Energy Explorer

Team: Spam W

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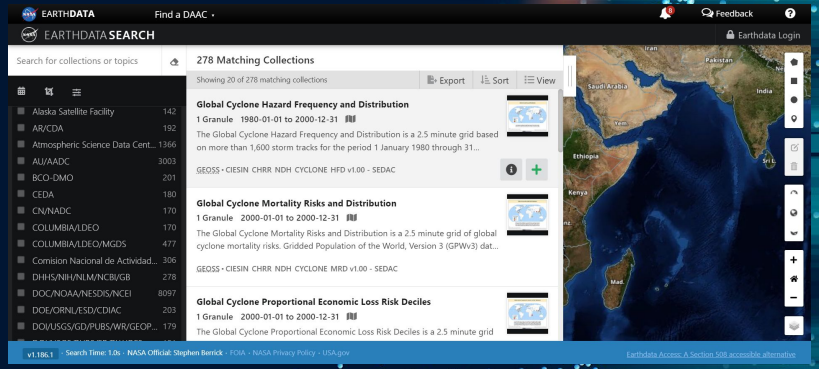
The current NASA data paths and archives are getting in the way of Citizen Science.



What is

ENERGY EXPLORER

Energy Explorer is a website that aims to reduce the barrier to entry for the general public. Focusing on what renewable energy sources are “viable” for a given region

Stakeholders And Users

- National Aeronautics and Space Administration (NASA)
- Rensselaer Polytechnic Institute (RPI)
- RPI Students
- Professor Callahan
- Citizen Scientists
- Science Interested
- General Public

Personas

Bobby the Scientist

Bobby is a scientist at NASA and he’s researching ways to increase Nasa’s internal usage of Bio thermal energy to reduce climate change

