

User Evaluations

For the user testing and evaluations two individuals were chosen who have no technical experience in the field of computer science and who have never accessed or had any past exposure to the web application itself. One of these individuals was an interior design and drafting design student, Katherine, whereas the other was a chemical engineering major, Josh. These two were chosen as testers primarily because they could be trusted to give honest and constructive criticism. Furthermore, their contrasting backgrounds guaranteed different outlooks and expectations of the web application.

Both of the testers were asked to imagine themselves as physicians that might use this electronic healthcare system in diagnosing a patient. Very little direction or explanation was given here, as the first test was to determine the ease at which they could log into and navigate the site, which both individuals were able to do with no difficulties at all. Next, they were asked to create a patient, update a patient, create a form, create a questionnaire, update a questionnaire, and review a form. Without further help, other than clarification of the expected actions, the correct pages were able to be navigated to for each of these requests, however further explanation was needed in a couple cases. Largely, it was clear that the questionnaire creation page was not self-explanatory enough as the many questionnaire components, buttons, and inputs and all their purposes were not extremely well documented or intuitive.

Throughout the whole project, aesthetics and visual choices were always a consideration. Therefore, getting an outside opinion on the matter was one of the major intended outcomes of these tests and definitely played a part in choosing Katherine as a tester and she definitely delivered as expected. First, the color scheme was liked by Katherine and Josh alike, both commenting on the blue being a good, professional color. However, Katherine did comment on how, although not a bad thing, there was a lot of white and some individuals prefer more graphics and illustrations to a plain and simple look. One part she did like as a subtle addition was the gradation in the background opposed to a solid color. Although, she did note that the text color could be improved from a readability standpoint in all of the inputs that had temporary grey text within them on a dark blue background. Another couple suggestions she gave were to do with the buttons and dropdown menus across the application. Although they were uniform, she did remark that there were some improvement that could be done. For the drop down menus, they didn't follow the same rounded corner design seen everywhere else in the website and so seemed somewhat out of place. On the other hand, the buttons seemed too uniform. As she so described: "If the 'Add Question' is to be a subcomponent of the 'Add Question Section' this could be shown visually by having the 'Add Question' button be significantly smaller than the 'Add Question Section' button."

Additionally, Josh brought some of his own useful insights and circumstances to bear here as well. Being best described as a somewhat rash creature of habit and self proclaimed technical illiterate individual, Josh actually gave a number of completely unique insights that were thoroughly unexpected. One such situation occurred in the questionnaire creation page; here he assumed that pressing enter would automatically move to the next text field, and thus

inadvertently attempting to submit the entire form. Luckily, there is a confirmation popup window that asks if you are sure you would like to submit. However, this is where the second insight comes in. Without a second thought, maybe due to desensitization to such classic popup confirmations that are so prevalent all over the internet, he accepted and submitted a blank form followed by closing the second popup window stating that the form was successfully submitted. All of these events happened in about the span of a second, after which he was completely unaware as to what happened. Lastly, on the second attempt to submit a questionnaire, a new error arose, a failure to execute. After trying to determine exactly how this could happen, as it obviously worked previously, I saw that he was no longer connected to the internet, causing this strange error. Overall, these strange situations resulted in an understanding of how real life users might inadvertently misuse or break the application. Restricting form submission to the 'submit' button, using unique popups that would catch the user's eye as being something important, and creating an error condition not just for bad information being submitted, but the inability to connect to the server in the first place are all complications that were never even remotely foreseen as problems before being found in this round of tests and evaluations.

All in all, these tests were very useful and brought to light usability issues, user prompt and direction issues, aesthetic choices, additional feature ideas, and even unknown bugs that were previously overlooked. Not only did the criticism lead to new insights, but the liking and even praising of certain design choices further cemented them as useful and permanent contributions to the overall design and functionality of the project as a whole. Furthermore, this experience exposed me to new ideas of what a user might expect. For instance, both parties in this evaluation responded similarly to certain small expectations. This showed that users not only expect a product to be able to perform all necessary features, but also expect it to also provide all the normal responses that have been ingrained into people as universal expectations through the thousands of applications everyone uses everyday. Following this standardized formula included small things such as links and buttons bolding, underlining, or altering in some way from mousing over them and drop down lists disappearing upon deselection to name just a few.