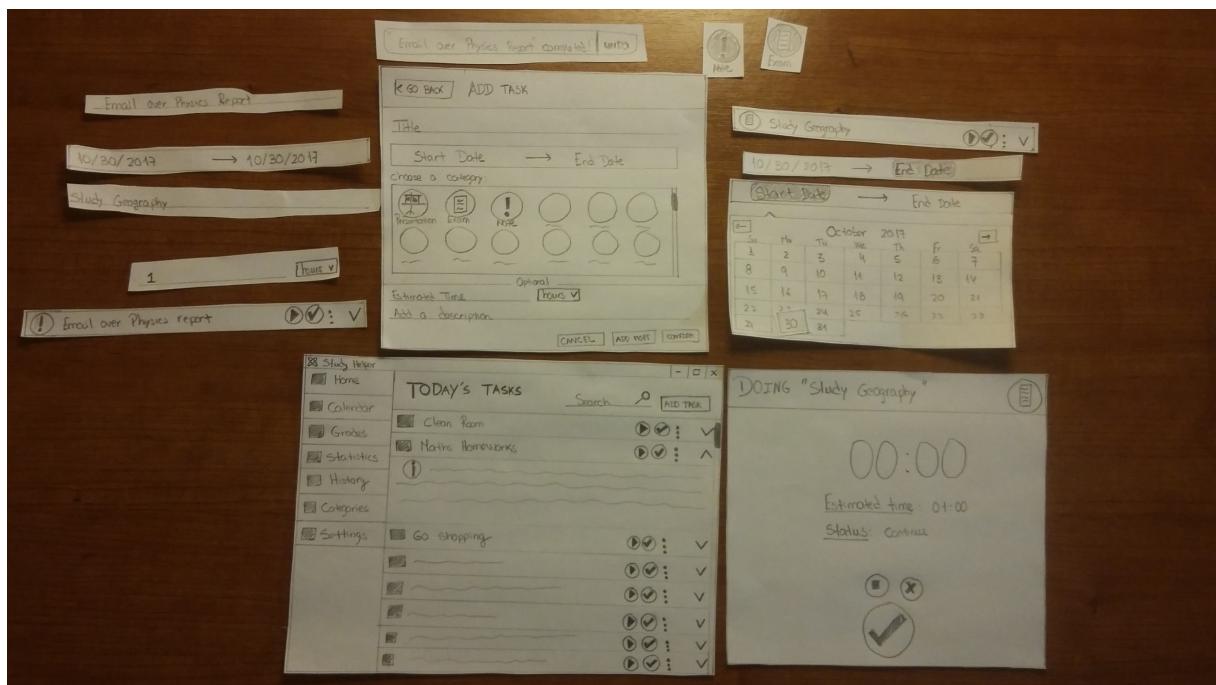
At lunch time, Jane reminded Mark of that super difficult Physics exam that was going to take place on the 21st of December.

Mark had no idea about this event, and so he decided to add a new task, on his calendar, for the 21st of December - “*Physics exam*”, tagging it with the *Exam* category. This way, he’d start studying earlier and wouldn’t forget about this important date.

Prototyping

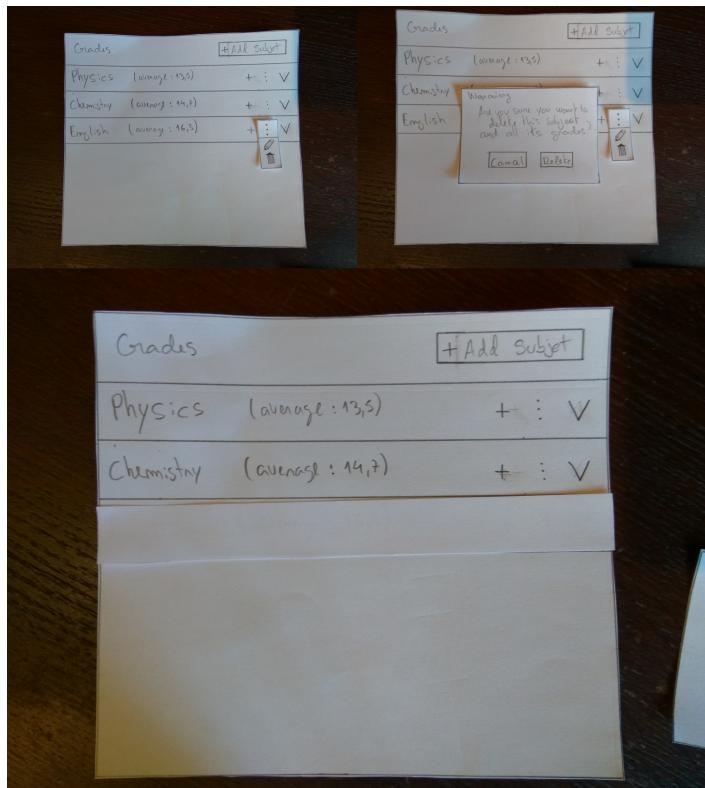
After sketching and brainstorming some more, we felt ready to start building the paper prototypes. Below we’ll show an overview of the three prototypes that were built (one for each of the scenarios above).

