

CARBON-COVID API

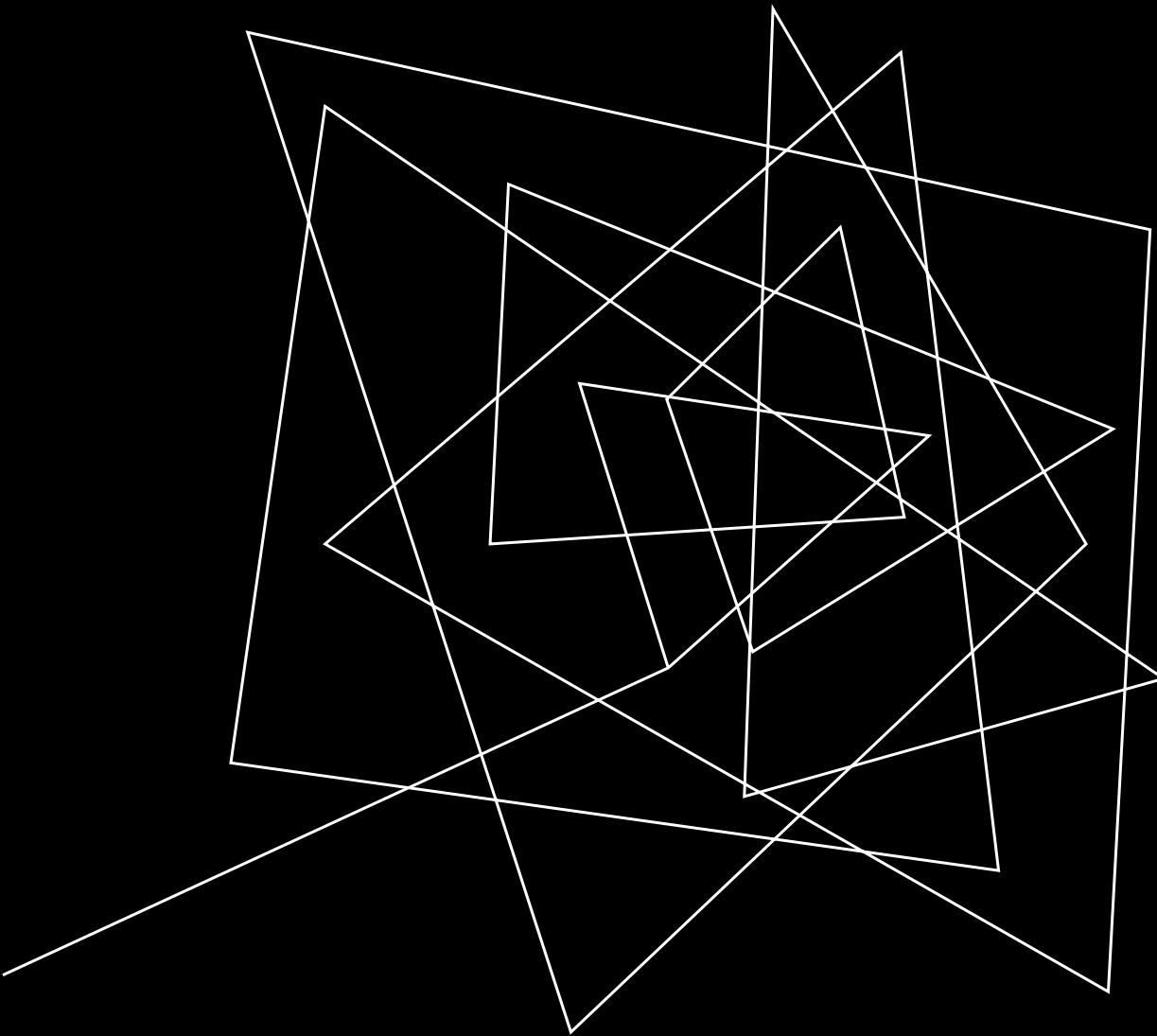
Andrew Yang

AGENDA

- Overview
- Structure
- Technologies Used
- API Design
- Process
- Demo
- Next Steps

