



Alpha Presentation

Modeling Michigan's Energy Future

The Capstone Experience

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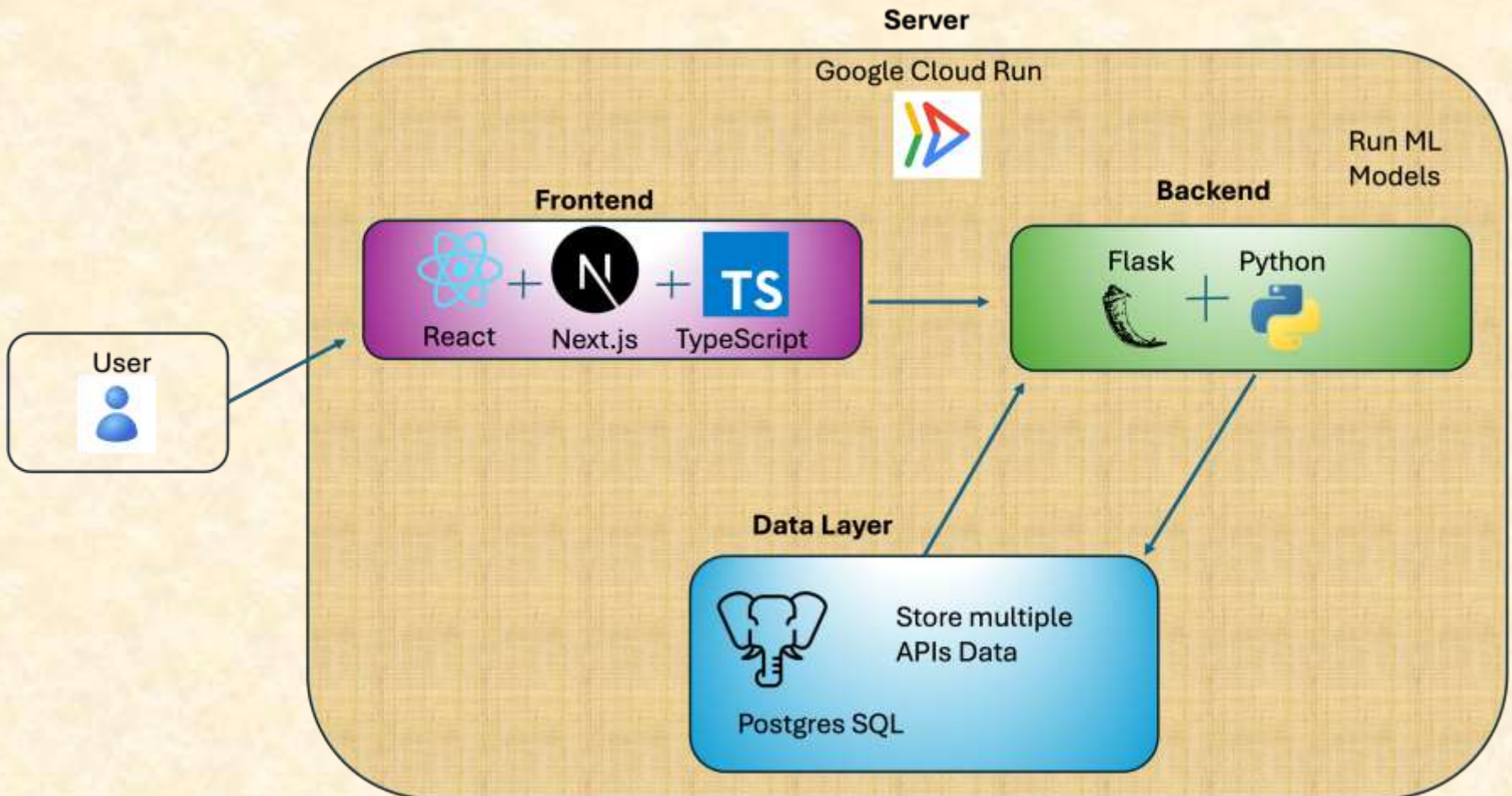
*From Students...
...to Professionals*

