Airboats Data Visualizer

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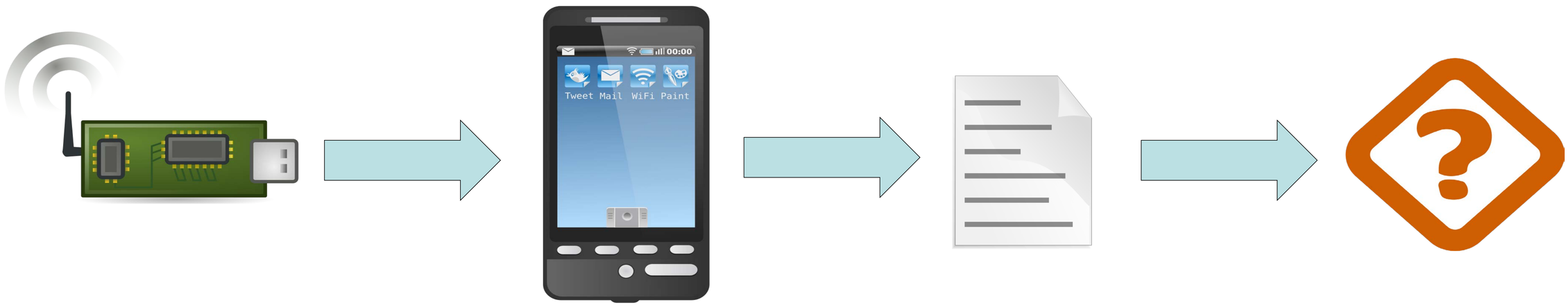
Problem Statement

o Airboats gather a lot of data autonomously.
o All data is stored in log files as text.
o The data is not very readable and thus the project's effectiveness in communicating its results is reduced.

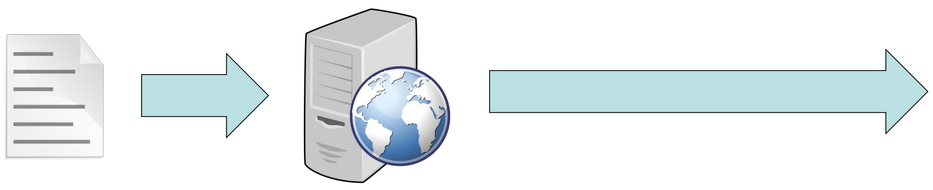
Specification & Constraints

o Each airboat employs a phone and one or more sensors.
o The sensors send the data to the phone, using the boats internal architecture.
o The phone then stores all this data in a log file, which can be accessed later.



Solution

o Used the Google Maps API to create a standalone web app that visualizes all data in the form of a heat map.
o Data is now uploaded to an external server, and the web app can access it from anywhere.



The web app is written in JavaScript, and thus can be embedded in any webpage!

Results

o All the sensor data is now presented in a much more elegant fashion.
o Work is being done to polish the interface and the entire process itself.

Future Work

o Use better visualization libraries to present the data better.
o Eliminate the need for an intermediate machine and upload the data from the phone in real time.