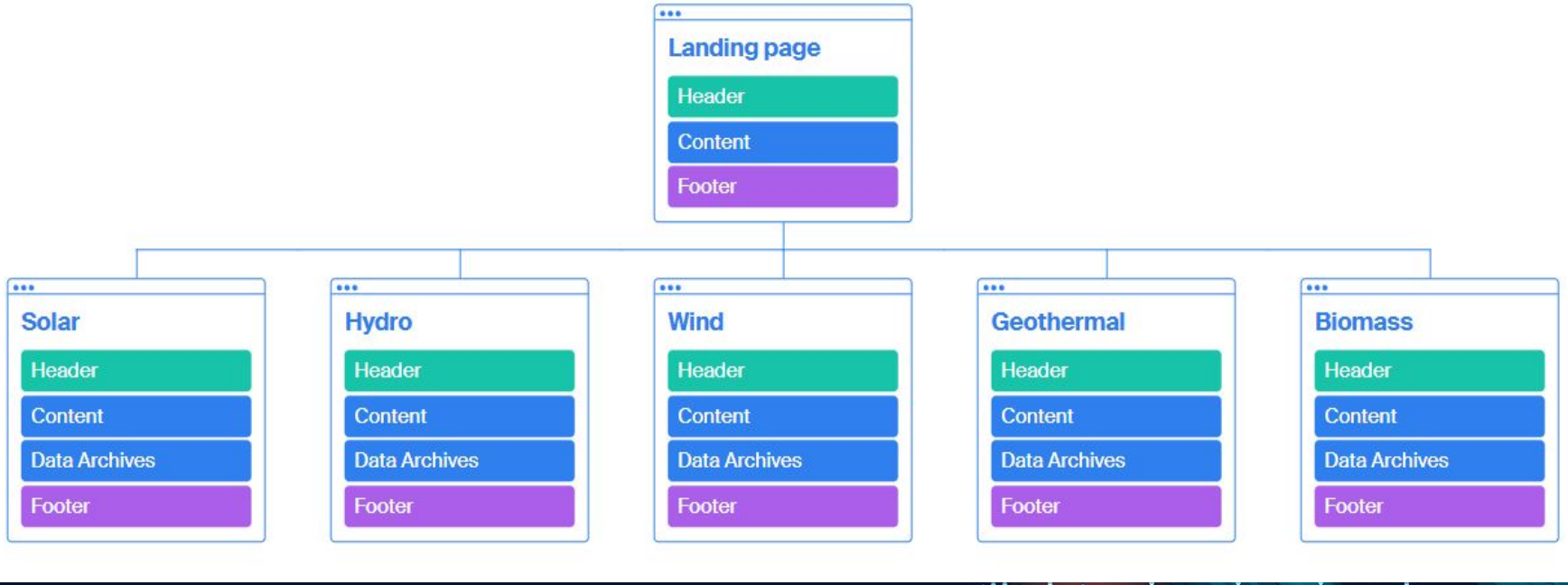
Sammy the Student

Sammy is a student in high school and he’s just learnt about Solar energy in science class. He’s curious and wants to learn more.

Personas (cont.)

- Energy Explorer is able to serve both personas even though they have varied need. Because the data is so accessible and streamlined can help both our personas by giving them access to the data they need in concise and accessible ways

Site Map


Landing page
Header
Content
Footer
Solar
Header
Content
Data Archives
Footer
Hydro
Header
Content
Data Archives
Footer
Wind
Header
Content
Data Archives
Footer
Geothermal
Header
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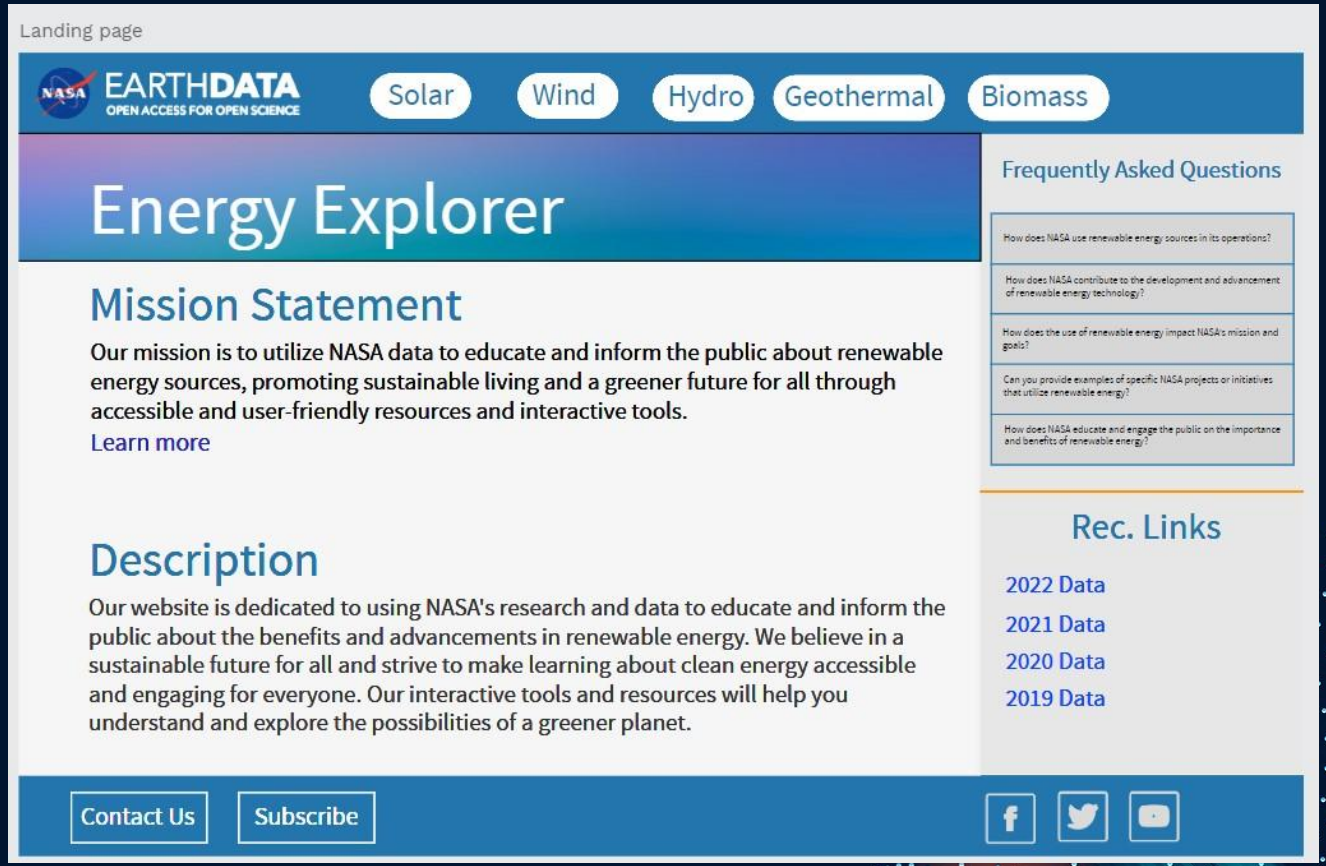
Data Archives
Footer
Biomass
Header
Content
Data Archives
Footer