Prototype: Scenario 1

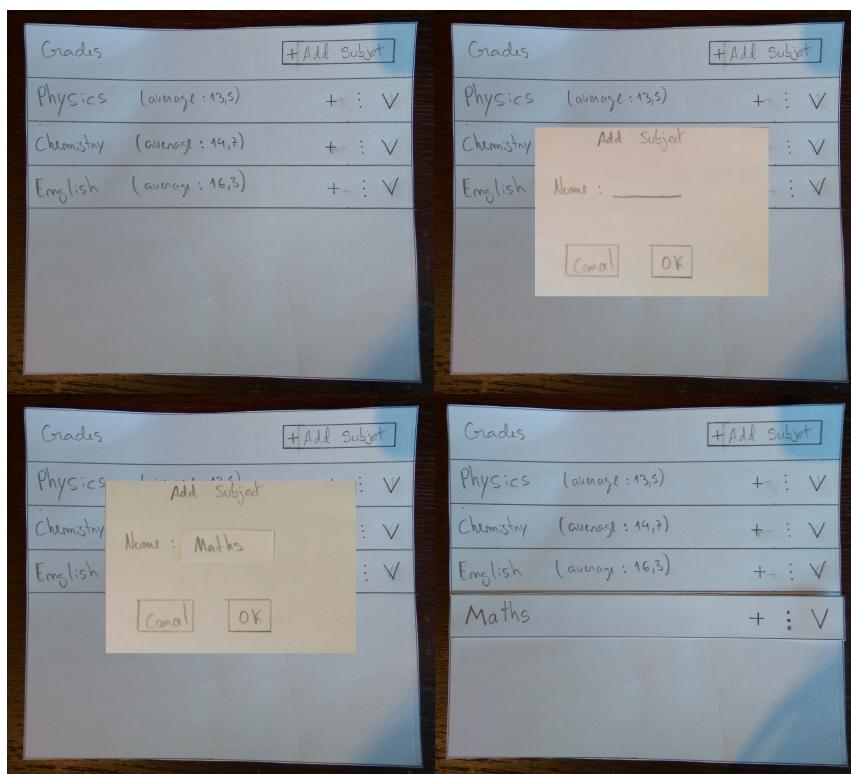


Prototype: Scenario 2

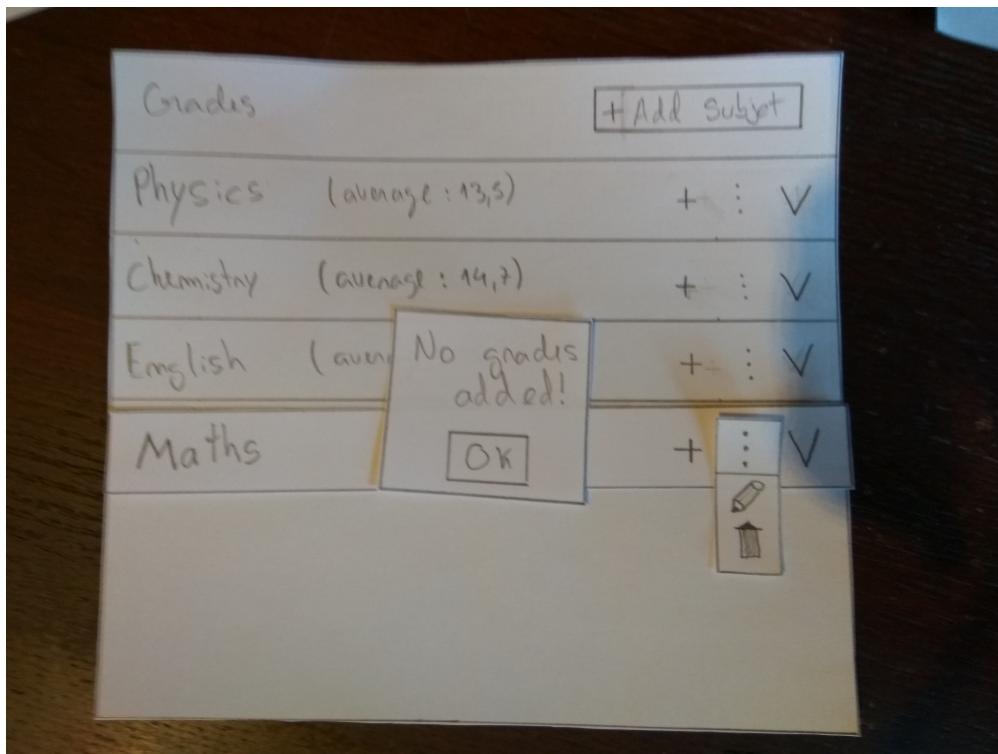
Delete Subject:



