

UI Modernization Scenario For Environmental Recorder

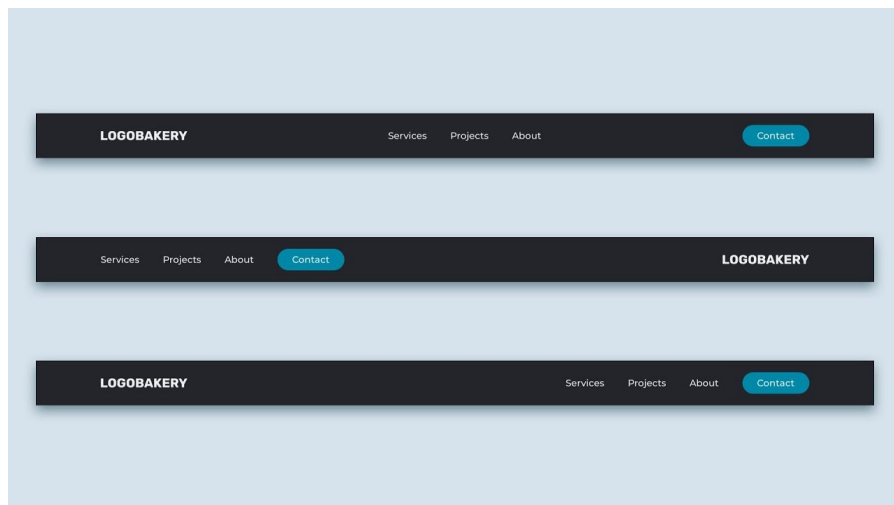
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Scenario UI Modernization

Currently the UI has a universal color scheme and font but is very static. For this scenario we want to modernize the UI to be more interactable and modern. Our navigation bar, for example, is still pretty barebones and doesn't span the top of the page. We also want to make the UI more interactable, for example if a user hovers over the name of a page on the navbar it might be highlighted or a circle might appear around it.

List of UI Changes for Third Release:

1. More modern and consistent styling throughout the web app. Consistent coloring and formatting.
2. More intractability to make the web app feel more responsive instead of feeling like a simple google doc. Examples, buttons are highlighted when hovered, navbar elements highlighted when hovered, or scroll effects.
3. Navbar modernization.



Online example of navbar, similar to what we want to accomplish.

Recent Accomplishments and Improvements:

Features:

- Pin markers now change dynamically based on data to show areas of higher or lower discomfort

- Easier navigation of website including login followed by navigation feature to access other parts of pages or logging out.

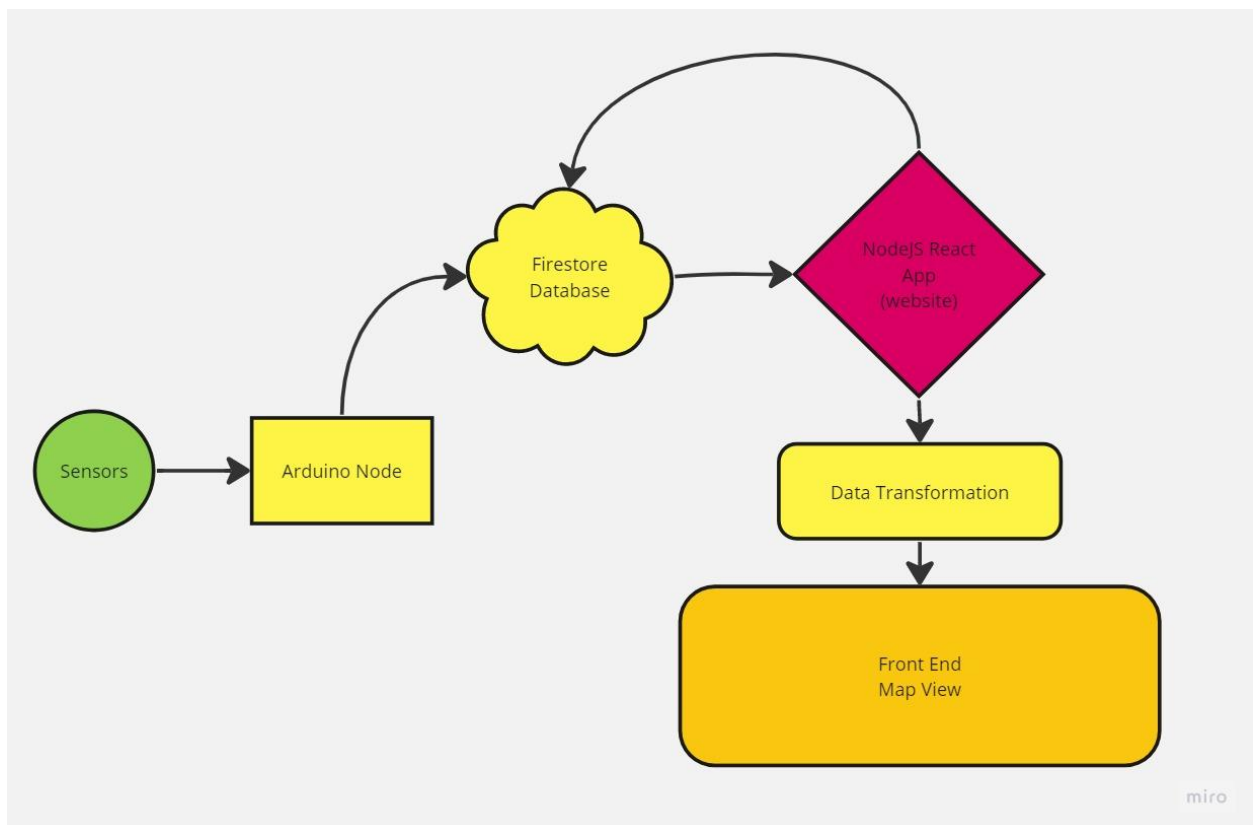
Bug Fixes:

- Fixed an issue where the data processing only worked with mock data. Live data points did not push correctly in expected format.
- Pins would not update live even with an interval set to schedule updated polling. Fixed to update every 30 seconds for testing or 3 minutes for release.

Planning:

- Improve data flow organization. Work in tandem with front end database usage formatting and limitations of data processing from node (arduino) devices to plan a simple pipeline.
- What can be done to the UI to make it look more interactive and modernized.

Data pipeline diagram



Data is uploaded to the firestore from sensors then pulled from the NodeJS web server periodically or on load. Every so often the last few data points will be uploaded from the web server back to the firestore database. Final transformed data going through the webserver will be shown on the front end of the website.