CT Windvision

By Wacky Windmills

About Us: Wacky Windmills

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Summary of Project: CT Windvision

- Utilizes historical air temperature, wind direction, and speed data in Connecticut to create a website with a user-friendly interface and easy for anyone to navigate, accessing data by searching or browsing.
- NASA data processed and analyzed for accurate information, accessible by searching or browsing
- Valuable resource for renewable energy industry and interested parties, promotes renewable energy development in Connecticut.

Users and Stakeholders

- Users:
- Wide range of individuals and organizations interested in wind energy and the potential for renewable energy development in Connecticut. Windmill Companies, Policymakers, Researchers

- Stakeholders:
- Diverse group of individuals and organizations who stand to greatly benefit from the increased use of renewable energy.
- NASA (provider of data used in the project)

Technologies

We will be using the MERN tech stack.

MongoDB - A document Oriented, No-SQL database.

ExpressJS - A web framework built on top of Node that allows us build backends and API's.

ReactJS - A Javascript library that allows us to build UI components for the front-end.

NodeJS - Javascript environment that allows users to run javascript on a server rather than a browser.

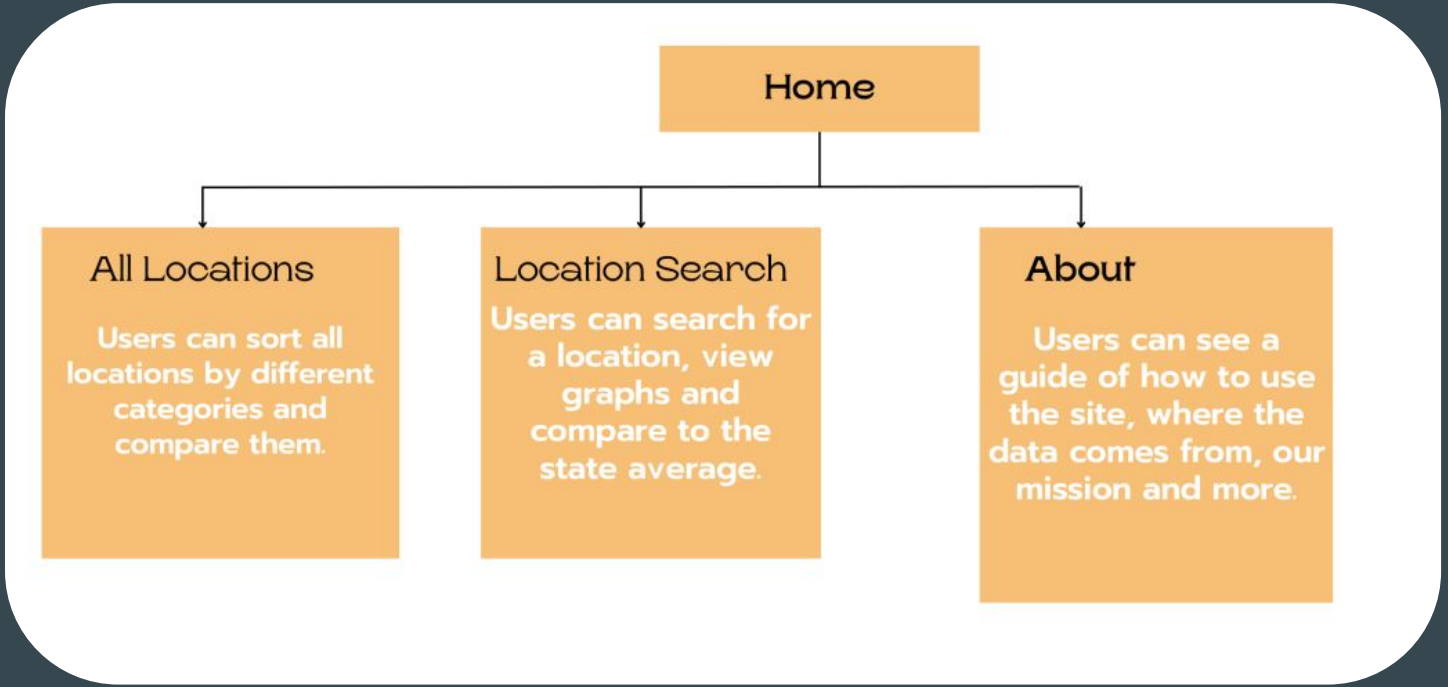
Functional & Non-Functional

- Store NASA's data on wind speed, direction, and temperature
- Return data to users for each type of query (ex: location, date)
- Allow users to find/sort data based on location and range of dates
- Provide clear documentation for sample API calls

