Usability testing report - GRYBB team 3

For usability testing, we asked four people to each carry out three tests. These four people were friends and other students. The tasks are described below.

Proposed tests

Field worker (#test1)

The first test is on the field worker portal. The user has the task to access the portal and water a tree in the Walhof-Roessing district. Then the user should log out. The user was also asked to create an account. So for this test the user had to go to the employee portal, create an account, then log in and press on the red square indicating the walhof-Roesing district and press on a red tree and confirm the user watered this tree. Lastly the user had to find the log-out button.

Municipality (#test2)

The second test was asking the user to act as municipality official and, through the appropriate portal, check the statistics of the overall process of tree watering, and step by step go through the program in order to access the page that displayed the percentages of trees and their average water levels (sufficiently watered, require watering and dead trees). This required going to the municipality portal, log into the system and click a button that redirected the user to the statistics page. In the end, the user had to find the log out button.

Manager (#test3)

For the final and third test the user was asked to act as a manager. The user had the task to access the portal and check the working hours of employee John Smith and if he worked today. After they completed this task they were asked to check when one of the red trees was last watered. The final task was to use the filter system to check which trees were watered by company #3.

Results

Participant #1

The first participant has encountered some issues during the tests. They were confused while acting as a field worker whether to click on the red square that was on top of the target area, or on the name. They have also mentioned that the zoom in button needs to be bigger, and that the writing in the table that displays tree characteristics is too small.

They did not change the water intake for the specific needs of the tree and found the "OK" button at the end of the process to be too generic. There was also an issue with logging out, as the participant could not find the log out button.

The second test did not create any impediments, and the process went smoothly. However for the third and final test, the user did not immediately understand what was meant by "attendance today".

Participant #2

The second test subject encountered difficulty only during the first test, when they have noted that the writing in the table containing the tree characteristics is too small. Further impediments have not been registered in test 2 and 3, and the testing continued steadily.

Participant #3

The third participant did not encounter any obstacles during the first test and was able to successfully water a tree.

However, during the second trial, because of a language barrier, the test subject had trouble identifying the english word "municipality". After being able to identify the portal required for the task, there have been no other difficulties registered.

During the third and final test, the user had issues with the "attendance today" functionality of the system.

Participant #4

The fourth participant had multiple problems and suggestions on all three tests. During the first test the participant did not know how to zoom in onto the district map. He first tried to zoom in further on the map, this was not possible because the prototype program does not support this. When he pressed on the red square of the walhof-roesing district he did not know how to get to the district map and finally just guessed to press on the zoom in button. This was because the pop-up got completely over the map so the user did not know what was happening. The participant also suggested to add an indicator with what symbol means what. When he pressed a tree the participant did not know if he needed to change values in the tree details table. The second test went without problem, but the participant did suggest adding a pop-up that an email had been sent to change the password.

During the third test the participant could not find how to check if John Smith had worked today. This was because the participant did not think of clicking on John Smith's

name. After he clicked on the name the participant, like some other participants, thought the attendance today button was rather vague.

Conclusion and proposed changes

After creating an account, the page was redirected to the municipality log-in when creating an account as a fieldworker. This is of course supposed to redirect to the field worker log-in page. Furthermore, there was no pop-up confirmation that a password email reset has been sent. Although it is not necessary for the core functionality, it is useful for any user and hence can be added in the second release. The way we would add this is through an easily visible pop-up, most likely at the top of the page. This also made us realize that we should add a button to resend the email if it didn't arrive.

One of the test subjects did not know what municipality meant. Making an option for selecting language could be something we work on, but it is not the most important, because we assume the users to be able to speak English. If we were to implement this, it would be in our very last release.

One of the test subjects did not know how to access the Walhof-Roessing district and finally just tried to click somewhere on the red square. There are two possible solutions to this. The first one being assuming fieldworkers would rather quickly learn how to use the district system and the second one would be to find a way to make the areas look more clickable. An idea could be to highlight the area when you hover over it, hence making it more clear for the user. This change is not the most important, because the field worker most likely gets an introduction to the program and knows that they can click the areas. We could position the name of the district more central and change it to bold.

Multiple test subjects found the text difficult to read and proposed to use a larger font. This is something that we fixed immediately.

One of the test subjects was confused if the "OK" button needed to be pressed when confirming that a tree was watered. The participant proposed to change "OK" to "confirm" which would make its function more clear. Another button that was not clear was the "zoom in" button when pressing on a district. After the user pressed on the district, a popup appeared containing the "zoom in" button, which was supposed to lead to the zoomed in map of that certain area, but it was not working. The participant proposed to change this to something which would be more clear or to instantly go to the district map. The best solution would be going directly to the district map, because the pop-up did not add much information. Another issue that was found in our prototype

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was the checkbox "Attendance today" from the management portal. The participants did not understand the purpose of selecting the box so the function was considered vague. We fixed this by modifying the checkbox. The manager will no longer be able to select the box, but it will appear as selected and disabled if the field worker signed for attendance.

Так, тогда хотите в четверг к 15:00?

- 1. Сабр
- 2. Димаш
- 3. Бекболот
- 4. Омирзак
- 5. Нурмаш
- 6. Арлан
- 7. Исатай
- 8. Саид
- 9. Бернар
- 10. Тала

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