Project Overview

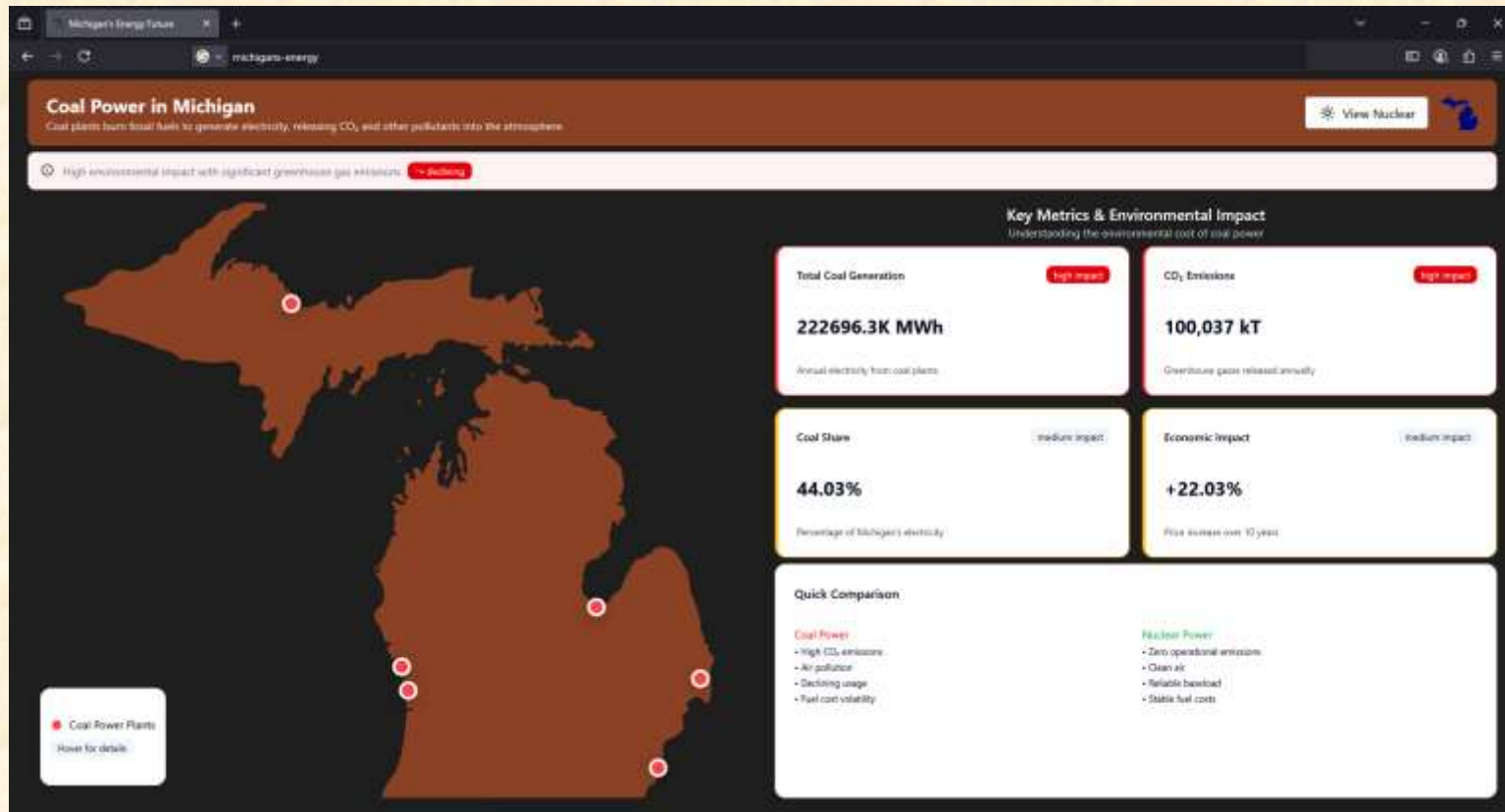
- Energy generation choices are crucial to inform policymaking and public awareness
- Interactive models that display health and economic impacts of different methods of power generation
- Emphasis on benefits of nuclear power when compared to fossil fuels



