

## Project Manual

### Proposal/Use:


The goal of the project is to provide people with information regarding air quality. A website will be created to inform people about air quality. The website will link to PlumeLabs, IQAir, and AirNow so that people can check the air quality in their local area. The website will also contain information regarding basic measurements of air quality, what to do if air quality is poor, how government actions related to air quality, the health effects of differing air quality, and environmental justice with regards to air quality.

Air quality is important to consider as climate change is on the rise. Progressing climate change has increased the amount of wildfires, which in turn decreases air quality.

### Requirements:

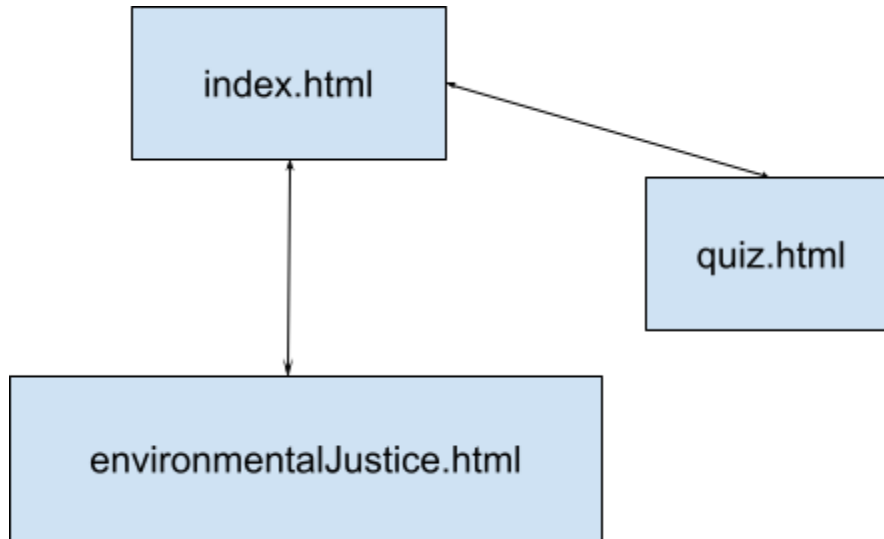
- Github - Github can be used to store the files for the project as well as for version control and easier collaborative team effort.
- Github Pages - Pages allows for the website to be viewed on the internet.
- React - React can help better organize the different parts of the website.
- Google Documents - Google Documents can be used to write out the documentation needed for the project such as the Project Manual and Project Progress Documents.

### Database:

Data arrives from the research of other websites such as PlumeLabs ([Air Quality Chicago, IL: Live air quality and pollution Forecasts](#)), IQAir ([Chicago Air Quality Index \(AQI\) and Illinois Air Pollution | IQAir](#)), AirNow ([Air Quality Index \(AQI\) Basics](#)), World Health Organization ([Air pollution is responsible for 6.7 million premature deaths every year](#)), American Lung Association ([Protecting Yourself from Poor Air Quality: Answering FAQs to help you understand AQI | American Lung Association](#)), Youtube (  [A Brief History of Environmental Justice](#) ).

### Application Workflow:

The homepage is located at index.html. index.html links to quiz.html and environmentalJustice.html. quiz.html and environmentalJustice.html link back to the index.html (homepage), but not to each other. Given the small size of the website, I believe that a navigation bar can hold all of the web pages for easy access for the users to navigate to.



Features table (listing):

| Feature                   | Feature Description   | Software Used       | Added, Improved, Already Existing, or Future Feature? |
|---------------------------|---|---------------------|---|
| index.html                | Informs the user about air quality  | React, Github Pages | Added Feature   |
| quiz.html                 | Allows the user to test out their knowledge after reviewing the website's informative content | React, Github Pages | Added Feature   |
| enivornmentalJustice.html | Informs the user about how air quality relates to the community.                              | React, Github Pages | Added Feature   |

#### Project Planning:

A majority of the project planning has been drafted with Google Documents. Files have also been stored in Github for viewing and organization.

#### Test Planning:

Running through the websites on different web browser is important. Although Google Chrome holds a huge share of the web browser market, it is important to check if one's website functions on other browsers in order to include non-Google Chrome users. Testing potential web browsers include: Firefox, Duckduckgo, Edge, Safari, Brave, Vivaldi, Opera.

There should also be testing of the different features of the website's navigation. Proper navigation is key for the functionality of the website.

Once those tests are completed, a more ambitious test would be to see how the website functions on smaller devices such as tablets and mobile phones. The smaller screen size will require different CSS for the user to be able to read and navigate the website more easily.

Conclusion:

{To be added at a later time.}