

Usability Test Report - HiFi Prototype

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Contents

Version History	2
1 Introduction	3
1.1 Executive summary	3
1.2 Participants	3
2 Procedure	4
2.1 Goals	4
2.2 Methodology	4
3 Results	7
3.1 SUS Results	7
3.1.1 Questions and Average rating	7
3.1.2 Participants SUS-score	8
3.2 Key comments	8
3.3 Tests	8
3.3.1 Test 1	8
3.3.2 Test 2	9
3.3.3 Test 3	11
3.3.4 Test 4	12
3.3.5 Test 5	13
3.3.6 Test 6	15
3.3.7 Test 7	16
3.3.8 Test 8	17

Version History

Version	Date	Name	Change
1.0	2020-12-03	Fredrik Thorsson Matthew Soulaka	Converted the document from drive into Overleaf.

Chapter 1

Introduction

1.1 Executive summary

The participants did most of the tasks/scenarios with the minimum amount of clicks needed to complete a task/scenario which indicated that the overall design of the application is understandable and easy to understand. Overall the participants felt that they like the design and that it's clean, easy and contains just the right amount of information. The participants emphasized the importance of a minimalistic design in application for these contexts and believed that it was achieved with this application. All of the participants believed that the initial was informative and contributed to making the navigation easier for a user. This resulted in that participants had much less problems with tasks related to icons of the navigation bar as the guide described what information that can be found behind each icon in the navigation bar. This is also reflected through the improved SUS-score (of 87.5 which is considered to be excellent) in comparison with the previous version which did not consist of an initial guide. Some of the participants had a few tasks which took more clicks than normal to complete due to misunderstanding of the task or, most often, due to the logic of the Goals-page.

1.2 Participants

- Participant 1: Male, 27
- Participant 2: Male, 26
- Participant 3: Male, 27
- Participant 4: Female, 29
- Participant 5: Male, 29
- Participant 6: Female, 58
- Participant 7: Female, 22
- Participant 8: Female, 24

Chapter 2

Procedure

2.1 Goals

The goal with this Usability Testing is to test our overall logic and design of the application. This to test the product concept and reveal and catch potential confusing experiences with the product in an early stage. The test participants will give the Company indications of how the navigation of the application feels and where improvements can be made.

2.2 Methodology

The participants will take part in the usability test remote by getting a link to our prototype and screen share the whole test process. The test leader will ask the participants to do some tasks or give the participants a scenario to complete. The participant is asked to think out loud when the task/scenario is conducted.

The tasks/scenarios/questions were:

1. Finish the guide that is displayed to get an understanding of the application. Did you find it informative?
2. You want to change your password. How will you proceed?
3. You want to enter a new value for your blood sugar level. How do you proceed?
4. You filled in that you were out walking this morning, but now you realized that you entered the wrong value. You want to change your previously entered value to the correct value. How do you proceed?
5. You have just disagreed with your cousin Amanda, who you previously gave permission in the app to see all your medical data you register in the app. But now you do not want Amanda to have access to this anymore. How do you proceed?
6. You want to see your goals related to diabetes. How do you proceed?

7. You want to see all your previously registered activity values. How do you proceed?
8. You want to see all your previously achieved achievements. How do you proceed?
9. You want to read more about the displayed tree and understand what it is. How do you proceed?
10. You have understood that the trees in the application are a form of gamification, how do you go about reducing the degree of gamification in the application?
11. You want to follow up your progress in one of your set goals "Lose 5 kg". How do you proceed?
12. You want to re-do the initial guide that was displayed when you first entered the application. How do you proceed?

Upon completion of the tasks, the participants were asked to fill in a form with the questions presented below. Participants answered through a likert scale from one to five where one means strongly disagree and five means strongly agree. This scale was then used for measuring the SUS of the application.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

The participants will also after the test be asked some post-test questions to gain a deeper understanding about how they felt about the product overall.

These questions are:

- What's your spontaneous impression of the application?
- What do you like most about the application?
- What do you dislike the most about the application?

- If you had to change one attribute in the design, what would you change?
- Did the navigation between different pages in the application feel natural?
- Was any task/scenario difficult to perform? why?
- Do you think that the English language of the application might have had an impact on your test, and if so how?
- What do you think Streaks mean?

Since the test leaders will conduct the tests alone due to some resource restraints each test will be recorded to make sure that the report includes everything. Lostness (amount of clicks and on what nodes), current thinking out loud and answers to questions will therefore be transcribed from a recording and be rewritten into this report.

