

ReFill Usability Test

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Introduction

ReFill is an application that provides lists of accessible water bottle filling stations in a variety of areas. This is useful to provide better knowledge about accessible water for those traveling in new areas or looking to stay hydrated.

Executive Summary

The usability test was performed on Wednesday December 6th and Thursday December 7th on the Northeastern campuses in Silicon Valley and Boston.

The test identified a few minor problems:

- Change the typography - P2, P3 mentioned the comic sans logo.
- Add update status feature to the stations - P2.
- Add status section to the add form - P2, P3
- Add filtering on text for the stations data - P1, P2, P3
- Fix title card bug for the stations - P2
- Confirmation to user creating a profile - P2, P1
- Change icon from default.
- Sort filtering by most recently added - (P2, P3 mentioned scrolling to find the station they added)
- Add more color to the homepage - P6 mentioned the page was bland.
- Add stations button is not obvious, align it better and use background for emphasis - P3, P5
- Add address to the station data - P3.
- Fix bug about adding stations after logging out -P2.

Methodology

Sessions

A convenience sample of 6 participants was recruited from the authors connections. Each session began with the informed consent and was followed by the usability study.

Participants were first prompted to see the website and answer their first impressions and what they thought the website was for. Consequently, we prompted participants with some context scenario and provided a couple of tasks for their completion.

After all the tasks were completed, participants were asked to answer one Likert question per task and a final overall question.

Participants

6 participants were recruited 3 from each campus in Northeastern.

Evaluation Tasks/Scenarios

Experimenter Puerta created the task scenarios that were to be administered.

Test participants attempted completion of the following tasks:

- Search for a water fountain station in Brookline, MA (02443) that you would feel comfortable using based on the review.
- Create a user and log in.
- Add a water fountain in a location near where you live in 02115.
- Search for the station you added.

At the end participants were prompted with the following Likert questionnaire:

- On a scale of 1 to 7, with 1 being very hard, 4 being neutral and 7 being very easy, how difficult was the (first, second, third, fourth) task?

And a final question:

- On the same scale of 1 to 7, with 1 being very hard and 7 being very easy, how difficult was navigating the website as a whole?

Results

Below are the results of the Likert responses for the usability evaluation. Chrome's autofill seemed to be a problem for participants.

	Task A	Task B	Task C	Task D
BOS1	5	4	5	7
BOS2	6	7	6	6
BOS3	6	7	7	6
CA1	6	7	7	6
CA2	6	7	5	6
CA3	5	6	5	5

Conclusion

Most of the participants found ReFill to be intuitive and well designed. While there were some minor recommendations and suggestions of how to elevate the project significantly (for example addition of Google Maps API, and location services) all participants were able to navigate the tasks with minor issues.

Script

Hello! Thank you for volunteering to do this with us.

First we are just going to go over a consent form

<go over consent form linked [here](#)>

As you saw, we do ask to record you during this study. Is it ok if we start the recording now?

So first I am just going to go to this website/ask you to go to this website

Script- what are your initial impressions, what do you think this website does?

Ok, I am going to ask you to do a couple of tasks, but before we begin I want to give you some context.

You are an entrepreneur who just moved to the Boston area.

You enjoy walking around different neighborhoods in the city and want to go explore Boston.

You also like to carry your water bottle around and want to make sure that you can refill it in the neighborhood you'll go to.

Tasks

- A. Search for a water fountain station in Brookline, MA 02443 that you would feel comfortable using based on the review (you decide what is positive)
- B. Create a user and log in
- C. Add a water fountain in a location near where you live in 02115
- D. Search for the station you added

Likert

On a scale of 1 to 7, with 1 being very hard, 4 being neutral and 7 being very easy, how difficult was the (first, second, third, fourth) task?

On the same scale of 1 to 7, with 1 being very hard and 7 being very easy, how difficult was navigating the website as a whole?

Open questions

Were there any parts of the website that were not intuitive to navigate?

What did you like about the website?

