During our past week of meetings with the instructor, UX expert, and scientists. We have collected the following ideas for design improvements:

Design Changes Proposed by Scientists:

- Nested toggles for Wet/Dry and Pool/Riffle
- Dry trails cannot be pools or riffles. Pool/Riffle toggle will be disabled if Wet/Dry toggle is set to dry.
- POIs only for when can't decide between pool / riffle
- Videos over pictures
- Restricting features on phone due to inaccuracies on on small touch screen
- Confirmations of everything
- Extra button for instructor options after login
- Students associated with instructors so that the students can only see the stream names from their instructor.
- README that comes with the CSV file explaining what is going on and how to interpret the data.

Design Changes Proposed by Graduate Student:

- Return to home page after data submission
- Put limits on input fields to prevent overflow
- Functionality when app is closed
- Help / information / instruction pages
- Notifications / confirmations that actions are performed, gives the user feedback if actions are successful or unsuccessful
- Local / cloud data storing, Cookies

Design Changes Proposed by Instructor:

- Location ping when toggles are changed
- 3 State toggle where pool - neither - riffle
- Use watch_position api for geo data gathering
- Use a separate file for HTML and global variables that is just sourced for each page
- Data editing only available onsite
- Stream name dropdown
- Stream name predictive text algorithm, suggests names based on currently typed input (Typeahead widget)
- Only 1 picture per POI

The following are the design changes we will be adopting for the app:

- Pool/Riffle toggle will be a three state toggle with the states: Wet, Neither, Dry
    - The three-state toggle will only be available when the Wet/Dry toggle is switched to wet
- The confirmation page after the survey is completed will only show the map superimposed with the users' path but not the spreadsheet view of each datapoint.
- All actions performed by users will have a feedback to tell the users whether the actions are successful or not. It could be small animation, colour changing, or even a pop-up window.
- On the mobile side, faculty logins will have an additional option to add streams and sections.

- Downloaded .CSV file will be accompanied by a README text file that illustrates how to interpret the data in the file.

- After survey submission, users will be sent back to the home page where record data and retrieve data options are presented.
- Limit input field letter count to prevent overflow.
- Use prepared statements to prevent SQL injection.
- Use cookies to store each data entry until the end of one survey section they are submitted to the server, but keep in mind the danger that the app might crash mid survey.

- Stream name dropdown
    - Predictive text algorithm, suggests names based on currently typed input (Typeahead widget)
- Data editing only available onsite (Confirmation page at end)
- Use watch_position api for geo data gathering
- Only 1 picture per POI
- Use a separate file for HTML and global variables that is just sourced for each page