Schedule

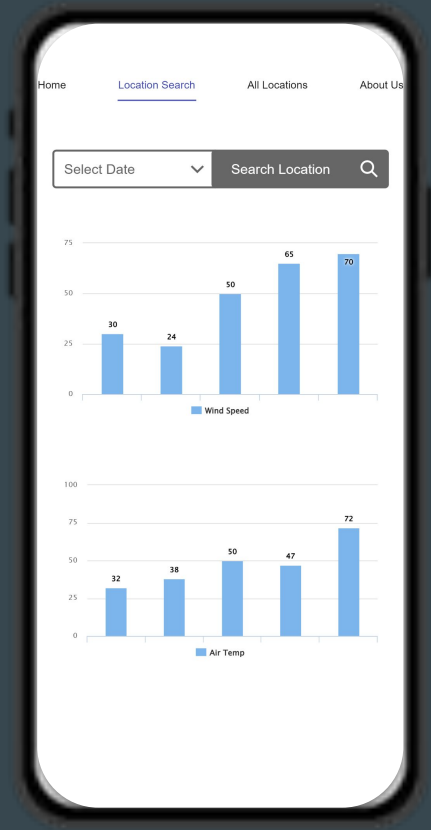
February	March	April	May
Begin front-end development	Finish front-end and begin back-end	Finish back-end and get ready to present	Finishing touches

Sitemap

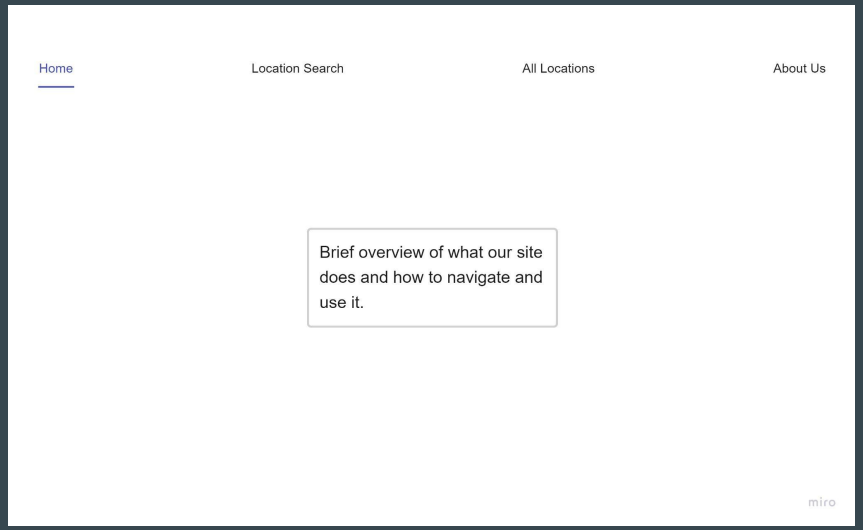

Home
All Locations
Users can sort all locations by different categories and compare them.
Location Search
Users can search for a location, view graphs and compare to the state average.
About
Users can see a guide of how to use the site, where the data comes from, our mission and more.

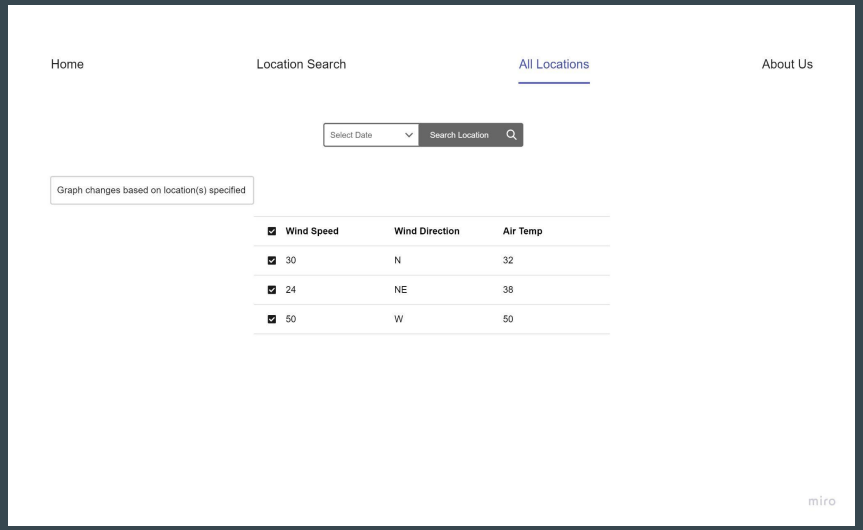
Wireframes


Home
Location Search
All Locations
About Us
Brief example of how to use page
Select Date
Search Location
Wind Speed
Air Temp
Wind Direction
Area to display averages / specifically requested data
miro


Home
Location Search
All Locations
About Us
Select Date
Search Location
Wind Speed
Air Temp

Wireframes


Home
Location Search
All Locations
About Us
Brief overview of what our site does and how to navigate and use it.
miro


Home
Location Search
All Locations
About Us
Select Date
Search Location
Graph changes based on location(s) specified
Wind Speed
Wind Direction
Air Temp
30
N
32
24
NE
38
50
W
50
miro

Thx for listening & Any Questions?