User Interface Evaluation ~ Usability Report

Application: Water Those
By: Team 11

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Analysis

Overall, the system is highly functional and succeeded in meeting many of its requirements. The custom interface style creates a recognizable brand-image for the application, adding some much-needed personality to an otherwise unexciting subject matter. Most features functioned as expected, but there were some specific issues regarding submitting and viewing to reports.

The historical quality graph function of the application is cumbersome to use because it requires an input of latitude and longitude. This violates the principle of speaking the user's language, because raw coordinates are rather unwieldy and are difficult to make exact. In addition, the coordinates of existing quality reports are not viewable/accessible, so those exact coordinates are not readily available. This issue may render that feature unusable. Our recommendation would be to either list the coordinates of reports on their map pins or, preferably, not have the historical graph depend on the user's input of coordinates.

In the application, there are two screens that show reports in a list format. Navigating these lists is not as efficient as it could be. When a user is looking at these lists, they are likely searching for a particular report or reports or for a particular attribute of those reports (timestamp of report, location, quality of water, etc.). To do this, they must click on each

individual report until they find the one they are looking for. This is not efficient, but could be improved. Our recommendation would be to replace the numbers in the 'list view' of reports with text that indicates an attribute, such as the timestamp. A corollary of this change would be that the 'list view' be sorted by the attribute to facilitate searching.

Additionally, the ability to create a new report (source report or quality report) is an essential task that a user will want to perform. This process is not immediately obvious from the home screen of the application, however. To do this, the user must first click the "View Reports" button before they see a button to create a new report. This may be unintuitive for novice users. Our recommendation would be to move the "create report" buttons onto the home screen to have them immediately accessible.

Notes on Issues

	Rank - Consensus
Window size sometimes changes when there is a screen change	**0**
Profile data editing is not consistent in that First Name and Last Name are separate on one screen but all as one full name on another screen	**2**
To add a report, you first have to go to the view report screen	**3**
A water quality report is not called consistently the same, so it was confusing at first to see "Reports" and "Reviews" and purity reports and source reports	**3**
Historical quality graphs are not easily usable when you do not already know the gps coordinates of a location you want to check.	**4**
No error message when putting in invalid data into fields for creating reports.	**3**
When a text field is selected, the user cannot see the field's description (Registration, user profile)	**2**

Longitudes and latitudes never shown on screen after created	**4**
Map opens to arbitrary area — doesn't show any reports on startup	2
"Back" and "Cancel" are used interchangeably – that is, the button label says "Back" on the Edit Profile screen but "Cancel" or Add Water Quality Report	1
The text for the buttons do not fully display, maybe due to font issues.	3
Dummy picture in place in profile screen; no way to edit it	1
Initial screen doesn't have system status or name	2
Inconsistent language: button says "Add Water Quality Report" but interface/form has label saying "Create Water Quality Report	1
Redundant info in registration screen error message: "Please correct invalid fields" and "please fill out all required fields"	1
No indication of what the required fields are on the Registration page. This is a problem because the error message asks for the required fields to be filled out	2
Listviews in View Water Report screens aren't labeled so I have no idea what the numbers represent	**3**
In creating a Water Quality Report, the PPM fields have no placeholder value. What is PPM? Not obvious to any user unfamiliar with the term	1
No system status on main application page (page after logging in). Unclear what to do on main page.	3
View Water Quality Report has an extra scrollbar with no functionality.	1