

Usability Study

The user was asked to submit entries and then directed to do some basic manipulation of them. The first instruction was to add an "ICS 101"-titled entry on August 20th, 2007 located at "art 132 from 9:00am for 3 hours. This, we felt, was meant to be a guide to the kinds of information that would be needed for the rest of the test; it was also intended to serve as an aid for users who, not knowing what the program is, might not have any ideas on what to add initially.

The user was then directed to add 3 entries of their own for "today" and then add one to any other day of their choosing. This would give the user the freedom to add time or location at their leisure and see how they interact with the program with a little bit of freedom as if they were actually choosing to use it. Also, if there were problems with adding the first entry, this would give them a few more attempts to see if they had any consistent issues.

We then asked them to pick an entry and change the date, to see how easily they would be able to handle editing entries through this interface. After that, we asked them to remove the superfluous details of an entry so that it just contained the name. And the final editing test was to see how intuitively they could check off events as complete by having them complete 3 entries.

After having them remove an entry, we requested that they export the work that they had done and quit the program. These instructions were written on a piece of paper given to them to follow at their own pace while we took notes. We gave them minimal instruction, hoping that we would see how self-apparent the interface would be. Very basic instructions are available through the help section of the menu bar, that we hoped any subject having trouble would be able to access on their own.

We had a short questionnaire for them to rate from 1 to 5 how easy it was to input data, submit entries, navigate through the lists, edit entries, and how likely it would be that they would use the program willfully.

Results

The experience was much more troublesome than anticipated. Of the 5 users, the average was 180 clicks and 13 minutes per run from adding the first entry to exiting the program. During that time we were able to discover multiple errors with the interface itself and 1 error with the underlying functions (delete). The users were always confused by the errors and had to be told to ignore each one to prevent multiple re-attempts.

We recorded noteworthy monologue comments:

- "What?"/"What the..."/%&*# - 5 times total
- "That's confusing" - 3 times total
- "That's not good" - 1 time
- "You'll need to fix that" - 1 time

1 user unnecessarily added an entry, but was able to fix it with 2 clicks. The same user then accidentally deleted an entry he was trying to edit and spent 45 clicks fixing the error. He ended up with the correct results but never actually used the edit entry function to do so. Also, users naturally tried to click next to the entry itself to check it off, when our system is inherently counter-intuitive as is.

Comments on the questionnaire include:

- Problems with edit, how to edit is confusing/edit doesn't work - 5 people
- Duration format was confusing
- -1 values for time was confusing
- right-click/keyboard shortcuts (tab, ctrl-c, ctrl-v) functionality was missed
- Navigating dates was difficult

The average score for the difficulty of entering a date was 2. Editing an entry was 4 and navigating was 2.2. But what was truly surprising is that the average score for willingness to use this program personally was 3 - right in the middle.

The obvious interpretation is that our GUI needs work. Specifically with navigation, editing, completing and consistency of button highlighting and dis/enabling. What I learned, painfully (since I thought I already knew this), is that it is easy to take for granted the knowledge of how a program works when you yourself design it. What seems obvious to the programmer is often not apparent at all to the end-user.

But at the same time, there were positive comments. A couple of the subjects noted surprise at how well it was put together, perhaps expecting something worse. Held to a commercial software standard, FloydCal falls flat on its face, but I think the fact that our users were judging it in comparison to commercial software at all is encouraging. The vote of 3 that they would use it willfully is indicative of that (or of a fear to offend, since they were personal acquaintances).