

Tech Trio

<https://trellykan.github.io/hci/>

Project Description:

There is currently a lack of tools and resources available for dementia caregivers to effectively monitor, understand, and cope with changes in their patients. Therefore, we are designing a smartphone app that will make it easier for dementia caregivers to interact with their patients while providing them with a variety of new resources and methods that may ease the stress of caregiving and provide better help to the patient. There will be a smartwatch companion device for caregivers to give to their patients. The device can track location, monitor vitals, and assist with communicating with the patient.

Overall Tone

The overall tone of feedback received from our peers was good. We did not have any function or page that need to be deleted and redo it. Most of our design problems are minor. Their design changes were usually all about making it more mobile-friendly. They proposed user friendly functions instead of redesigning the whole dashboard/App structure. They say our flow was good and enjoyed that we added some design principles we learned like Feedback into our app.

Problems/Questions

Design Changes

Feedback	Criticality	Response
The font size on the “Top Questions” board is too small and hard to read.	Critical - since most of our age demographics is older (therefore their eyesight is not the best) or in a rush, it should be easily readable.	We will increase the font size of our community feature. This way the section will take up more real-estate on the screen. This way users can see it clearly even if just quickly glancing at it
Consider adding a row of functions at the bottom of every screen instead of having them on a hamburger menu.	Critical, removing them out from the hamburger menu will increase the efficiency of using the app.	We will think about adding a button that can expand to a round menu that have all the vital functions. This can save steps for users to call or monitor a patient.
The forms are not mobile-friendly. Need to incorporate more mobile UI	Very critical - We need to make the forms more mobile friendly for our	We will research best practices for forms that match what capabilities we want. Radio buttons and checkboxes

principles. Have bigger checkboxes. Instead of radio buttons, use a dropdown to save screen space.	users to interact with.	can be switched to dropdown boxes so it more mobile friendly.
“Press and hold” to delete is iOS specific. Consider a “swipe left” to show delete option to make it more universal.	Not very pressing because it doesn’t affect functionality, but good to note for final touches.	This problem occurred because we are used to using iOS ourselves, but it’s a useful point that was brought up. We will solve this by rethinking the Delete design. Swiping left/right may get confusing, so there will instead be “X’s” that appear on each item in the Edit screen to denote deletion.
Call function can be added to Monitor since it’s a simple function.	Not critical but a good suggestion to be implemented.	We conceived the Call function as a standalone function, but it’s true that the buttons/screens for calling are simple and can be incorporated into the Monitor function to reduce space.

Suggested Features/Existing Features (that needed more clarity in the design)

Feedback	Criticality	Response
What is the use of the search function on the patient dashboard?	Very critical, we will change the search button into something more useful.	We will change the search button to an add button that can add “to-do” and alerts for a patient. It will also include function to repeat the to do. For example, the “take medicine” to-do can be repeated for every day and user can set the repeat time.
Need an easier/more seamless way to switch between patients. Checklist function needs to be improved. Consider a patient queue that aggregates notifications from all patients.	Critical - This is the main screen of our app so we need to make sure it is fluid.	We as a team are still figuring out this functionality. They suggested that we have a patient queue feature where the patient who need attention first is at the top. We really liked this suggestion and will definitely implement it in our app. We are also trying to figure out if we want to focus in on professionals or non-professional caregivers. Once we fine-tune those aspects, we can better design the main screen.
How will the app differ for	Critical - This is the main	As said before, we will discuss who we

caregivers who have 1 patient versus multiple patients?	function of our app so we need to discuss further as a group.	want to target with our app. From our interviews, we noticed that professionals and non-professionals do want the same functionality. The one difference is that one usually as one patient and the other has more.
The use of a smart watch is good, but it doesn't seem to have a lot of functions. Consider adding more watch capabilities.	Not very pressing to add functions, but needs more wireframes for watch interface..	This is something we acknowledge and will keep in mind for future updates, but the basic functionality of the watch to monitor vitals is its primary purpose. As an afterthought, we did realize we should include more wireframes for the watch interface.
Consider moving the alerts to the monitor screen instead of from the checklist screen.	Need to be considered more if the change is necessary because the dashboard is meant to show alerts and to-do .	We will redesign the dashboard and to show each part more independently. However, because the dashboard is design to show the basic information of a patient, so we will unlikely to delete alerts from the dashboard.

Overall Improvement

Our peers found the overall design of our application to be effective, although a few minor changes need to be put in place. Many of these suggestions were centered upon making both our mobile and smartwatch application more user-friendly and practical for patients and caretakers alike. Our plan is to redesign our forms with more checkboxes and dropdowns to make the mobile application more friendly for users. We will also reconsider the font size and typography of our community board so that users can see questions without having to strain to read anything. Our biggest focus will be to create a more seamless way to switch between patients and to make bigger use of the search function of the patient dashboard, since these are key aspects of our mobile application, and having access to information about patients is our main purpose. One issue we may run into while redesigning these aspects of our application is having to reform other parts of the app to create a better and more seamless flow. As we go through another iteration of our design, we will be focusing much more on this seamlessness while ensuring that our app remains mobile-friendly.