Wireframe


Landing page
EARTHDATA
OPEN ACCESS FOR OPEN SCIENCE
Solar
Wind
Hydro
Geothermal
Biomass
Energy Explorer
Mission Statement
Our mission is to utilize NASA data to educate and inform the public about renewable energy sources, promoting sustainable living and a greener future for all through accessible and user-friendly resources and interactive tools.
Learn more
Description
Our website is dedicated to using NASA's research and data to educate and inform the public about the benefits and advancements in renewable energy. We believe in a sustainable future for all and strive to make learning about clean energy accessible and engaging for everyone. Our interactive tools and resources will help you understand and explore the possibilities of a greener planet.
Frequently Asked Questions
How does NASA use renewable energy sources in its operations?
How does NASA contribute to the development and advancement of renewable energy technology?
How does the use of renewable energy impact NASA's mission and goals?
Can you provide examples of specific NASA projects or initiatives that utilize renewable energy?
How does NASA educate and engage the public on the importance and benefits of renewable energy?
Rec. Links
2022 Data
2021 Data
2020 Data
2019 Data
Contact Us
Subscribe

Wireframe

Specific energy page

EARTHDATA
OPEN ACCESS FOR OPEN SCIENCE

Solar | Wind | Hydro | Geothermal | Biomass

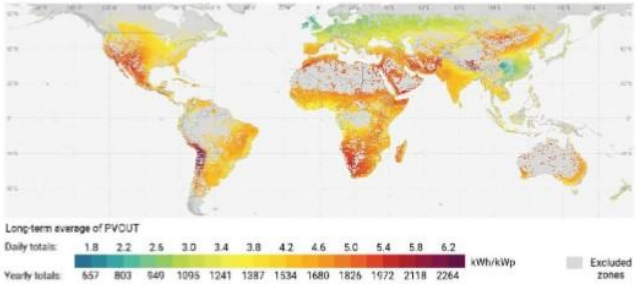
Solar Energy

Solar energy is harnessed from the sun's rays through the use of solar panels. It is a clean, renewable source of power that does not produce emissions or pollutants. It can be used to power homes and buildings.

Learn more

2017 Data

Data
Data
Data
Data
Data
Data



Data Archives

2020 | 2019 | 2018
2017 | 2016 | 2015
2014 | 2013 | 2012
2011 | 2010 | 2009
2008 | 2007 | 2006
2018 | 2004 | 2003

