

Contribution to GNOME Usability Test

By being new at the Usability Testing universe, I started searching around to understand and learn more about it. I could relate deeply with the reason of using Usability Testing (UT) in open source software, because if is not obvious, easily one can come back to a comfort zone. The idea of being a facilitator to open source software, so people don't choose proprietary software over it, is something that motivates me.

Organizing and performing the test

The test was made using GNOME 3.22 desktop environment and Debian 9 (Stretch) operating system, with five testers with different Linux background, different genders and different ages. The two chosen applications were Gedit and Nautilus and the tasks were taken from previous UTs that I was given permission to use. My behavior and the way I conducted the test was inspired by *Ciarrai's* summary.

I ran each test individually and with no one else in the room. I started the test by letting them know that they weren't the ones being tested, that there was no running clock to complete the tasks and that there was no problem to quit a task if they wished. I explained a little bit about open source software and the importance to improve the user experience in it, and that I would be sitting next to them to see how the software was going to work. I stressed that I would be there to mediate the experience, help with any general issues that they might have, but I wasn't going to provide assistance to complete any task.

I asked permission to record the audio of the experience and asked them to talk out loud about what they were thinking during each task so I could understand their logical thinking.

After each experience I listened the recorded audios, took notes and documented the test results using a heat map. This was the heat map result:

Gedit	P1	P2	P3	P4	P5
T1. Use the "Find and Replace" tool.	Yellow	Green	Green	Orange	Green
T2. Save under a new name.	Green	Green	Green	Green	Yellow
T3. Change font and color theme.	Orange	Yellow	Red	Black	Red

Nautilus	P1	P2	P3	P4	P5
T1. Search for a specific folder.	Green	Green	Green	Yellow	Yellow
T2. Increase the font size.	Green	Green	Green	Green	Green

Subtitles: Tn for tasks; Pn for participants; Green for easily completed the task; Yellow for some (but not too much) difficulty; Orange for some trouble (had to poke around); Red for severe difficulty and Black for unable to figure out and gave up.

Analyzing the results

The five testers use computer daily and have different operational system backgrounds. Three of them use Linux system, being one a GNOME heavy user and two familiar with the GNOME environment. The other two testers are proprietary systems users. Taking into account this mix of levels of knowledges, I believe that I got very interesting results as it can be seen at the heat map that they'd difficulty with the same tasks.

It started with the Gedit opened with the text "Note to myself" written on it and the first scenario task was to make some already stipulated word changes using the tool "Find and Replace"(T1). All testers were able to find this tool, some of them took a little longer since they'd never used this program before. Once they seemed more integrated with the system, in other words had clicked all around, it became easier to conclude the tasks and they became more confident as well. Nobody seemed to have had any problem to find the "Save As" and save under a new name (T2), although one participant clicked directly at the Save button and continued clicking a couple of times more expecting to pop up a "Save As" window.

The bigger difficulty was to change the font size and the color theme (T3). Even the participant that uses GNOME and it's tools daily started to feel nervous since he wasn't finding this setting. Two of them highlighted the words and clicked with the right button to look for it between the options that opened. All of them spend some time going around the hamburger menu, specially at Tools and reading again and again.

Once the testers found the setting at the panel, it was intuitive click at the chosen color theme, but for the font size they've clicked a couple of times at the options, that was frozen, before realize that they needed to deselect the box above it.

After the task was completed, they said that they only clicked at the Gedit panel icon, because they decided to click at everything possible. Three of the testers mentioned that even though they understand that it's a preference setting and not a one time thing, it would be better if it was inside the work space at the hamburger menu.

All participants thought that both applications were intuitive, specially Nautilus. Two participants started to look for the stipulated file (T1) going through each folder at Nautilus before they realize that they could use the magnifying glass resource, but I blame the nervousness for that. What I think is interesting to highlight is about shortcuts conventions - three testers used "CTRL +" to increase the font size (T2) without even thinking about looking for it.

No tester took over than 18 minutes to complete the whole round of scenario tasks. Two of them were very nervous about having difficulties to complete a task and were taking personal, even though I was repeating that they weren't being tested. I also thought it was hard for me to repress my willingness to help whenever they seemed stuck at some task.

I enjoyed learning about UT and I felt motivated to try new open source programs, not only for personal use but as a contribution tool to GNOME's software improvements.

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