

Name: Working conditions

<Files\\EU-2> - § 4 references coded [18.11% Coverage]

Reference 1 - 4.60% Coverage

¶53: The app I mentioned is not much reliable in the sense that the decision it provides, because it doesn't get that current situation. It is actually not quite reliable for the stress level and I'm not quite satisfied with this. Then, regarding the sleep monitoring as well it is quite unreliable, maybe due to my special condition, because when you actually get sleep, your heart rate falls. ‘

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¶55: I think the, the fitness tracker watches actually flag notification when they observe a very low heart rate and you're not moving for sleep issues, okay this guy's sleeping, but because my resting heart rate is high, also cannot actually check my sleep hours as well. Even if I'm sleeping, it actually understands or records that this guy is awake and active.

Reference 2 - 5.04% Coverage

¶62: For the other apps Google fit that use I observed some. I think they actually have a lot of things to improve. For example, I think Google fit calculate the step count and distance based on the GPS data and sometimes when I actually walk inside a building, it doesn't register my steps. So, I think it actually doesn't take into consideration about the where the user is and when he actually loses the GPS signal, it cannot register step counts. I think that's the biggest drawback of Google fit.

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¶64: Thus, I used an app named Runtastic that was quite good for tracking how much you have run, what was your pace and all that relative parameters, but other than that, it has the same problem. So right now, I actually don't use them much. They are in my phone, but I actually don't use them much. I mostly use the Garmin Connect.

Reference 3 - 5.22% Coverage

¶71: The limitation they have, I guess, unless the device gives them a provision to register the step count, they actually come too much, I guess, because it's the device like in front-end, I don't think there is a step counter, like a watch, like a fitness tracker watch in similar forms. They don't have that. So I think they actually calculate the state based on how much length you have covered. Based on this they actually don't count the steps accurately. So you can consider this as a design problem. I don't think they (user) actually know much unless the device gives them a provision to register the steps.

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¶73: However, the good thing is when I'm driving, they can guess that I'm walking based on speed i.e., distance covered vs time spent and disregard these data. Even then, some problem in the recommendation and the working process be to fixed.

¶74:

Reference 4 - 3.25% Coverage

¶80: Ohh one more things is the cost related to this, you can say living situations and educational attainment. For example, most of my friends and family are highly educated and they don't have much of the difficulty to use such apps, but how the app collect data present information is bit difficult for some users who are not technologically proficient. For example, it show some numeric parameters for stress level, so how a user of mid 60's like my mother could understand these unless they get educated on the app working process.

¶81:

<Files\\EU-3> - § 3 references coded [17.43% Coverage]

Reference 1 - 5.09% Coverage

¶161: Then, we're not talking about building a kind of physical tool, anything online should be very flexible. it's really just spending effort and resources to co-design. If it's human centric, you can see the human as not as a kind of stereotypical a user, it has to be somebody that you actually speak to the from the potential user group and get their opinion, not just once.

¶162:

¶163: Then, sometimes the patient centric or in a user centric means you ask the requirements, and then you come back to them to do the evaluation, that's not good enough. You really need to work with them all along, developing the tool and getting it right in terms of culture, language, gender, and all these other things that you're talking about.

Reference 2 - 6.33% Coverage

¶189: I like the tools which are very responsive. It's not necessarily it helps, but I know, I have experienced with an error fixed by left a comment. Like provided feedback, there identify the issue. And I was very impressed that I got a response from the company very soon. saying thank you for your feedback, we'll take it into consideration, we'll fix it. I think, this is one of the sort of opportunities for E health apps, they should listen to the users, if they haven't had the chance to listen to them upfront, they should actually trace how the system was used. And if any human centric issues is been a reason after by the real users, not potential users, they should actually take it as a opportunity to improve. So it should be a continuous improvement process. It means, one of the major challenges they have is continuing and continuous monitoring in health app development and deployment.

Reference 3 - 6.01% Coverage

¶191: I know it is challenging. But again, with rapid development, it's much easier to provide new versions that has a improved interfaces. Anyway, all I'm saying is that, once they are considering to overcome those limitations in current approaches e.g., recognizing or handling some human centric issues, I guess it comes back as review or form of feedback. So how much resources are available post implementation custom apps developed now a days is a major questions. Then if the app development company moves on, what could happen to its users. I had some apps that being discontinued after a while, I started using them and they seem to be useful, but then I tried to use them again and they answer was sorry, we not maintaining that app anymore. So do you want to use an app that is not maintain anymore? No right. So the there should be policy followed.

<Files\\EU-4> - § 3 references coded [10.92% Coverage]

Reference 1 - 1.56% Coverage

¶161: Then, working process and recommendation need further research as I found some of the health apps doesn't consider the user preference.