Contact Us | Subscribe

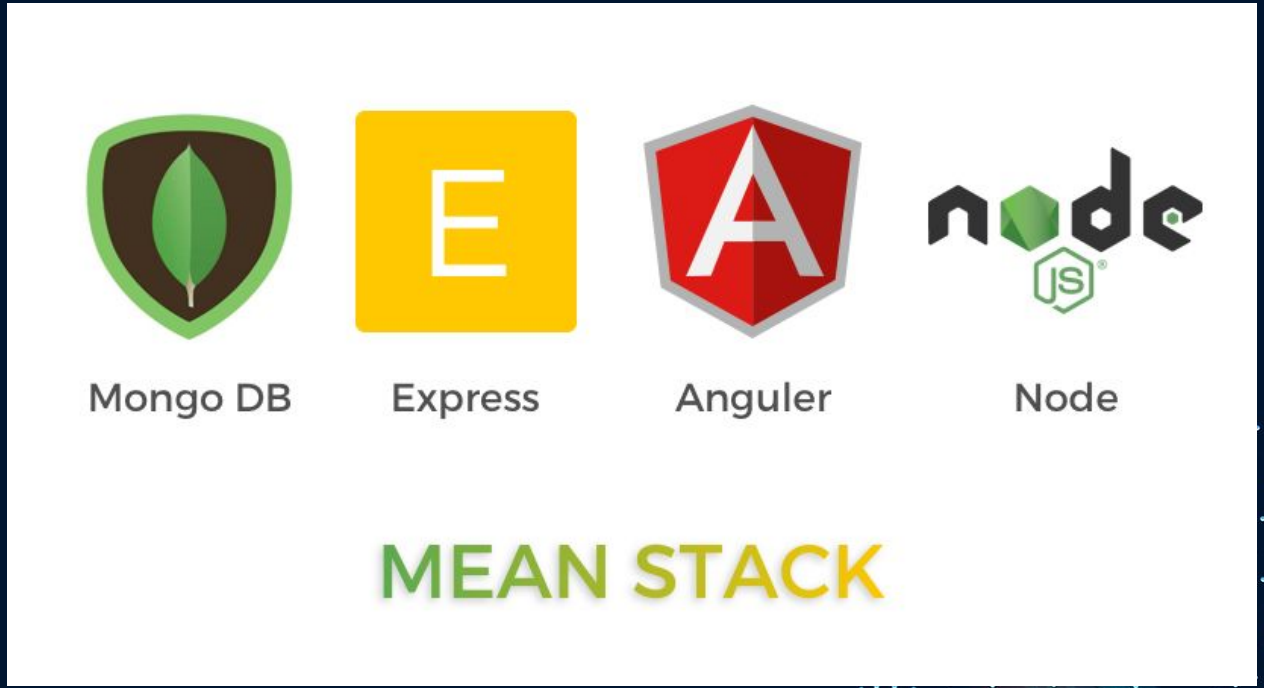
Functional Requirement

- People: Users must be able to navigate the Energy Explorer data pathfinder with ease on their device(s).
- Process: a Landing Page and associated pages for the different types
    - Navigable, Selectable, Accessible, Searchable
- User Interface: The user interface must be similar to current pathfinders and be intuitive to use for the general public.

Non Functional Requirement

- Software: Cross Platform
- Data Collection + Storage: store and fetch updated or additional NASA data relevant to their pathfinder.
- User Experience: ensure accessibility and iterative testing
- Performance: handle regular expected traffic
- Scalability: scale as the amount of data and users
- Maintainability: maintainable within the next 5 years