Chapter 3

Results

3.1 SUS Results

The application received an average SUS-score of 87.5 which is considered to be an Excellent score according to the numerical SUS Scale. Below tables represent a breakdown of the SUS calculations.

3.1.1 Questions and Average rating

Question	Average rating
I think that I would like to use this system frequently	4.3
I found the system unnecessarily complex	1.1
I thought the system was easy to use	4.4
I think that I would need the support of a technical person to be able to use this system	1.4
I found the various functions in this system were well integrated	4.1
I thought there was too much inconsistency in this system	1.3
I would imagine that most people would learn to use this system very quickly	4.0
I found the system very awkward to use	1.1
I felt very confident using the system	4.8
I needed to learn a lot of things before I could get going with the system	1.4

3.1.2 Participants SUS-score

Participant	SUS score
1	92.5
2	95.0
3	90.0
4	87.5
5	82.5
6	77.5
7	87.5
8	92.5
Average SUS score	87.5
Standard deviation	6.5

3.2 Key comments

POSITIVE	CONSTRUCTIVE
I strongly appreciate that the navigation bar is minimalistic and does not consist of many options	I believe that the initial guide was informative but I wish it was a bit less extensive
found the initial guide very informative and helpfu	I found it confusing that I needed to click on a disease before viewing my goals
I like the fact that there was not too many subpages which made the system feel less complex	

3.3 Tests

3.3.1 Test 1

Date:	29/11
Location:	Remote
Test Leader:	Fredrik Thorsson
Test Person	Participant 1, Male 27
SUS Score	92.5/100

Summarization from scenarios and questions

The participant performed a well executed test with no major issues. The participant really liked the concept of gamification and thought it would be a motivation to keep doing your measurements. He liked that the application was shallow with not too many layers of subpages and that the navigation bar was visible at all times. He expressed a wish to be able to configure the application after his own preferences.

Results from test scenarios

1. Finished the guide.
2. The user had no problems with changing the password.
Amount of clicks: normal
3. The participant navigated easily to new measurement from the homepage.
Amount of clicks: normal
4. The user could easily find the edit icon.
Amount of clicks: normal
5. The user had no problems with finding the relatives setting under the profile page.
Amount of clicks: more than normal
6. Due to the guide the participant knew the star icon was the symbol for goals and could with no problems find the goals related to diabetes.
Amount of clicks: more than normal
7. The user first navigated to the goals page before landing on the previously activity values under the history page.
Amount of clicks: normal
8. The participant had no issues with the task.
Amount of clicks: normal
9. The participant had no issues with the task.
Amount of clicks: normal
10. The user could easily find the gamification levels on the profile page.
Amount of clicks: normal
11. No issues with the task.
Amount of clicks: normal
12. No issues with the task.
Amount of clicks: normal

3.3.2 Test 2

Date:	29/11
Location:	Remote
Test Leader:	Fredrik Thorsson
Test Person	Participant 2, Male 26
SUS Score	95.0/100

Summarization from scenarios and questions

The user quickly understood the purpose of the application and found it easy to navigate. The layout was structured and the design was appealing. The participant found the application user friendly. Understood the meaning of streaks and liked the gamification implementation.

Results from test scenarios

1. Finished the guide and found it informative.
2. The participant had no issues with finishing the task.
Amount of clicks: normal
3. Could easily find the new measurements button from the home page.
Amount of clicks: normal
4. Had no problems with finding the edit icon.
Amount of clicks: normal
5. Managed to disable Amanda from the relatives settings with no problems.
Amount of clicks: normal
6. No issues with the task.
Amount of clicks: normal
7. Could easily find the activity values under the history page.
Amount of clicks: normal
8. Had no problems with the task.
Amount of clicks: normal
9. From the home page the user clicked the tree and found all the information needed
Amount of clicks: normal
10. Could with no problems change the settings from the profile page.
Amount of clicks: normal
11. The user navigated to the goals page and could with no problems find the goals related to diabetes and the progress of losing five kilograms.
Amount of clicks: normal
12. No issues with the task.
Amount of clicks: normal

3.3.3 Test 3

Date:	29/11
Location:	Remote
Test Leader:	Matthew Soulaka
Test Person	Participant 3, Male 27
SUS Score	90.0/100

Summarization from scenarios and questions

Overall the participant had no major issues with navigating through the application and completing the given tasks. The participant emphasized that the application did not feel complex but rather logical and natural. The participant found the design appealing and trustworthy. This is also reflected in the high SUS-score of 90. However, the participant commented that a few parts of the applications were awkward such as having to click on a specific disease before finding a health-related goal.