Reference 2 - 3.95% Coverage

¶170: Okay lets consider the fitness tracking app I use, it actually does not send all of the data to my smartwatch. It gives the main data in the mobile screen. What does it mean everytime I have to switch on my mobile phone to look over these data. If it could send more data to the watch, I could watch it from my watch screen that might be better.

Reference 3 - 5.41% Coverage

¶175: first of the health app need to provide such mechanism so that user can make it like more customizable. Like the places where it shows the list of the notification and places where they show the body of the text/recommendation, maybe they can make it more customizable to the customer that we can easily drag the body portion and the least portion here in there. So that it gets more visible to me which one I want to see more. But that option is not there I would say.

¶176:

<Files\\EU-5> - § 1 reference coded [9.91% Coverage]

Reference 1 - 9.91% Coverage

¶156: I think working process and recommendation part of the app that I use need improvement. The outcome part that this app basically shows what a person need to do. I mean, there are some specific designs that have been followed, for example how to use arm four legs for a bally exercise, but they don't have any particular workout plan and no detail is mentioned about how it will help. So I think they need to add this information in the example explanation. Like they can add a button or this section in the design so that user get more informed.

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¶158: Then, even if you follow their exercise chart, how can I think they should provide improvement unless I know the theory behind this.

<Files\\EU-6> - § 3 references coded [9.18% Coverage]

Reference 1 - 2.28% Coverage

¶149: I think filter out unnecessary information is a challenging since sometimes there are there are some contain not suitable for the users.

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Reference 2 - 5.57% Coverage

¶160: Okay I found most in working process. For example, if I do search for my past data in the health app that I use, its keep showing me same this again and again, this might not be interested and some annoying. What I found that it keep track of my past use and then do recommendation as per the last few scenario even I don't asked to do so.

Reference 3 - 1.33% Coverage

¶160: Mostly, the UI is good, but yes, working process need a bit more intelligence.

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<Files\\EU-7> - § 4 references coded [22.07% Coverage]

Reference 1 - 2.21% Coverage

¶164: Then for the children and older users if the app use some sort of related icons than actual text for different symptoms and different filed of the app, then it would be much easy for then to understand.

Reference 2 - 5.44% Coverage

¶166: Of course, the language and culture is always an issue in this part of the world. First of use of technical language in the app itself should be minimized. For example, if some recommendation shows you DM is X and LCS value is Y, so on so forth. It actually doesn't mean anything to the end-users. However, if we provide the same recommendation like your sugar lever X% higher than normal sugar level and we pretend you might have a diabetics, that would have more meaningful meaning to the users.

¶167:

Reference 3 - 8.46% Coverage

¶182: First of all information sharing is limited, everything should be integrated. For example, app should have an integrated database between themselves and among corresponding authority. Then, if a GP switch their job location, the patient information should also be available in their new posting location too, since most of case the previous patient want to visit the same doctor.

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¶184: Then, misinterpretation of user data should come to absolute zero level, anything above zero is not accepted. Thirdly, all app should use as simple language as possible for the enduser, should incorporate automatic translations services, and if possible, interpreter services.

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¶186: Finally, it the privacy of user information need more concentration from all the involve parties of health app.

Reference 4 - 5.96% Coverage

¶196: Yes they consider at some level, but I found once the app is launched it is not properly maintained, not provide update for some reported issues and I found most of it in telemedicine apps

¶197: One more think I want mentioned, it seems expert were not involved during the app design and development. Then, the technology is not developed itself, especially for health app and hence coordination is missing. For example, the developers of health app seem more focused on popularity of their app rather actual impact and effect of the app to its users.

<Files\\EU-8> - § 7 references coded [40.42% Coverage]

Reference 1 - 4.75% Coverage

¶142: While using this app I felt like it gives me notification often in a manner that I didn't like at all. This is specially due to the interface and sort of animation they provide. For example, when it tries to notify me about drinking a glass of water I found the animation comes in with sound, but sometime you know this is annoying as I have no option to choose which notification to show and which don't.

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Reference 2 - 2.72% Coverage

¶144: I think this also relate to the mental challenges, because I have to keep in mind to do that, and when the app is reminding me to do that, I fell it can be done in a much better way so that the user can follow the advice willingly.

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Reference 3 - 4.07% Coverage

¶146: Then, I also have to input all the food intake taken during that time. If I had something like not that much heavy stuff, then shows a huge red bar and keep posting a notification a while. This is not good, as I know I have taken sufficient amount of food, hence I felt sometime it actually disturbing to me, like little bit frustrating sometimes.

¶147:

Reference 4 - 2.52% Coverage

¶159: In my experience, the main challenge was how to present something to the user so that it remains information but don't frustrate them. So in my point of view, the this how you designed the interface is the main point.