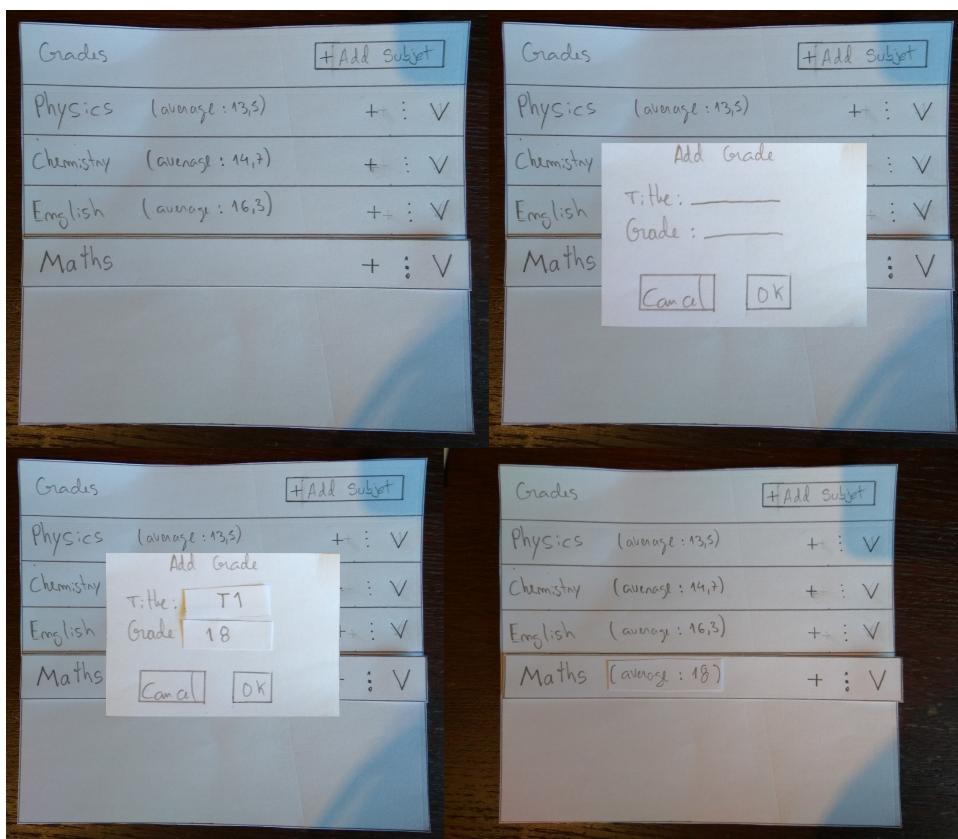
Add Subject:



Edit Grades Without Previous Added Grades:



