

Iteration 1

Research Question:

Taking cues from the last Field Report, we have decided to build a prototype of the “Late Add/Drop Form” that showcases *concise and clear* “Instructions” (about filling up the form and getting it processed).

The Heuristic Test of Talk Aloud method in our field report suggested that most of the users (the human subjects) did not read the instructions thoroughly, or in some cases did not even take a look at the page with instructions. When prompted to speak about their decision of not reading the instructions, most of them stated that it is long and verbose. While we do want the user to obtain all important instructions like- where to get the authorization from and what exactly is the deadline for adding or dropping a course; we certainly don’t want users to be overwhelmed with information.

This brings us to the idea of creating a prototype with a column of concise instructions that is comprehensive enough so that it guides them through every step yet it is concise and clear so that it catches their attention. So, our research question for this iteration of field study for improving the usability of this form is:

Will reducing the length of the “Instructions” column while keeping it exhaustive, makes this form more usable?

This question covers the first basic usability of the form while keeping it complete. This is being done before refining the actual process of filling up the form so that “Completeness” is prioritized over “Refinement”. This leads us to create a more *“Horizontal Prototype”* as stated below.

A Prototype to answer this question:

The following prototype is formed by keeping well-known design principles in mind. Since, this prototype endorses conciseness of Instructions, following are some of the principles kept in mind while creating it:

- As Kelly Johnson stated the first principle of Usability design should be “KISS- Keep it simple Stupid”. It was stated as a product design principle and adopted by U.S. Navy in 1960. It surely applies to the usability design of this form where the Instructions are the basis of how a user would understand the process of filling up the form or get it processed.
- From Don Norman’s Principles of Interaction Design,

Visibility is the basic principle that the more visible an element is, the more likely users will know about them and how to use them.[1]

“Visibility. Make relevant parts visible.”[2]

Thus, it is very important for the usability of this form, that the Instructions are easily visible to the user. This can only be achieved if the Instruction column is concise and has only the important information needed, omitting any extra information. This will catch the attention of the users and would probably increase the probability of them reading the column.

- Also, the form needs the Instructions column for the purpose of “Affordance”. This is also one of Norman’s Design Principles. It suggests that an object (in this case this form) is more usable if it explains the process of how you could use it. The explanation here is the “Instructions” column.

The Prototype: (Page 2)

INSTRUCTIONS

GENERAL INFORMATION:

- You have 2 weeks to add courses and 8 weeks to drop courses on SIS.
- After these add/drop periods, this form is used to add or drop courses (with extenuating circumstances) at the discretion of the Advising & Learning Assistance Center and Academic Standing Committee. Submission of paperwork is NOT a guarantee of approval.
- Students who receive approval to drop a course after the eighth week of classes will receive a grade of "W" in the course.

UNDERGRADUATE STUDENTS: ALAC (Academy Hall, Suite 4226)

- The signature of the course instructor is required for all LATE ADDS.
- An instructor signature is NOT required for a LATE DROP.

GRADUATE STUDENTS: Office of Graduate Education (1516 Peoples Ave)

- Include New Plan of Study (if applicable).
- Instructor (for courses) should send a note to the Office of Graduate Education to verify the student's attendance and that he/she is making satisfactory academic progress.

INTERNATIONAL STUDENTS: ISSS Office (1528 15th Street) signature is required for LATE DROPS IF FALLING BELOW 9 CREDITS(for graduate students) AND BELOW 12 CREDITS(for undergraduate students)

In addition to the above:

For Late Independent Study submissions

- Both the Late Add/Drop form and the Graduate Independent Study form are required.

For Late Thesis/Project/Dissertation submissions

- Both the Late Add/Drop form and the Thesis/Project Dissertation Registration Form are required.
- Advisor and Graduate Program Director should include a note outlining the reasons for submitting at this late date and a brief description of research and academic progress to date.

Usability test script:

We used talk-aloud methodology last time to analyze the potential issues with late add/drop form. In the thinking aloud test, we asked test participants to use the system (forms in our case) while continuously thinking out loud — that is, simply verbalizing their thoughts as they move through the user interface (forms in our case) [3]. This time we decided to conduct the same usability test to make sure that the results are being generated in the same manner with the same methodology and possibly the same environments. We aimed to gather insights by observing the subjects about- whether making the Instructions column concise, leads to better usability, or not. This study was intended to concentrate on the horizontal model to make sure that the content of the form is the same, and we expect to move forward to the method of surveying the users about the content of the form in the next iteration.

The approach of horizontal prototype is being considered for two reasons:

- Firstly, the form stays “complete” while the process of making its usability better is going on,
- Secondly, while the form remains the same, it makes sure that this time the Instructions column is the ONLY reason for any change in the level of usability that this form would achieve. Thus, if it users fill it up with ease it would only be because the instructions are clearer than the last time (since everything else in the form remains the same).

For this report, we did a talk aloud with five people, individually. We wanted to get a broader perspective from people who are familiar with usability in terms of documents and people who are not very familiar with it. For this purpose, we decided to test the prototype with three human subjects who are not familiar with the concepts of usability and principles of design, and two others who do have some knowledge of the domain.

We took the same flexible approach to intervention, we used last time. We took notes as each of them sat down filling up the forms. We kept reminding them to talk aloud about their thoughts while filling up the form, asking them to explain more about the hurdles they face and closely observing their thought processes (especially noting their reactions towards the “Instructions” column in the backside of the page). But while doing this, we focused on influencing them as little as possible.

Report on the Results of the Test:

- Most of the users did read the instructions column this time.
- They told us that the instructions contain all the necessary information related to the form.
- They also mentioned that the instructions are well organized and easy to understand.
- One of them skipped some instructions in the middle and jumped directly to the next part. While the other one read the whole set of instructions.
- The one with some knowledge about the usability and design principles noticed that the instructions are perfectly aligned and bullet points make them easy to read and understand.

In the next iteration, we will be focusing on improving the overall design of the content of this form, focusing on aspects of alignment, order and spacing, resultantly improving its usability for the users.

References and Citations:

[1] <https://medium.com/@sachinrekhi/don-normans-principles-of-interaction-design-51025a2c0f33>

[2] The Design of Everyday Things. By: Norman, Donald A.. New York : Basic Books, c2002. Chapter Four - Knowing What to Do. "Visibility and Feedback".

[3]<https://www.nngroup.com/articles/thinking-aloud-the-1-usability-tool/#targetText=Definition%3A%20In%20a%20thinking%20aloud,move%20through%20the%20user%20interface.&targetText=To%20run%20a%20basic%20thinking,Recruit%20representative%20users>.