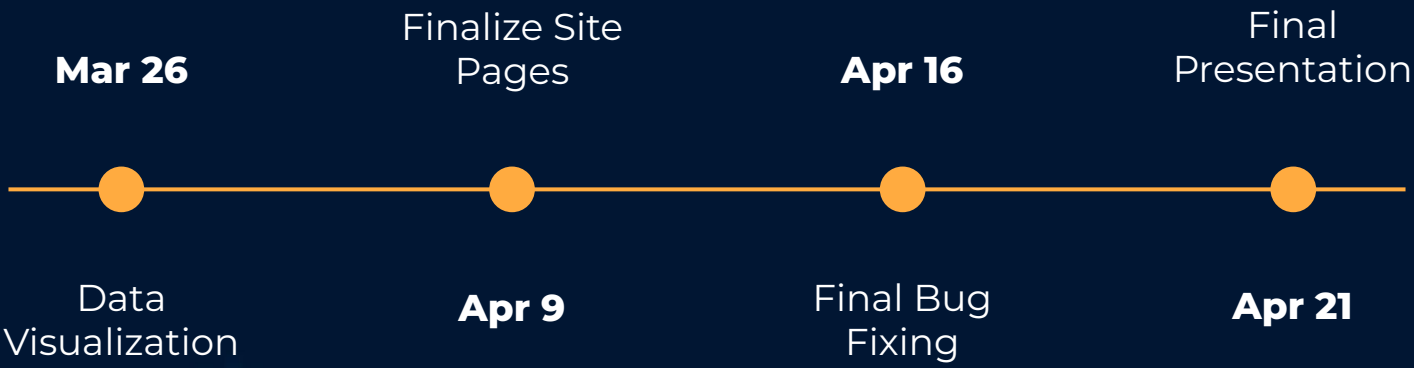
Tech Stack

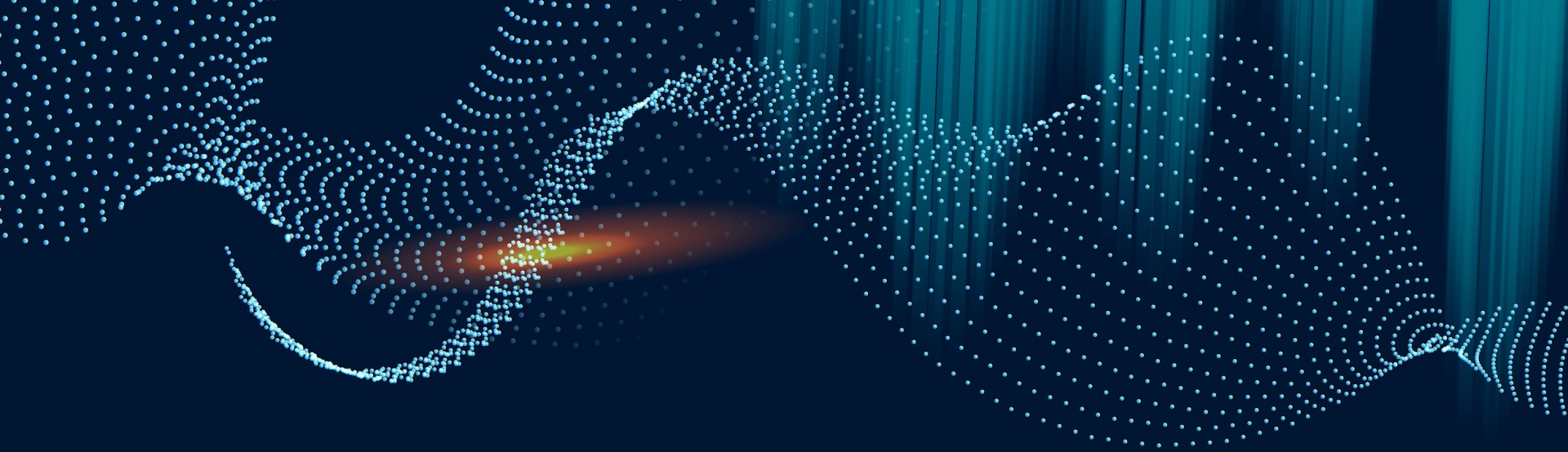


TIMELINE (1/2)


Jan 29
Begin HTML & CSS
Feb 12
Continue HTML & CSS
Feb 26
Begin Javascript
Mar 12
Strategize Dataset Breakdown
Mar 19
MongoDB

TIMELINE (2/2)


Mar 26
Finalize Site Pages
Apr 16
Final Presentation
Data Visualization
Apr 9
Final Bug Fixing
Apr 21



SPAMW

Thank you
Questions?