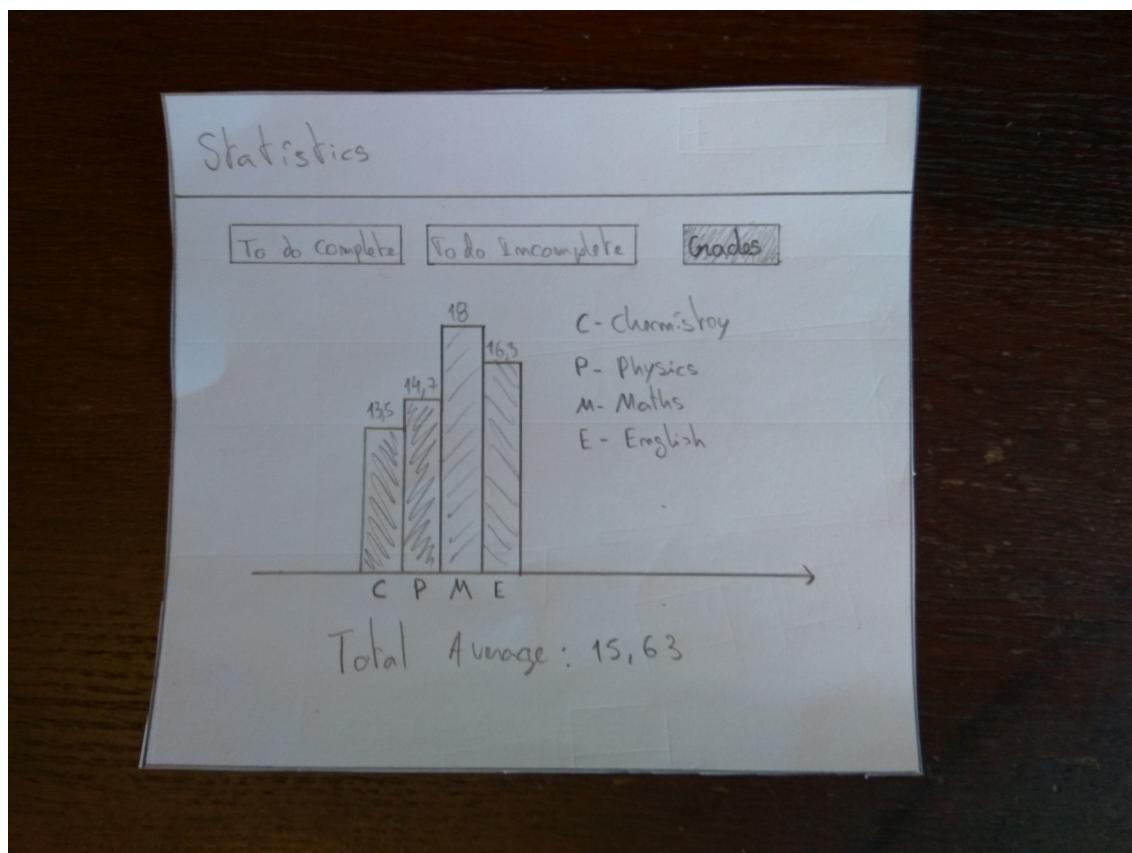
Add Grade:



Expand Grade View:

Grades		+ Add Subject
Physics	(average : 13,5)	+ : ✓
Chemistry	(average : 14,7)	+ : ✓
English	(average : 16,3)	++ : ✓
Maths	(average : 18)	+ : ▲
Total: 18		

Check Statistics:



Edit Grade:

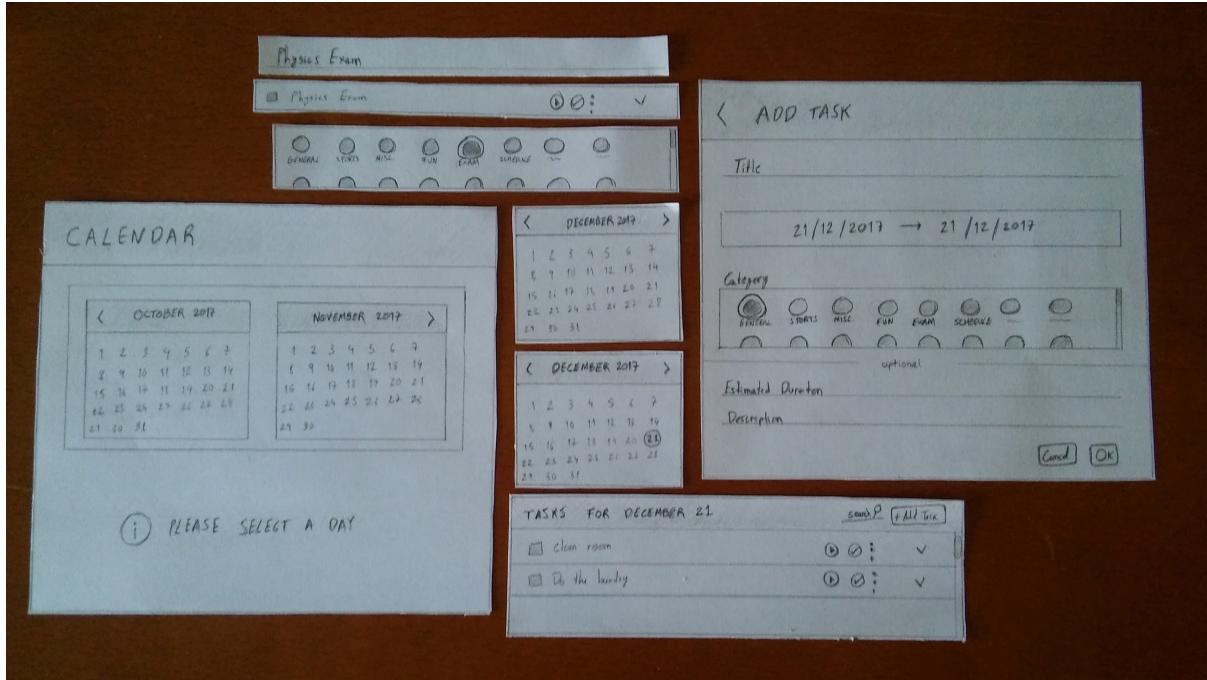
Grades		+ Add Subject
Physics	(average : 13,5)	+ : ✓
Chemistry	(average : 14,7)	+ : ✓
English	(average : 16,3)	+ : ✓
Maths	(average : 18)	+ : ✓