Results from test scenarios

1. The participant had no issues with completing the guide and found it informative.
Amount of clicks: Normal
2. The participant changed their password with no issues and understood that the Profile-page is the way to proceed.
Amount of clicks: Normal
3. This task was completed with no issues
Amount of clicks: Normal
4. The participant analyzed the home-page before clicking on anything and then understood that the pen represented the edit-functionality.
Amount of clicks: Normal
5. The participant had some issues with understanding the question but completed the task in an optimal way once they understood it.
Amount of clicks: Normal
6. The participant completed this task with no issues.
Amount of clicks: Normal
7. The participant first clicked on the home page and then on goals before realizing immediately that the clock represented history.
Amount of clicks: More than normal
8. The participant found the achievements in an optimal way.
Amount of clicks: Normal

9. The participant had no issues with this task

Amount of clicks: Normal

10. This task was completed with no issues

Amount of clicks: Normal

11. The participant found it confusing that the goal could only be found by actually clicking on the disease first. This resulted in a few more clicks on the home-page before completing the task.

Amount of clicks: More than normal

12. The participant completed this task with no issues and navigated to Help under profile-page in an optimal way.

Amount of clicks: Normal

3.3.4 Test 4

Date:	30/11
Location:	Remote
Test Leader:	Fredrik Thorsson
Test Person	Participant 4, Female 29
SUS Score	87.5/100

Summarization from scenarios and questions

The participant performed a well done test. She really liked the initial guide and found it informative. She especially pointed out it might be good for people who are less experienced with technology. She found the application logical with easy navigation and good design.

Results from test scenarios

1. Finished the guide.
2. Had no issues with changing the password, thought it was logical it was located under the profile page.

Amount of clicks: normal

3. No issues with the task.

Amount of clicks: normal

4. No issues with the task.

Amount of clicks: normal

5. Could easily navigate to the profile page and find the settings for the authorized relatives.

Amount of clicks: normal

6. Could with no problems find the goals related to diabetes under the goals page.

Amount of clicks: normal

7. Could find the previously registered activity values under the history page. However, the participant pointed out that she would probably have navigated to the goals page if it wasn't for the guide in the beginning of the test.

Amount of clicks: normal

8. The participant first navigated to the history page, but could with no problems finding the achieved achievements after navigating to the goals page.

Amount of clicks: normal

9. No issues with the task.

Amount of clicks: normal

10. Could with no issues find the settings under the profile page.

Amount of clicks: normal

11. No issues with the task.

Amount of clicks: normal

12. Found the initial guide under the profile page with no issues.

Amount of clicks: normal

3.3.5 Test 5

Date:	1/12
Location:	Remote
Test Leader:	Matthew Soulaka
Test Person	Participant 5, Male 29
SUS Score	82.5/100

Summarization from scenarios and questions

Overall the participant had no major issues with navigating through the application and completing the given tasks. The participant appreciated the fact that the navigation bar was minimalistic and did not consist of too many options. The participant also liked that the application felt logical and not complex. This is reflected in the high SUS-score of 82.5. However, the participant commented that older persons might not find the application as logical and easy-to-use as he did but that's something to be expected and the initial guide will help in that case.

Results from test scenarios

1. The participant completed the guide with no issues and found it informative.

Amount of clicks: Normal

2. The participant had no issues with completing this issue.
Amount of clicks: Normal
3. The participant found the optimal way to complete this task.
Amount of clicks: Normal
4. The participant realized immediately that the pen was the button to click on in order to edit a measurement.
Amount of clicks: Normal
5. The participant did not quite understand the question but understood that this kind of task is completed by navigating to the profile-page, and in fact he managed to complete it in an optimal way.
Amount of clicks: Normal
6. The participant clicked on the star and referred to the initial guide and found the goals.
Amount of clicks: Normal
7. The participant first clicked on the home-page and then recalled what the guide had taught him.
Amount of clicks: More than normal
8. The participant had no issue with completing this task.
Amount of clicks: Normal
9. The participant had no issues with completing this task.
Amount of clicks: More than normal
10. The participant completed this task with no problems.
Amount of clicks: Normal
11. The participant found it quite confusing that the goal could only be viewed by clicking on a specific disease first. This resulted in more clicks than normal despite that the participant actually first clicked on the Goals-page (but then instead of clicking on Diabetes, navigated to the Home-page).
Amount of clicks: More than normal
12. The participant found the Help-button with no issues.
Amount of clicks: Normal

3.3.6 Test 6

Date:	1/12
Location:	Remote
Test Leader:	Fredrik Thorsson
Test Person	Participant 6, Female 58
SUS Score	77.5/100

Summarization from scenarios and questions

The participant did overall a good test. However, she pointed out that the test would have been much harder without the initial guide. She found it to be very informative. The application felt natural to navigate through and the design was appealing. The participant didn't understand the concept of streaks and gamification to begin with but after an explanation she thought it was a good element to keep the patients motivated.

