Usability report team „We deserve arrays"

For testing the usability of our LoFi paper prototype, we decided to use a task-based experiment. Our two subjects were one of the group members' flatmates. We defined a task that should be completed by the subjects and instructed them to verbalize their thoughts while using the prototype as per the "Thinking Aloud" method by Nielsen (1994). Simultaneously, the time to complete the task, the number of clicks needed as well as errors produced were recorded. The two defined tasks were as follows:

Task 1: Start in main menu → Check out dishes, choose a dish, find out if it's vegan or not, add it to your cart and order it

Subject/metric	Fastest possible time	Least number of clicks	Time needed	Number of clicks	Mistakes
Subject 1	20-25 s	4	1min 4s	6	1
Subject 2	20-25 s	4	1min 16s	7	1

Task 2: Start in main menu → Pay for your dishes

Subject/metric	Fastest possible time	Least number of clicks	Time needed	Number of clicks	Mistakes
Subject 1	10-15 s	4	25s	4	0
Subject 2	10-15 s	4	22s	4	0

For the first task: the main points of confusion were, where to add a dish to your order and where to confirm the order. This means that the "order icon" (in the paper prototype a "+"-icon was used) needs to be carefully chosen and clearly visible to prevent any confusion. Furthermore, both subjects entered the meal "detailed-view", which would not have been necessary, and indicates that a more visible "add-to-order" button must be implemented. The icons for vegan, vegetarian etc... on the dish overview as well as the meal "detailed-view" were hard to notice, which might be a relic of the paper prototype and should be more easily visible in the final product. Also, at least when using the prototype for the first time, the disparity between fastest possible time and actual time needed was relatively large, so it might make sense to add a little onboarding to the final product.

The second task was relatively easy for both subjects. The disparity between fastest possible time and actual time needed was relatively small, and both users got the job done in the least number of clicks possible without making a mistake. One subject found it a little confusing, that ordering and paying is on the same page, while the other user asked about further paying options like credit card etc., because he thought "Paying in person" meant paying in cash.

It's also important to keep in mind that the tasks weren't used in the environment the end product is going to be used, that might also change the behavior and thinking of the subjects.

Literature
Nielsen, J. (1994). Guerrilla HCI: Using discount usability engineering to penetrate the intimidation barrier. *Cost-justifying usability*, 245-272.