Grades		+ Add Subject
Physics	(average : 13,5)	+ : ✓
Chemistry	(average : 14,7)	+ : ✓
English	(average : 16,3)	+ : ✓
Maths	(average : 18)	+ : ✓

Grades		+ Add Subject
Physics	(average : 13,5)	+ : ✓
Chemistry	(average : 14,7)	+ : ✓
English	(average : 16,3)	+ : ✓
Maths	(average : 17,8)	+ : ✓

Grades		+ Add Subject
Physics	(average : 13,5)	+ : ✓
Chemistry	(average : 14,7)	+ : ✓
English	(average : 16,3)	+ : ✓
Maths	(average : 17,8)	+ : ✓

Prototype: Scenario 3



Storyboard

Here we'll showcase a storyboard for one of our three scenarios, scenario 3. Essentially, scenario 3 includes picking a specific day (via calendar) and marking a task with some given attributes onto that day.



Figure 1: Locate the desired month. In this case, December.

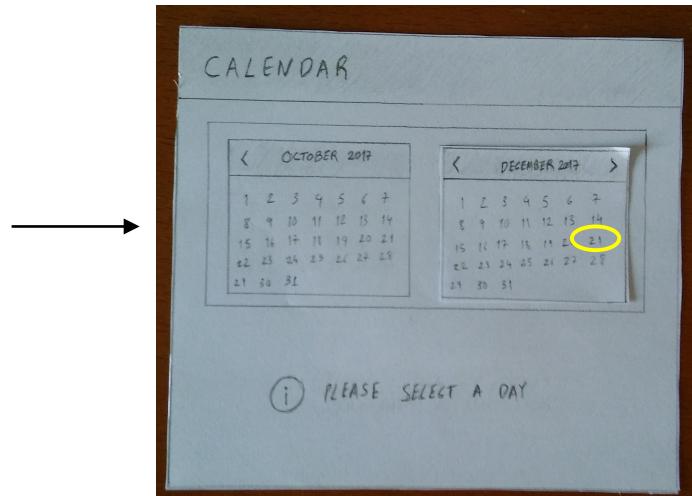


Figure 2: Locate and click on the desired day - 21st of December.

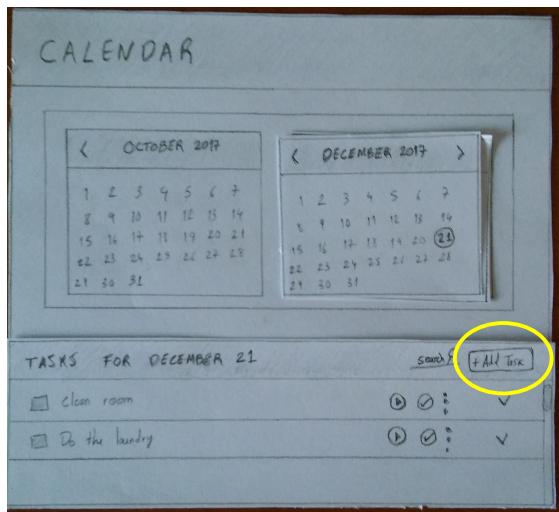


Figure 3: The tasks for that day show up at the bottom. Click on "Add Task" to add a new one.