Results from test scenarios

1. Finished the guide.
2. The participant could with no major issues navigate to the settings for password under the profile page.
Amount of clicks: normal
3. The participant could easily find the tab for upcoming measurements.
Amount of clicks: normal
4. The participant had no issues with the task.
Amount of clicks: normal
5. The participant navigated to the profile page. She had some issues with finding aurotized relatives, this was however due to the english language.
Amount of clicks: more than normal
6. The participant first went to the history page before getting to the goals page. After entering the goals page the participant had no problems finding the goals related to diabetes.
Amount of clicks: more than normal
7. The participant had no issues with the task.
Amount of clicks: normal
8. The participant first went to the history page. Again, after entering the goals page she could easily find the achieved achievements.
Amount of clicks: more than normal
9. No issues with the task.
Amount of clicks: normal

10. Found the settings for gamification levels under the profile page quite easily.

Amount of clicks: normal

11. Found the progress for the goal lose five kilograms with no major issues.

Amount of clicks: normal

12. No issues with the task.

Amount of clicks: normal

3.3.7 Test 7

Date:	1/12
Location:	Remote
Test Leader:	Matthew Soulaka
Test Person:	Participant 7, Female 22
SUS Score:	87.5/100

Summarization from scenarios and questions

Overall the participant had no major issues with navigating through the application and completing the given tasks. The participant appreciated the simple design and navigation of the application. The participant believed that the initial guide was informative and thought it could be more helpful for some than others. This is reflected in the high SUS-score of 87.5. The participant commented that the icon representing the history page might not be optimal but the guide helped to clarify that.

Results from test scenarios

1. The participant completed the guide with no issues and found it informative.

Amount of clicks: Normal

2. The participant had no problem with finding the optimal way to complete this task.

Amount of clicks: Normal

3. The participant first clicked on the home-page and then found the optimal way.

Amount of clicks: Normal

4. The participant realized immediately that the pen was the button to click on in order to edit a measurement.

Amount of clicks: Normal

5. The participant did not understand the task and had therefore issues with completing it.

Amount of clicks: More than normal

6. The participant found the goals with no problems.

Amount of clicks: Normal

7. The participant had no problem with completing this task.

Amount of clicks: Normal

8. The participant found achievements with no problem.

Amount of clicks: Normal

9. The participant had no issues with completing this task.

Amount of clicks: Normal

10. The participant completed this task with no problems.

Amount of clicks: Normal

11. The participant recalled the previously taken way and followed it with no problems.

Amount of clicks: Normal

12. The participant found the Help-button with no issues.

Amount of clicks: Normal

3.3.8 Test 8

Date:	1/12
Location:	Remote
Test Leader:	Fredrik Thorsson
Test Person	Participant 8 , Female 23
SUS Score	92.5/100

Summarization from scenarios and questions

The participant did a very well executed test with no issues or encountered problems. She thought that the idea for home monitoring was a good concept and that the application would make this process easy. She had no remarks on the functionality or the design.

Results from test scenarios

1. Finished the guide with no problems.

Amount of clicks: Normal

2. No issues with the task.

Amount of clicks: Normal

3. No issues with the task.

Amount of clicks: Normal

4. Could easily find the edit icon.

Amount of clicks: Normal

5. Could with no issues find navigate to the profile page to change the settings for the authorized relatives.

Amount of clicks: Normal

6. The participant could with no problems find the goals related to diabetes. She did point out the associated the star icon with favorites.

Amount of clicks: Normal

7. No issues with the task.

Amount of clicks: Normal

8. No issues with the task.

Amount of clicks: Normal

9. The participant could easily click the tree from the homepage to find the information asked for.

Amount of clicks: Normal

10. The participant could with no issues find the settings for the gamification levels under the profile page.

Amount of clicks: Normal

11. No issues with the task.

Amount of clicks: Normal

12. No issues with the task.

Amount of clicks: Normal