V.A.S.T

Cyber Crusaders

Project Midterm Presentation

TABLE OF CONTENTS

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

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.

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

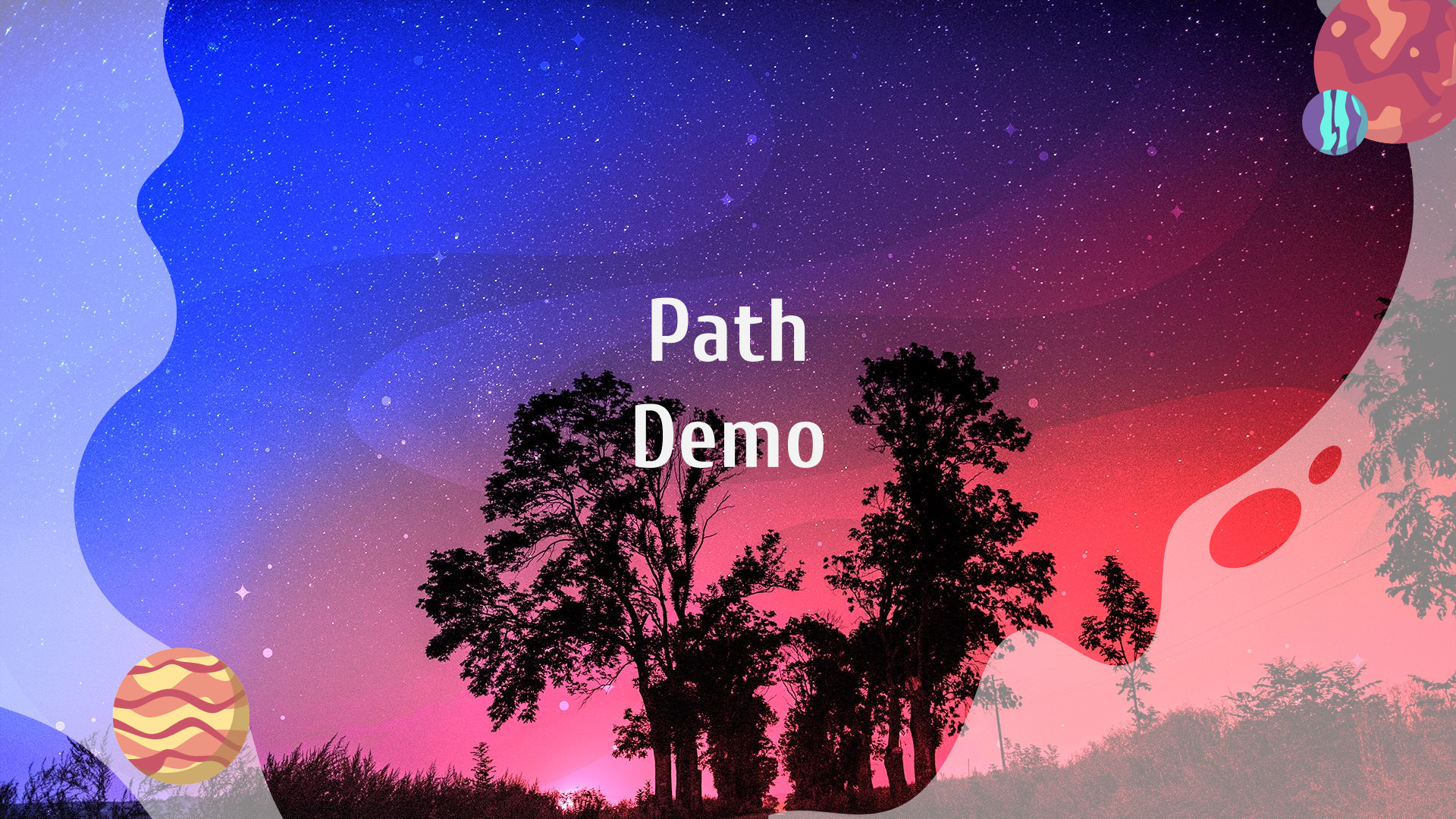
- Allows for exploration of questions such as potential seasonal performance or intensity in different seasons

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

MAR 31

API will be completed

Database will be built

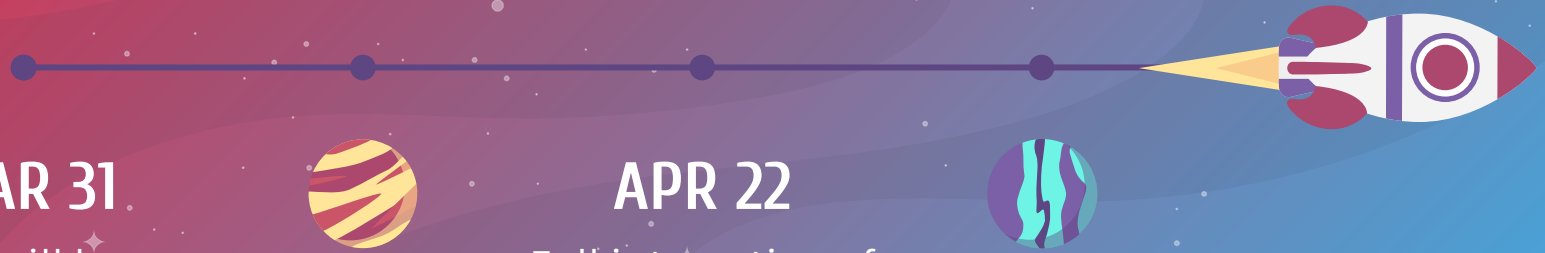
APR 15

APR 22

Full integration of front-end to back-end

Final Presentation and demonstration

APR 28



THANK YOU!

Any Questions?