OVERVIEW

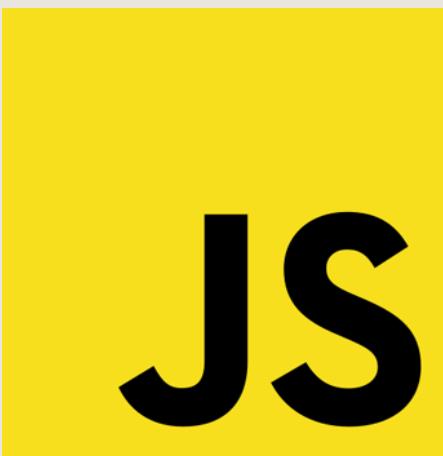
Tasked with building a REST API that combined **Carbon Intensity** and **COVID-19** data for a given **region** and **dates**.



STRUCTURE

```
▽ CARBON-COVID
  ▽ app
  > __pycache__
  > controllers
  > models
  > routes
  ▽ interface
    ▽ static
      > css
      > img
      > js
      > templates
    > venv
  i README.md
  t requirements.txt
  t run.py
```

TECHNOLOGIES USED



API DESIGN

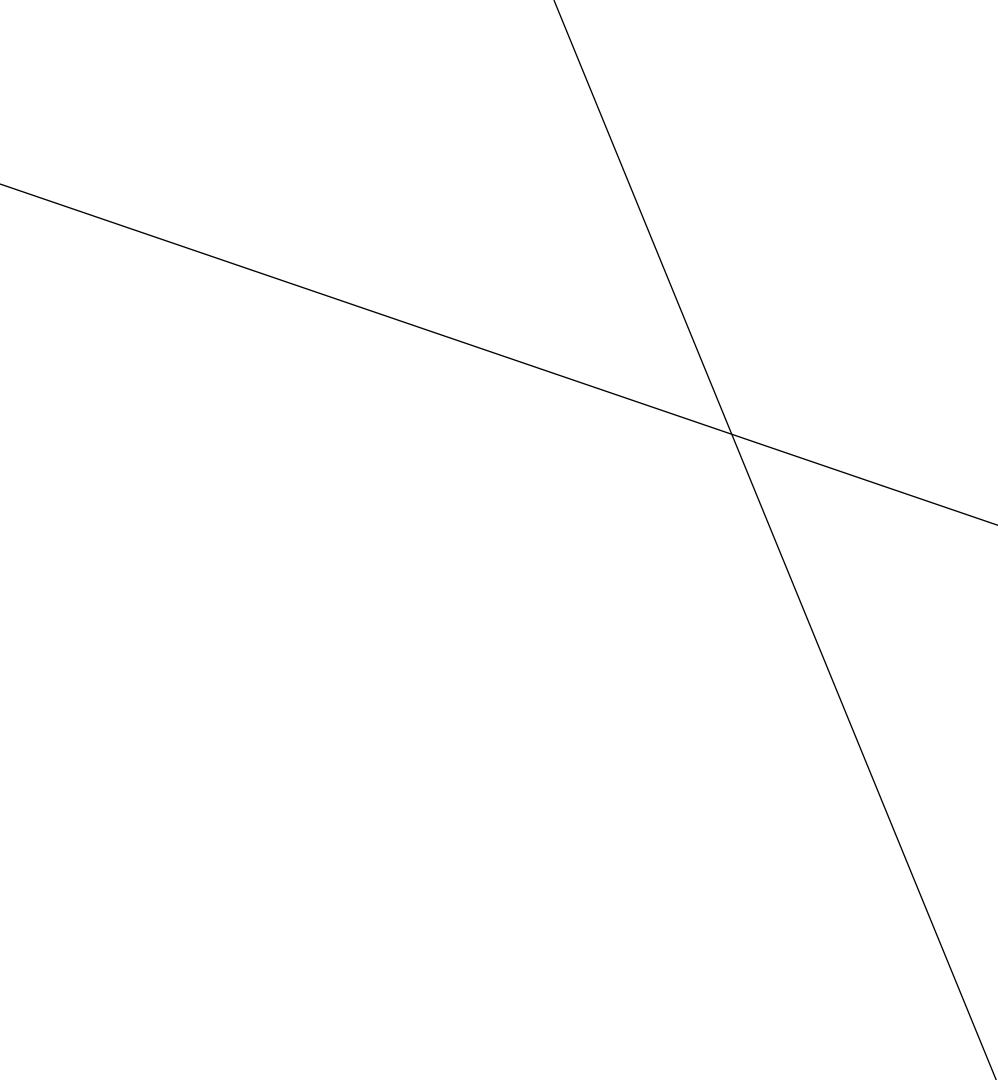
Endpoints	Parameters	Response Formats
GET /api/combined_data	Region (string) Name of specified UK region Date (string) Datetime in ISO8601 format YYYY-MM-DD	200 OK Request successful 400 Bad Request Invalid region name 404 Not Found Data not found 500 Internal Server Error