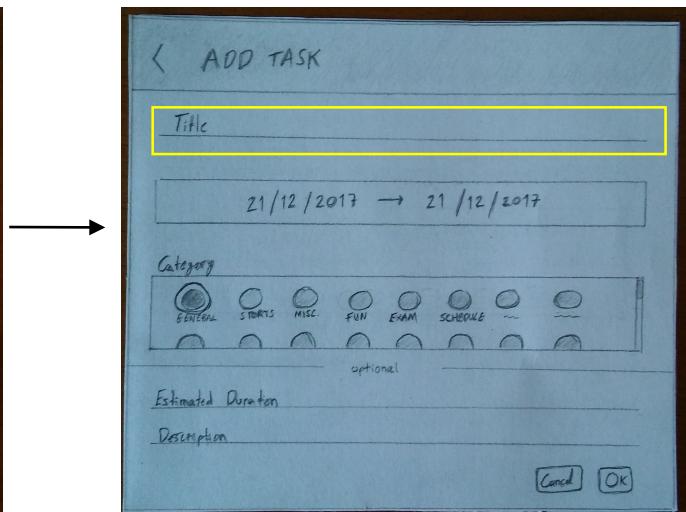


Figure 4: You're now on the "Add Task" menu. Click on the title field to give your task a custom title.

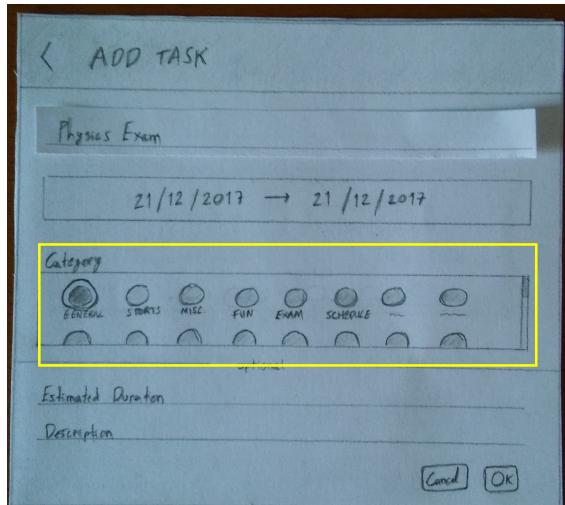


Figure 5: After that's done, select a category from the presented categories list. For this example, the category chosen is "Exam".



Figure 6: The optional fields are not part of the scenario; thus, we can click "Ok" to finish.



Figure 7: As expected, the just-added task is now shown on the task list of December 21st! Scenario complete.

Paper Prototyping Day – The Aftermath

In this section, we'll talk about the paper prototype testing day, mainly focusing on what we observed and how those observations (and the feedback we were given) will influence the further phases of this project.

Overall, we're pretty happy with our results. Considering the limitations imposed by paper prototypes, we can't *really* be sure about our application's UX. However, the testing session confirmed that, for the most part, the placement of our UI elements and the general flow of the application was on the right track.

Our observations provided us with some interesting feedback. To keep it short and simple, we'll summarize this information a bit:

- All three testers started our third scenario by clicking on the *Add Task* button on the application's home screen. Whilst a valid action, this wasn't the behaviour we were expecting – It will be possible to do it that way, but we thought the users would do it directly via the calendar. A not-so-explicit scenario could've also been the root for this. Either way, it was definitely curious.
- The action of *starting* a task wasn't perfectly clear for one of our testers. This made us reconsider the amount of buttons/icons present on each task item.

Other than that, the scenarios went pretty well, and we're looking forward to completing our computational prototype!

