



V.A.S.T

Cyber Crusaders
Project Midterm Presentation

TABLE OF CONTENTS

01 INTRODUCTION

Re-introduce our project idea and team members.

02 PRESENTATION

A more in-depth look at our progress thus far.

03 LIVE DEMO

Demonstrate our application design and current features.

04 FUTURE PLANS

Timeline and plans for finishing our application.

The background is a vibrant, abstract space scene. It features a gradient of colors from deep red and purple on the left to light blue on the right. Scattered throughout are numerous small white stars and several stylized planets. In the top left, there's a planet with blue and white stripes. Below it, a planet with orange and white stripes. In the bottom right, a planet with yellow and red stripes is surrounded by a ring. Other smaller, solid-colored planets in shades of blue and purple are also visible.

01

INTRODUCTIONS (again)

Our Team

"Crusading Towards a more Renewable Future"



**Dani
DiTomasso**

Front-End
Developer



**Daniel
Dorticos-Rossi**

Full-Stack
Developer



**Eric
Carson**

Back-End
Developer



**Yousif
Moftah**

Back-End
Developer



**Jordan
Oberstein**

Back-End
Developer



Project Recap

- Display Surface Skin Temperature and Wind Speed in the state of New York in an easy to understand fashion.
- The user can draw their own conclusions as to where the best location to place renewable energy sources would be.
- Part 1: Learning Modules will be available for K-12 educators to use as learning supplements
- Part 2: Data Visualization components will allow users to explore data

The background is a vibrant, stylized space scene. It features a gradient from deep red on the left to bright blue on the right. Large, flowing, abstract shapes in shades of purple and blue represent galaxies or nebulae. Scattered throughout are numerous small white dots representing stars, some with four-pointed starburst patterns. Several planets are depicted: a large yellow and orange sun-like planet in the top right, a planet with green and blue vertical stripes, and several smaller blue and purple planets. The overall aesthetic is modern and artistic.

02

CURRENT PROGRESS

What we've done so far and
changes we've made.

Front-End Development

HTML/CSS

The main design of our application is in HTML and CSS.

In order to customize our website further than what bootstrap provides, the addition of “!important” was useful in overriding some of the predetermined CSS.

BOOTSTRAP

Bootstrap was utilized extensively to create our navbar, footer with all of NASA’s socials, and in the creation of our cards for the dynamic layout of our page.

REACT/JAVASCRIPT

React and Javascript were used to create the layout for our application elements found in the Surface Temperature Data page, the Wind Velocity Data page, and our Educational Resources page.

The background is a vibrant space-themed illustration. It features a gradient of colors from deep red at the bottom left to bright blue at the top right. Scattered throughout are various celestial bodies: a large planet with a blue and white ringed pattern in the top left, several smaller planets with different colors and patterns, and numerous white stars of varying sizes. The overall effect is a dynamic and colorful cosmic scene.

Education Page

With guidance from NYS regents testing material and educator feedback, we have decided to make a renewable energy modules page which includes:

- Key Renewable Energy terms
- A fun module for students to visualize data

Data Exploration

Learning Modules supplemented with Data Visualization

- Wind Velocity Data over 1 year
- Surface Temperature Data over 1 year
- Planned scope: New York State

Presented currently as slider component to display change over time

- Allows for exploration of questions such as potential seasonal performance or intensity in different seasons

Learning Modules

Inspiration from AP Environmental Science resources such as BioMan Biology to create interactive component

- “Path of a Proton”
- Path 1: Solar Energy
- Path 2: Wind Energy

Division of difficulty by grade (K-6, 7-8, 9-12, AP Env Sci)

Path Demo





03

LIVE DEMO



04

FUTURE PLANS

Where we plan to take our project from here.

MongoDB Database

Data for Educational Resources Page

We plan to build our own database and keep useful information, links, and learning modules for each category under our Educational Resources page for easy call access to our front-end.

Express / Node API

Talk about development of API and how we will pull / use the data.

- Key Renewable Energy terms
- A fun module for students to visualize data

PROJECT TIMELINE





THANK YOU!
Any Questions?