Reference 5 - 9.56% Coverage

¶161: I found another related issues with a telehealth app that I used. This app also helps to book an appointment with your doctor. While using this app for booking a doctor appointment, I have to search the doctor name and the hospital name. So whenever I'm, looking for that doctor, it's really difficult because I have to type the whole name of the doctor, they won't give you any recommendation or any suggestions. You know name of Srilankan people is usally have long name, and I have to type the full doctor name and then then only show what are the hospitals that the doctor is available. So I have to type the name again and again for searching. This is like really difficult to deal with. Also in that app, there are few things in the design, like, the buttons are not properly placed, text are too clumsy and so on.

¶162:

Reference 6 - 5.43% Coverage

¶169: I should clear one thing is that, I didn't find huge differences while using the health app and apps from other domain, like facebook, WahtsApp. But, it seems there is big a difference between the health app and other apps for the elderly users. Like, my mom easily use WahtsApp and Facebook, but even after I teach her how to user use the health app couple of times, she doesn't seems to like it, I should say use it properly. So that is the difference as I feel.

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Reference 7 - 11.37% Coverage

¶176: I found the app provides only certain aspects free and for the other I have to subscribe. That's file, what I did I subscribed once. But the problem is after a while I found this is not the app I was expecting, and want to unsubscribe, but it was really difficult for me to unsubscribe. So there is certain limitations that the user could be mislead and misguided. Actually, after seeing the description of the app, I felt like okay, this would be nice to have all those things together. It's there to track the fitness, stress level, health documentation etc. So I downloaded that one. But after a while, when I was searching the details, I found, theoretical proof behind many feature is not their, some features are misleading, some features are annoying. Moreover, they don't provide the things that they mentioned in the

description. So I wanted to unsubscribe, but I had to write to them and get it unsubscribe because I can't find a proper way how to unsubscribe.

¶177:

<Files\\EU-9> - § 4 references coded [21.44% Coverage]

Reference 1 - 7.12% Coverage

¶145: Okay, for example in Bangladesh rice is the most common food for lunch and dinner, sometime as breakfast as well. However, when we give such input the app, it can't relate that parameters. Basically, I found it has some pre-calculated data measurements and it shows output parameters based on it. I mean, it consider user inputs, but based on pre-calculation its some results. That's why it is bit unrelative for us, It means there is problem in its working process.

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Reference 2 - 4.89% Coverage

¶157: Then, the data storage. I found most of the data are stored in colud in raw format. That means, it is a highly potential candidate for being hacked. Moreover, it these data are being used in future without my consent, what can I do? This is always a problem with not only health app but also for the all the app that use.

Reference 3 - 3.49% Coverage

¶164: Then, data processing in back-end should have based on some authentic sources, for example the app provide the unreal nutrition information for me as I mentioned early. Overall, I can say consideration on basic issues is missing.

Reference 4 - 5.94% Coverage

¶169: One of my friend said that he was bit mentally upset when using the app as he has some preexisting medical condition. The app doesn't consider that in its design and working procedures.

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¶171: Then, the app working process consider the previous history of use, not from the single users but also from the group of users. Therefore, there is good chance that it shows some incorrect results.

¶172:

<Files\\EU-9(10)> - § 5 references coded [23.08% Coverage]

Reference 1 - 5.19% Coverage

¶142: In the app I found there is one major problem related to tracking the data. As I said, I mainly used this app for tracking of my several issues, I found tracking is difficult. Moreover, I can't change the tracking features. So, I think it will be more difficult for the elderly people as well as for the person who are not tech friendly.

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Reference 2 - 5.13% Coverage

¶49: I also think that the some personal data that the app asked is not required for tracking. For example, it asked the permission to access the mobile contact list and media file. I really don't know why such list of contact and media storage is required for tracking. It seem they want some my valuable data for their future business.

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Reference 3 - 3.27% Coverage

¶54: Okay, I think if the app data can somehow integrated to doctors computer, it will save a lot of time. Doctors can easily see my progress as well if anything interesting that happen for a particular period of time.

Reference 4 - 4.29% Coverage

¶65: Then it is related to the working procedures and recommendation. For example, the don't show any pop-up of some thing like this even when my BP / strees level gets too high. If for example, some flushing RED light or vibration shown up with a message that would be much helpful.

¶66:

Reference 5 - 5.21% Coverage

¶74: Then, we also talk if the there is user manual with screen-shot included in the start-up that would help the new users. Some of the feature is not easy to access or understand at the very beginning, but after couple of time examining these feature, I found they are helpful, but initially I was unable to use these as don't know how use.

¶75:

<Files\\EU-9(13)> - § 2 references coded [8.52% Coverage]

Reference 1 - 5.10% Coverage

¶47: Then, sometimes we feel that the app is not appropriate for most of the children and for their parent, although is designed for them. I believe they (the app inventor) need to be more specific about the objective and follow some of existing mechanism to define this, which in results reflected in its design.

¶48:

Reference 2 - 3.42% Coverage

¶67: You say in UI and in working procedures. The interface need to be more simpler, and working process should be more clearer to users i.e., how it works should be explain more clearly with more simpler language