

Title and members: Give a title to your project, and list the names of your group members on your proposal.

Campus Weather Station Monitor

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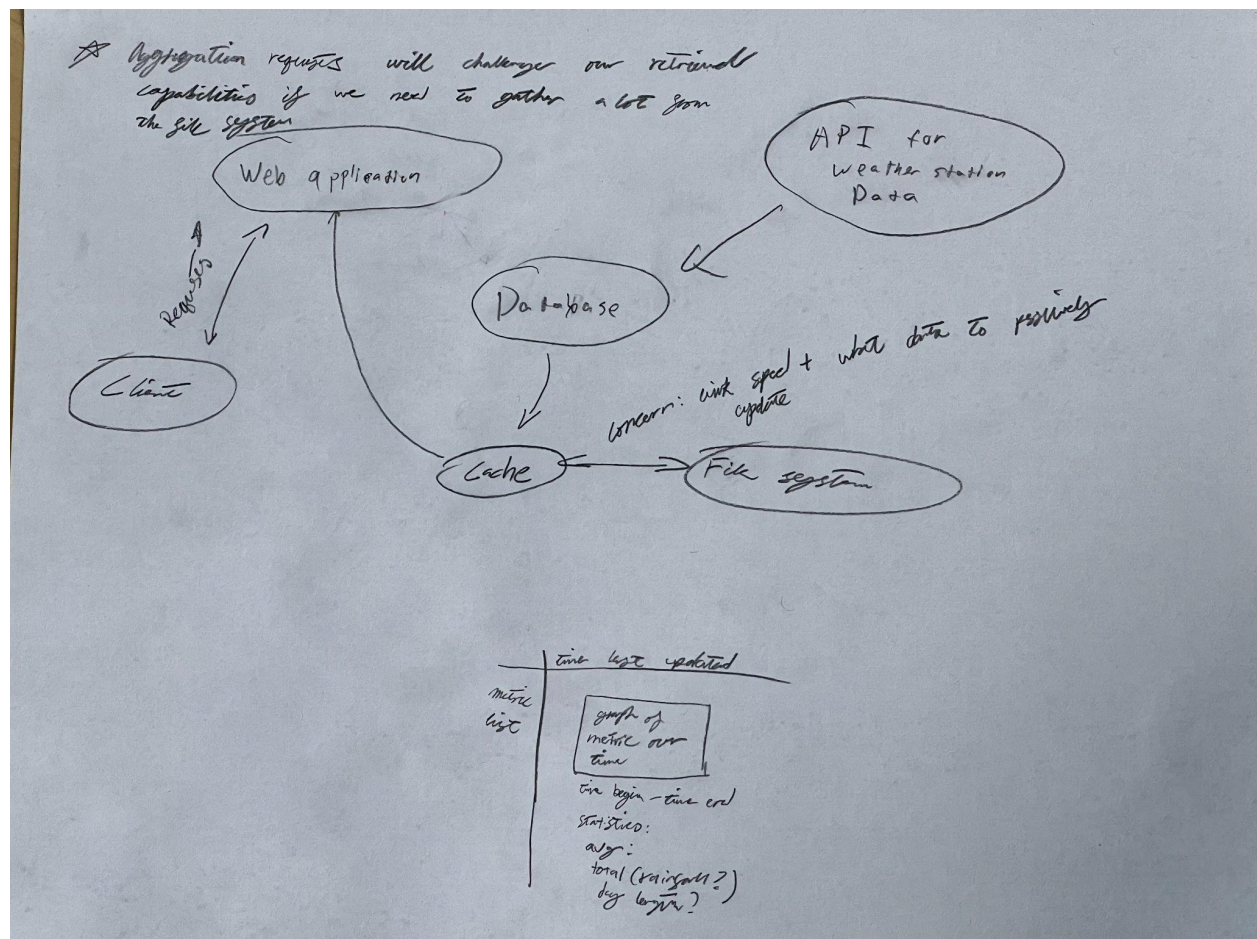
Branan Landau

Section I: Explain you're hoping to accomplish, addressing all the points below, if applicable:

What problem are you trying to solve? Why is the project interesting to you?

We are going to create a web application that will manipulate data from the weather stations on campus. This will require us to create a database that will store that data and interact with the application.

Provide original diagrams and figures to help you explain your application.



Address the novelty of the project. Explain what this project will teach you beyond what you'll take away from this course.

This project will allow us to learn how a web application will interact with a database, and what problems might arise from it. We have to both store data over the long term and handle potentially expensive aggregation queries we can't anticipate.

List the expected challenges. How do you expect the project will push you and your team? In what areas do you expect to face challenges? (The challenges may not be technical.)

We expect the website to have two parallel components: a connection to the weather station that continuously updates a local copy of the data and the web content which must manipulate that data to display useful metrics to the browser.

We will have to deal with coordinating the database accesses with the mutation from the weather server so as to not display garbage to the user. There's also the matter of storing what will eventually become a large data set. That can't stay in memory, so we need to consider what data is important, how long to keep it, and what metrics we actually want to extract.

Section II: Tentative Grading Rubric

How do you measure the success of your project? This also gives you a chance to think a little bit more about the details of the project. Work with your team and distribute 100 points across different items. You can model your rubric off of the ones I give you for your assignments. This rubric is only tentative, because we might expect plans to change as time passes. I will be using the finalized version to assign a final grade to your project.

Here's a sample rubric:

[5pts] A schema with primary keys foreign keys have been defined for SQLite.

[20pts] Design of the interface: its accessibility, aesthetics, and ergonomics. Can this thing get the information it needs to get to the user, and how well?

[35pts] Allow queries to be made from client side to interact with the database.

[20pts] Implement extraction of weather data using API onto the database (or other method which we want to discuss with you)

[20pts] Create a cache to be accessed by web application