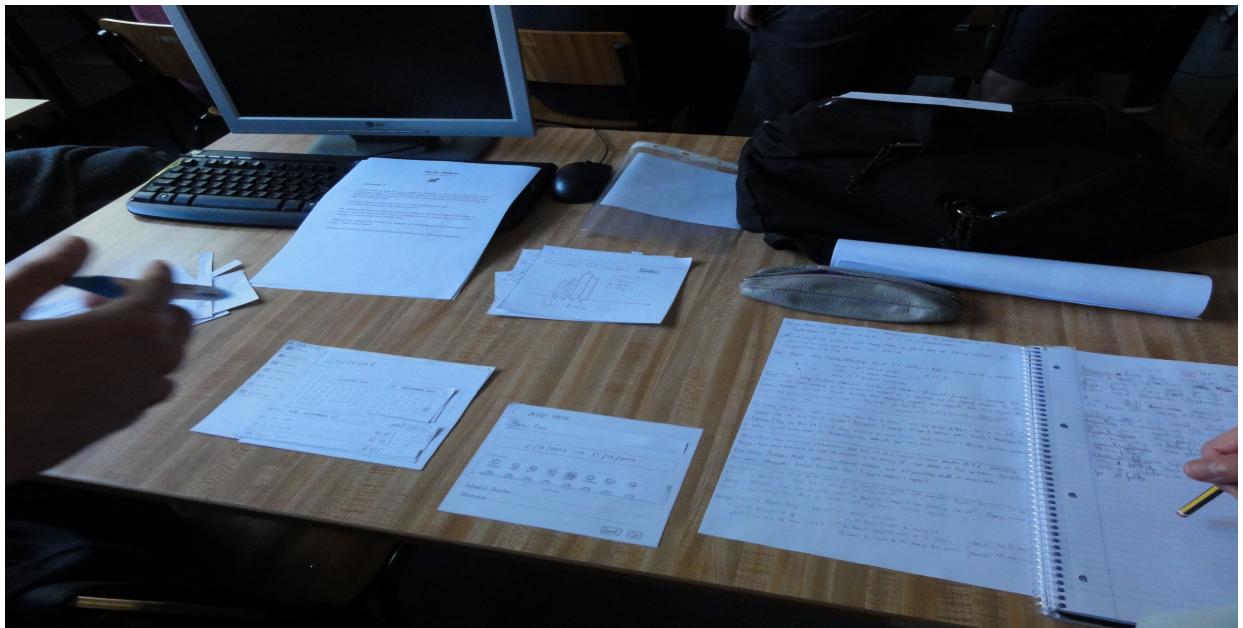


Figure 1: An overview of our testing table.

