Staff Gauge Application

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Users and Environment

User 1

Jack (Hydrologist Studying Water Levels)

Environmental Engineering PhD student doing research on water levels

User 2

Tammy (Middle School Science teacher)

Science teacher currently doing a unit on water levels with her students

Environment

Jack will be using the database in his lab to use data created by the other users.

Tammy will be using the webapp in the field. She will be the one entering data for the scientist to use.

Use Scenarios

Jack (Hydrologist Studying Water Levels)

Jack is drawing from the data gathered with the Staff Gauge app for his dissertation. He needs the most recent data available, so he checks the website. He selects the option to view data. On this page, he is able to view all available data in both graph and table format and is able to sort between different rivers and different measuring stations along each river. He is then able to download the data in the formats he needs.

Tammy (Middle School Science teacher)

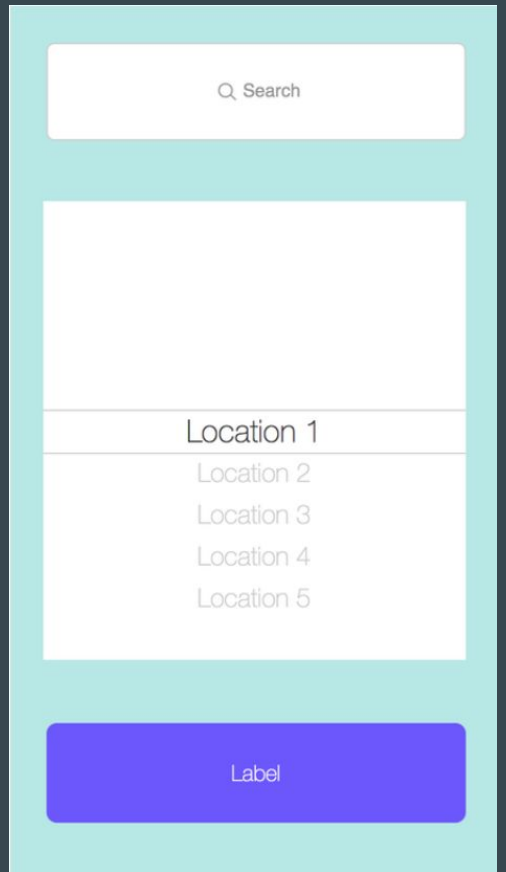
Tammy will be on the many people that provide Jack with the data. She will take her class out to a measuring station, where they will then bring up the website on a mobile browser. A student will then stand in a designated spot and point the phone's camera at the measuring staff. The photo will then be uploaded to the database where the information is parsed into usable data. After the photo has been uploaded, the user will be shown a graph of the most recent data to see how it has changed recently.