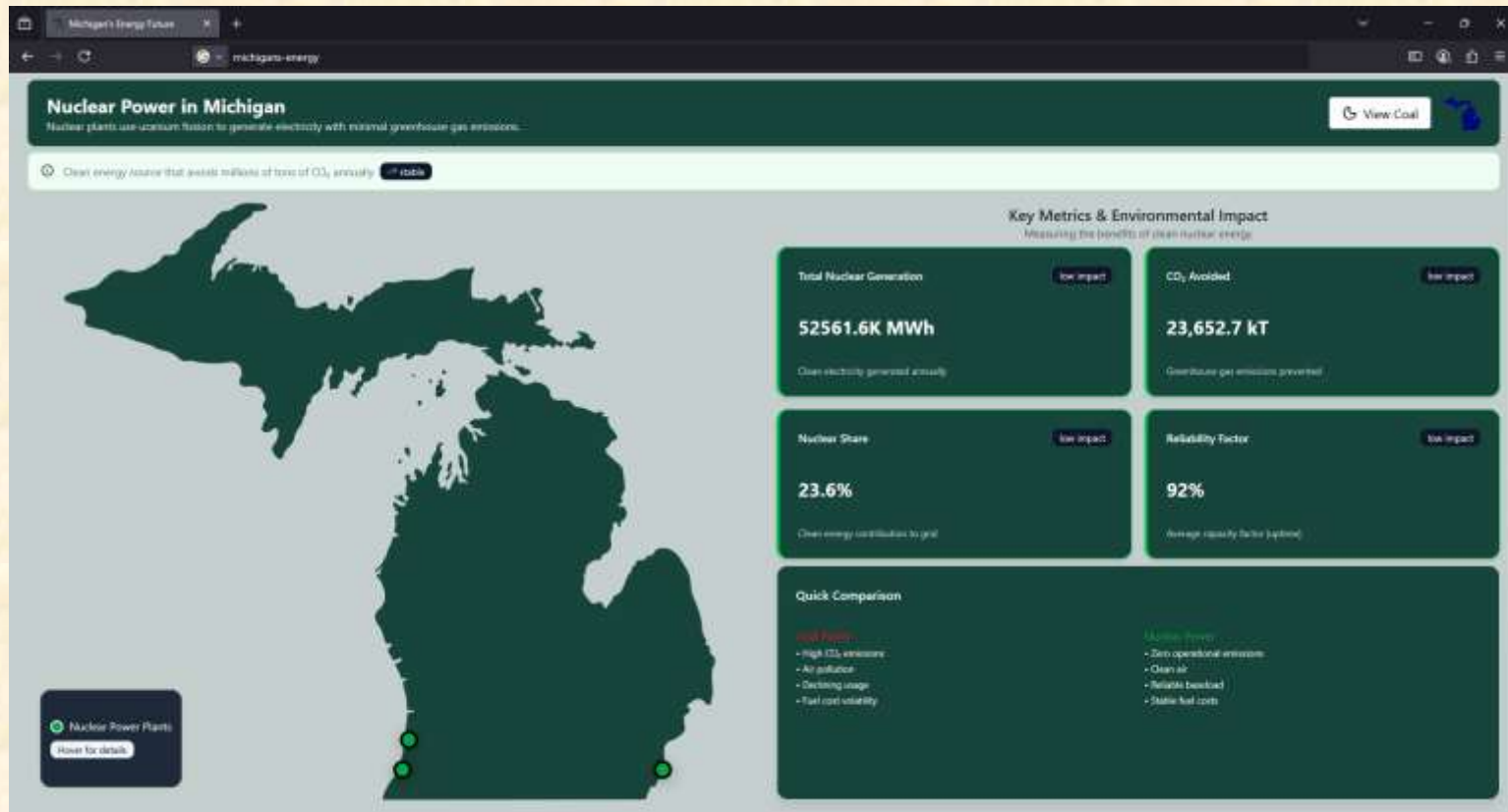
System Architecture



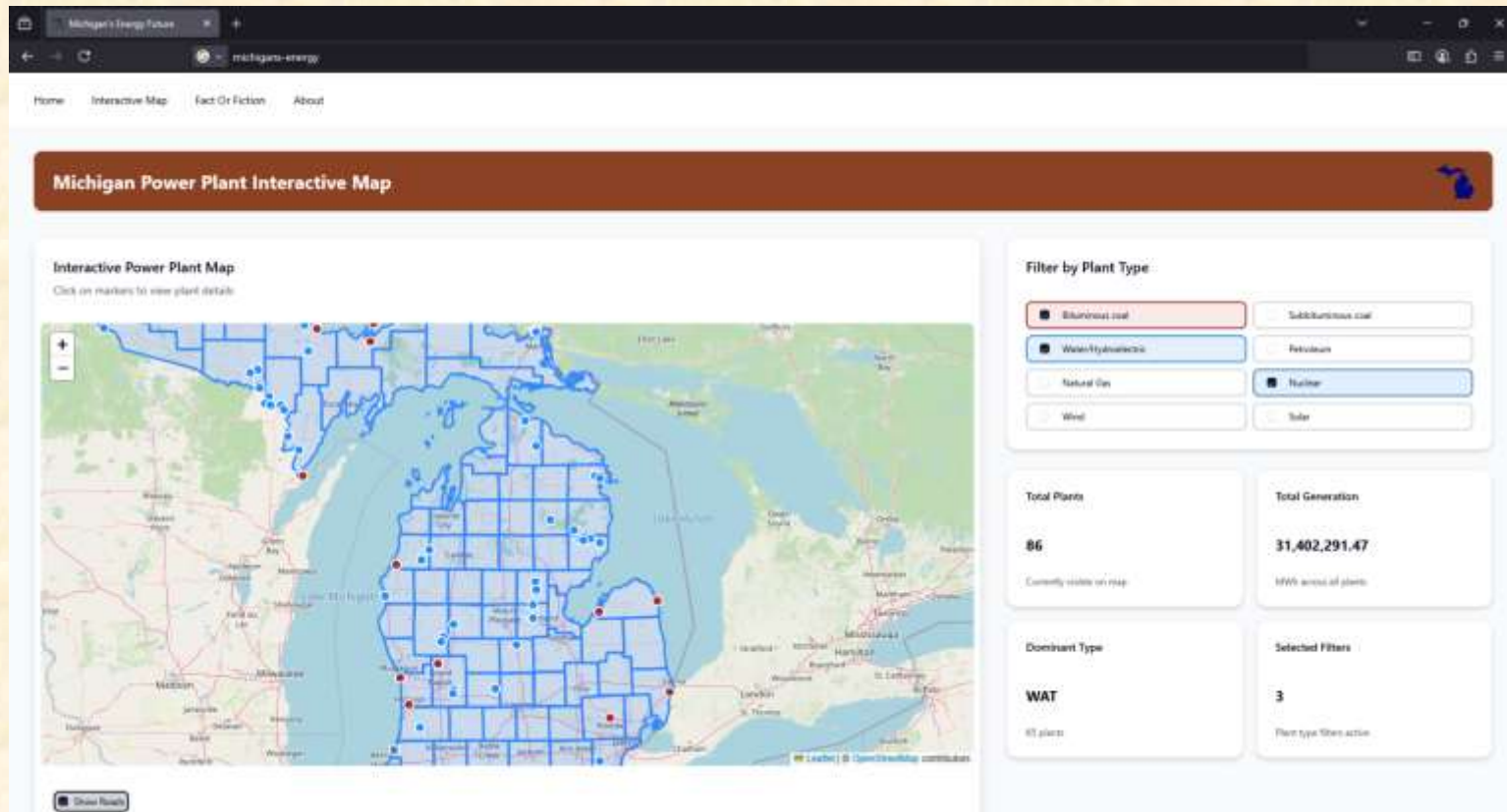
Current Energy – Dark Mode



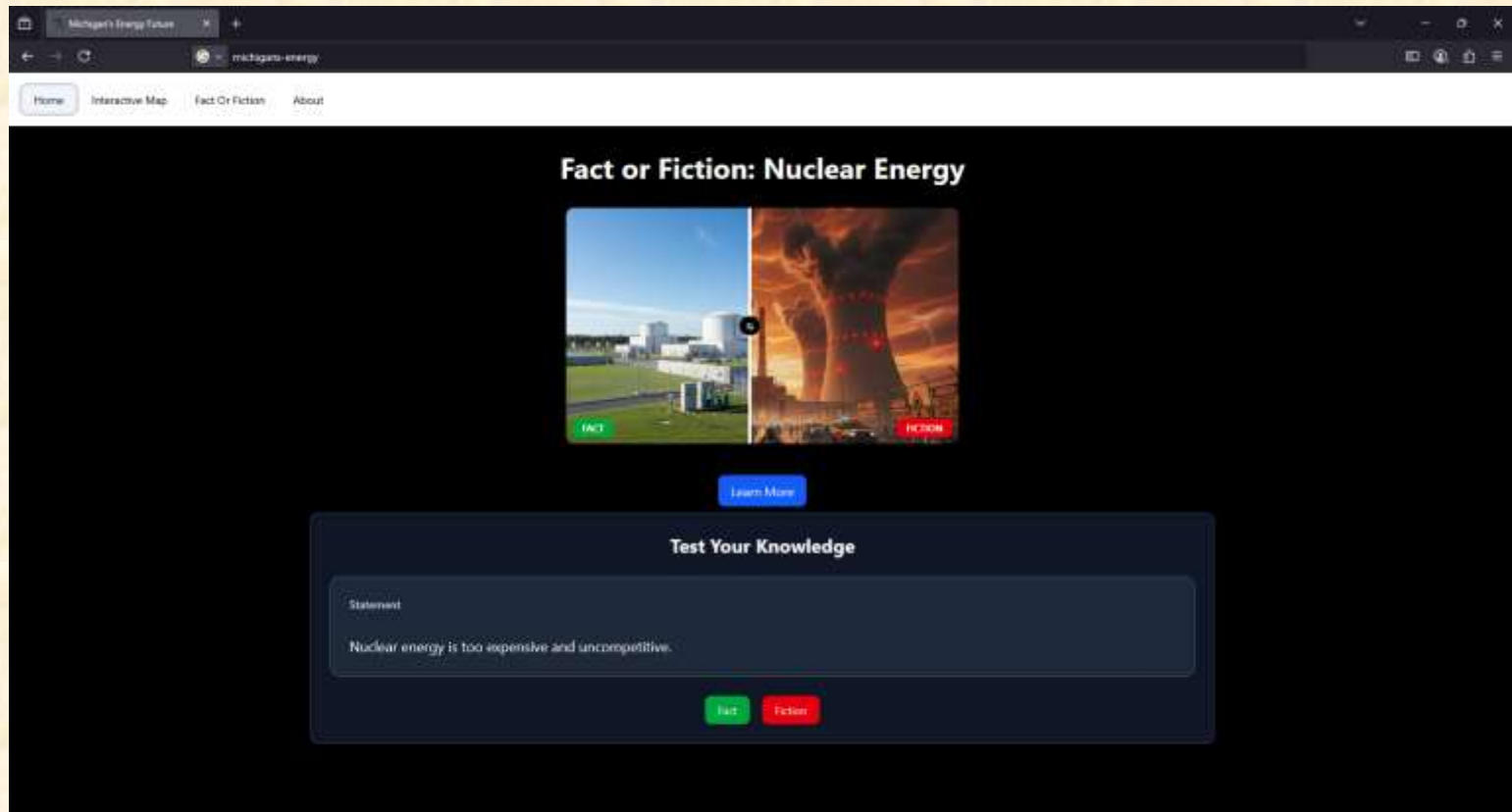
Energy Project – Light Mode



Interactive Map



Fact or Fiction



What's left to do?

- Implement caching and background task queues
- Dynamic modeling of plant swapping including carbon and economic footprint
- Increased Granularity of Plant Modification and Parameter Display
- Build an automated ETL pipeline that cleans, validates, and stores new EIA updates automatically
- Improve UI and storytelling across the website



Questions?

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