Considerations	How to design the endpoint(s); How to handle errors
Challenges	Integrating both APIs; mapping available regions
Solutions	Built a simple user interface and database to cache data
Tradeoffs	Cannot give range of times; Cannot access other Covid metrics

PROCESS

DEMO





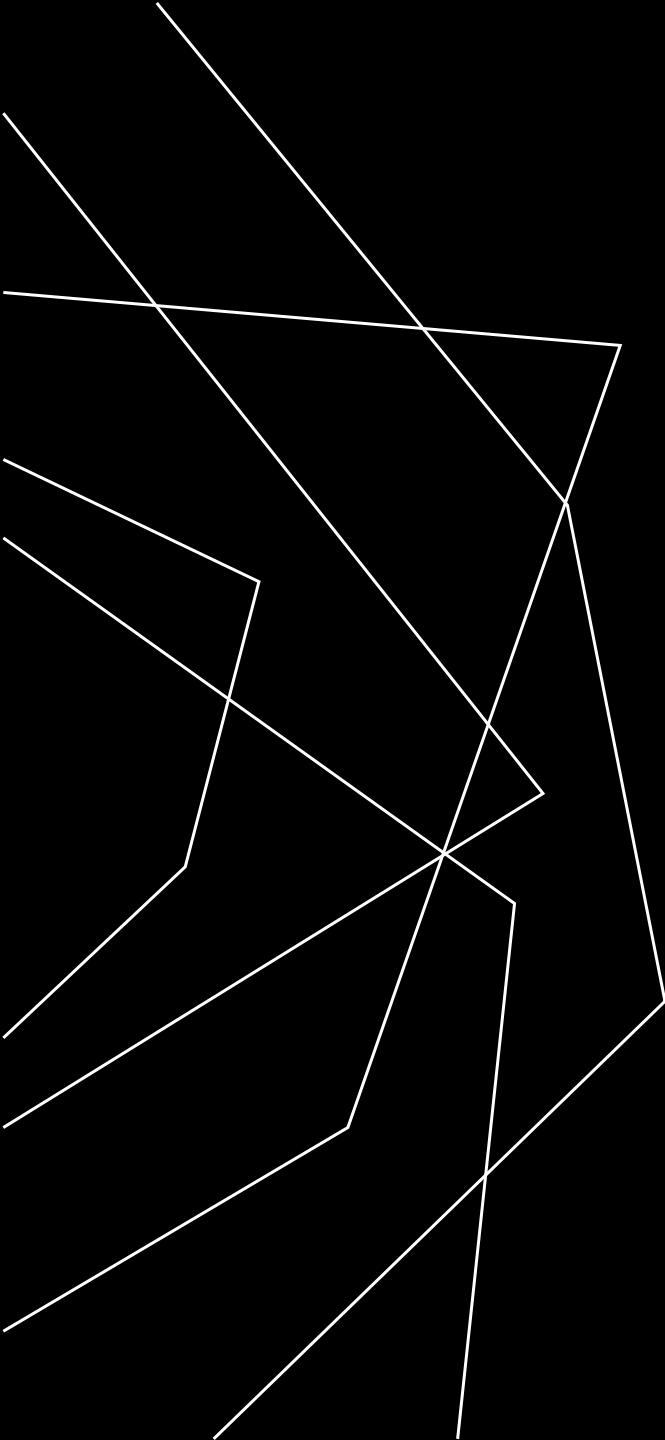
NEXT STEPS

Customize parameters

Integrate Authentication

Polish Interface

Analyze Data



THANK YOU

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