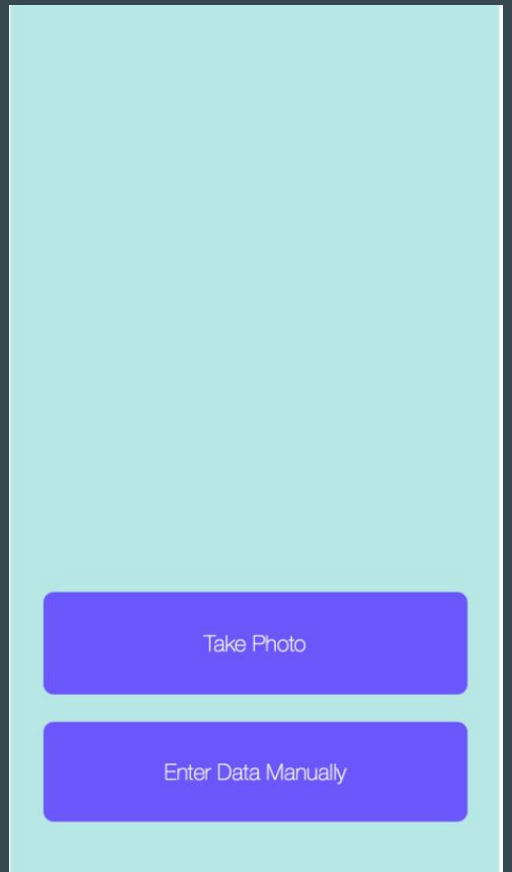
Incorrect Data Entry Scenario

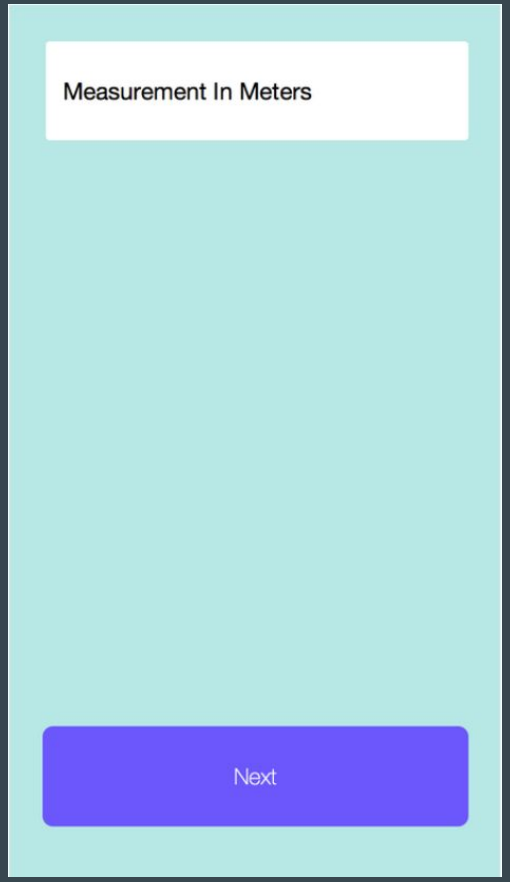
Jack (Hydrologist Studying Water Levels)

Jack recently finished taking photos out on the field and is ready to submit them using the web app. Jack, not paying attention, opens the app and, thinking he attached the photos, begins to submit the photos. Unknown to Jack, he accidentally chose photos of his recent vacation with his wife instead of the photos from the field. When shown the confirmation page, Jack notices in the corner that the thumbnail is not of the water gauge, but of his wife. He chooses to cancel the submission and resubmit the correct photos.

