Beta Presentation
Health Outcomes Forecasting Tool

The Capstone Experience
Team Anthropocene Institute 1

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Project Overview

• There is a lack of precise data about air pollution and health effects on the individual.
• Poor air quality can result in an increase in lung disease and other health complications.
• Keep consumers, researchers, and politicians informed about air quality in their area.
• Designing a web app that uses machine learning to predict air quality and health information in each area, and displays that with a map overlay.
System Architecture

Machine Learning Model
- SQLite
- scikit-learn

Backend
- Flask
- Python
- Apache

User Interface
- HTML
- CSS
- JS
Compare Page
Health Predictions Page

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Quiz Page

What is one NATURAL resource that can cause pollution?

- Forest Fires
- Fossil Fuels
- Oil Spills
- All of the above

Score: 0 / 10  Question: 1 / 10
What’s left to do?

• Features

• Stretch Goals
  ▪ Predict pm2.5 with historical data at a specific coordinate
  ▪ Predict pm2.5 with more than the four nearest sensors
  ▪ Provide additional overlay for major pollution sources
  ▪ Predict 5 total health parameters

• Other Tasks
  ▪ Ensure project is fully documented and ready to hand off
  ▪ Final meeting with AI design team
  ▪ Meet with software team to discuss server security
Questions?