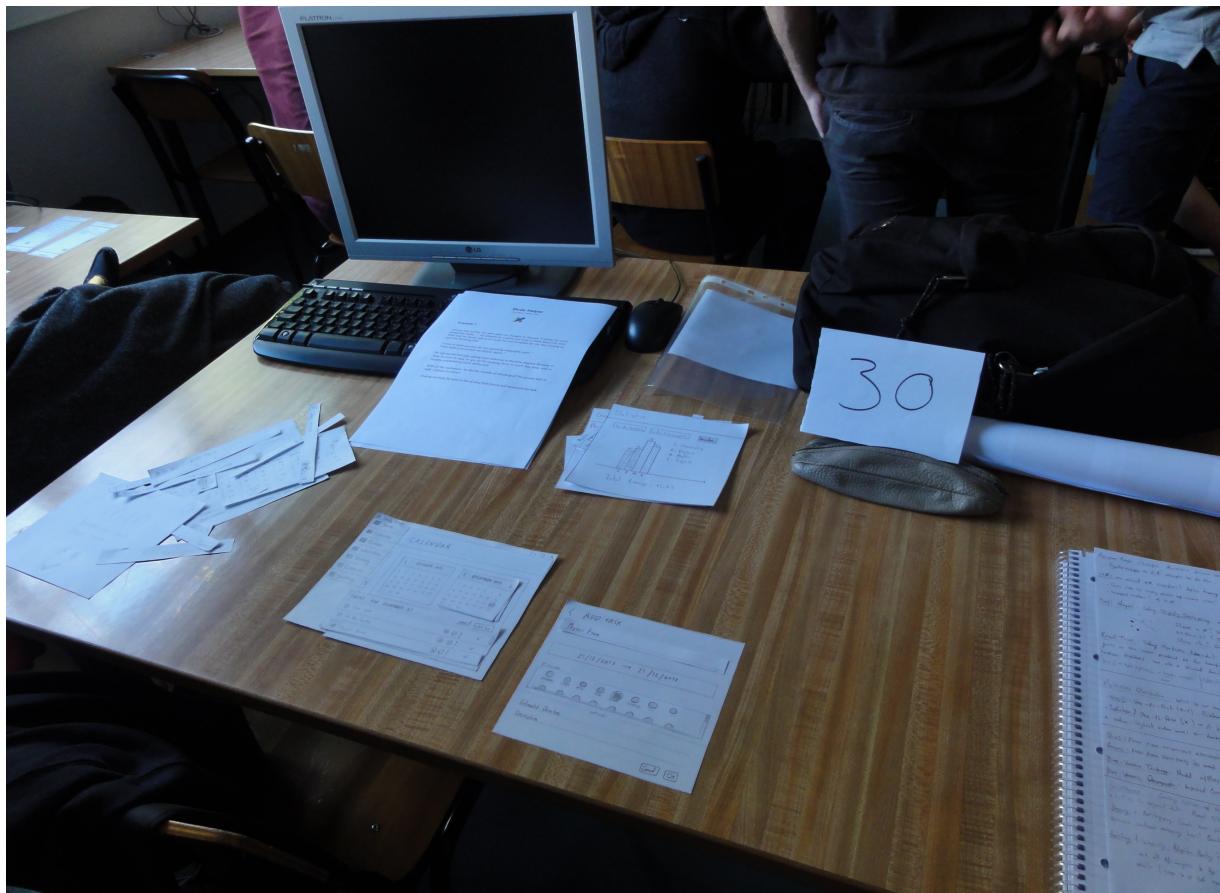


Figure 2: Another overview of our testing table.

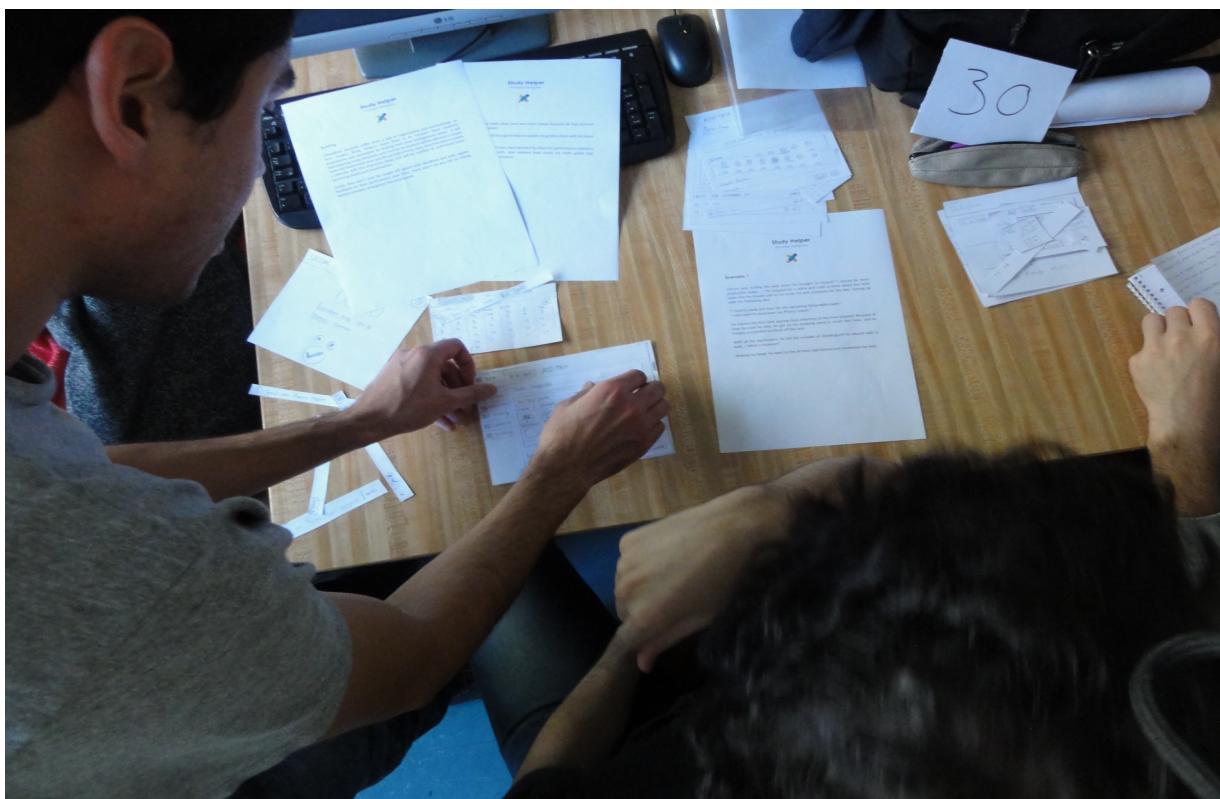


Figure 3: One of our testing sessions in action!