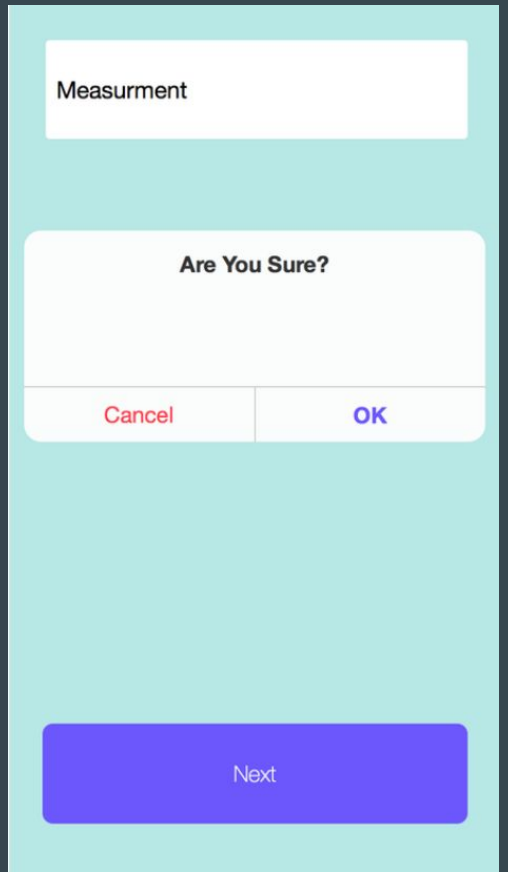
Prototype Views

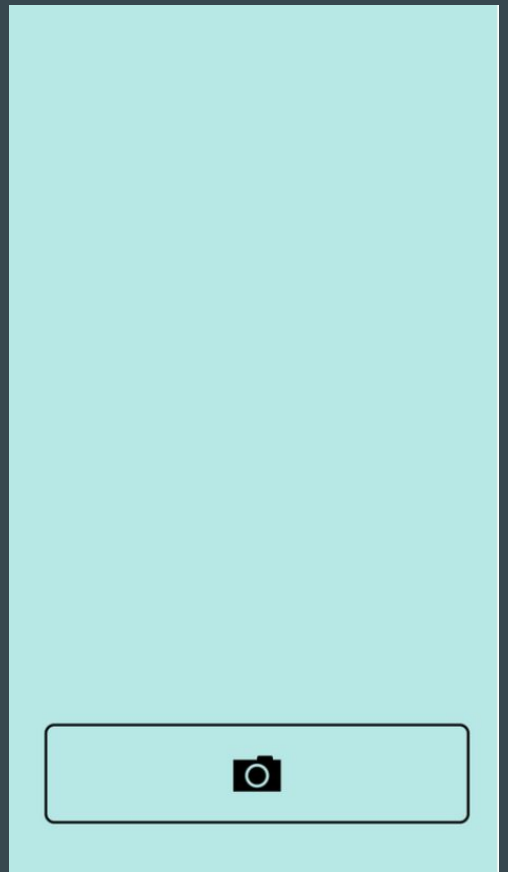


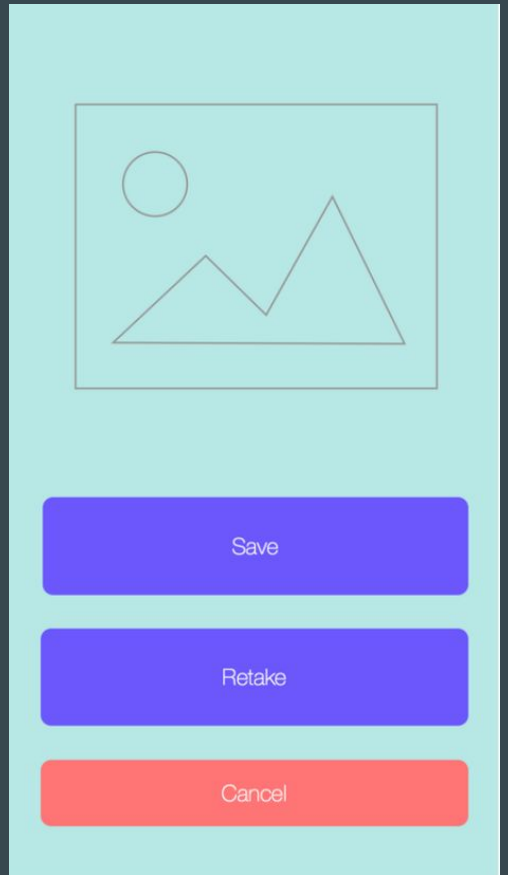




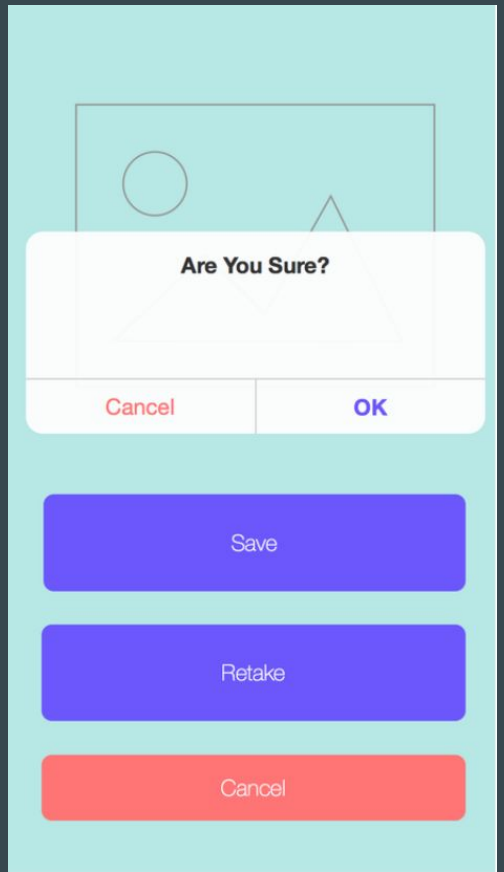
Prototype Views Continued

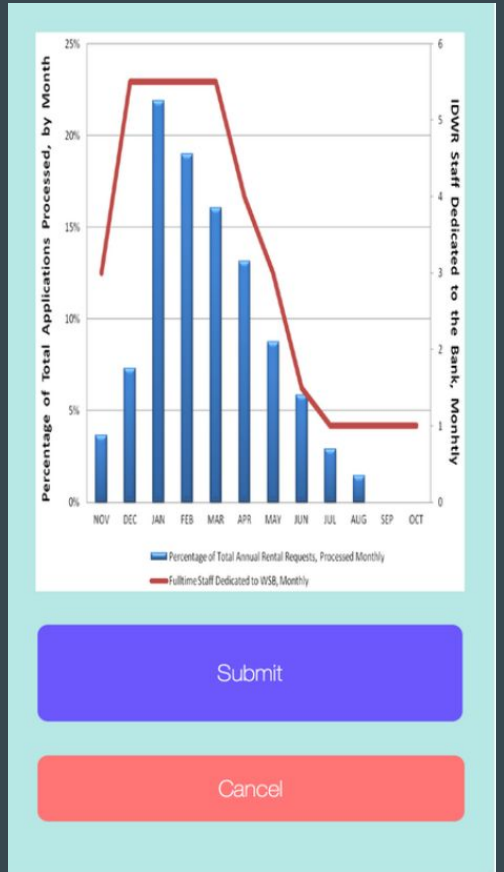






Prototype Views Continued





Usability Goals and Concerns

Goals:

- Durability - This app should be very fool-proof.
- Learnability - This app should be incredibly simple for any user to pick up and use.
- Feedback - A major goal of this app is for the users to receive instant and obvious feedback for every submission made.

Concerns:

- Integration - There is a concern that this app will be hard to integrate with existing databases.
- Input Validation - Users that submit false input (i.e. silly pictures) will be hard to verify.