AquaBlue

Denver Chernin, Austin Argueso-Nott, Eoin Doherty, Krishna Dholakiya, Albert Huang Ari Bagala

Overview

- Vision Statement:
  - We strive to achieve political literacy and increase political engagement locally and at a larger scale.
- What is AquaBlue?
  - A web-based platform that displayed unbiased political information relevant to the user location. We will provide information on local and national politicians.
- Why?
  - With the recent presidential election being the first we could participate, we realized there is a lot of noise surrounding the actual signal. That meaning that many people don't know their representatives and their stances.
- How does it work?
  - It uses an API and our created databases to pull information based on the location that the user inputs. The politicians displayed are relevant to that user.

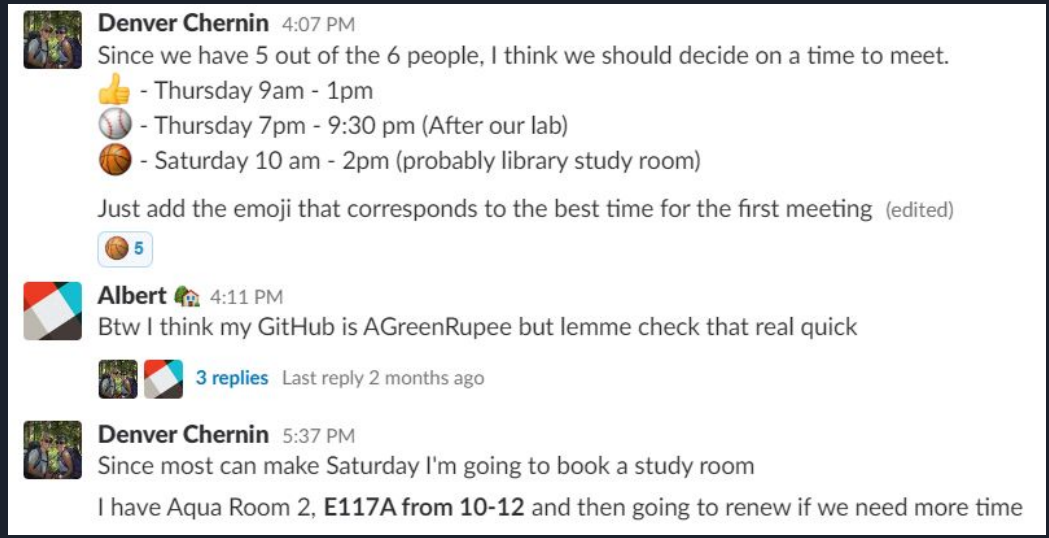
Version Control and Collaboration Tools

- GitHub - 5/5
  - Using branches for each feature along, we will use pull requests to merge each feature into the repo using group approval.
- Trello - 3/5
  - Used for organizing, prioritizing, and delegating stories & tasks that need to be completed.
- Slack - 5/5
  - Used for communicating ideas and meeting times. Through slack we have implemented GItHub and Trello. We have created a GitHub channel to create a log of all activity.
- Heroku - 5/5
  - Used to hold database and deploy project to Surge.sh. Also it holds all environmental variables so access to our information is not public.

GitHub Trello slack HEROKU

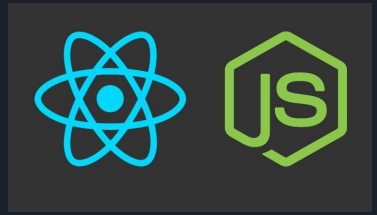
Methodology

- Agile Methodology
  - Adding features by feature with user testing/integration testing for each feature
- Weekly in person scrum on Saturdays
- Mid-week Slack standup



Programming Tools

- Frontend
  - Node.js- 5/5
    - Framework for the frontend
  - React - 5/5
    - Dynamic UI tool
  - Twitter API- 5/5
    - To show tweets from politicians
- Backend
  - Flask - 5/5
    - Python Framework
  - PyUnit - 5/5
    - Testing tool
  - PostgreSQL - 5/5
    - Database query language
  - Google Civic - 3/5
    - For detailed information on local politicians
  - ProPublica API - 4/5
    - Used to populate the politician database



Challenges

- Finding good APIs and datasets
  - We needed to find an API with detailed information about local level politicians.
  - Many APIs were poorly formatted and/or incomplete.
  - We eventually settled on ProPublica to populate the database and Google Civic for information on local representatives.
- Frontend configuration and deployment
  - Implementing a pipeline that compiles/compresses ES6 JavaScript into universally-compatible JS involves a lot of configuration
  - Not many hosting providers are solidly optimized for single-page apps (in terms of caching, navigation, etc)
- Tying the frontend and backend together
  - Both are essentially separate apps
  - Had to decide how to divide work between the two
  - Backend had to work like an API

Thank you