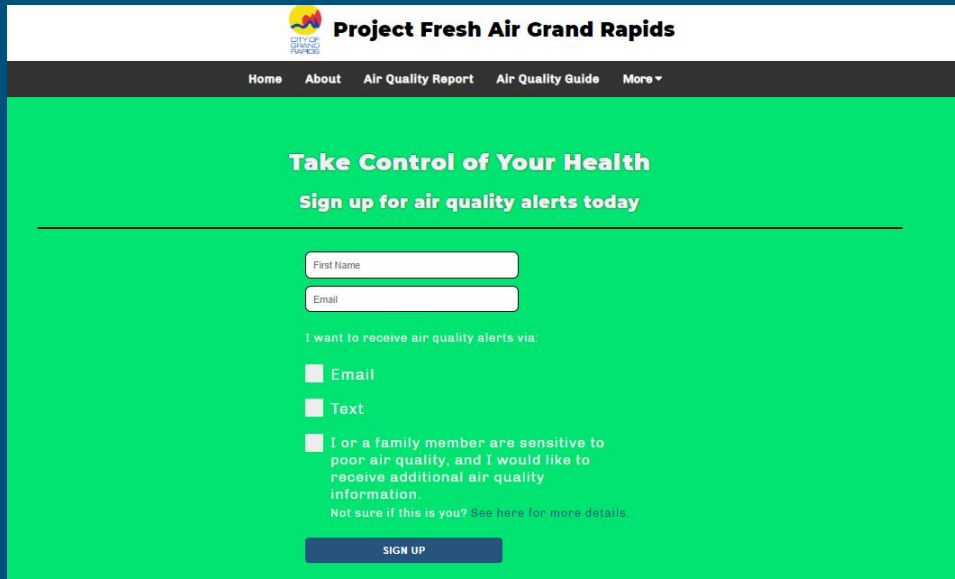


# Air Quality Visualization and Alert System

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Team 'Breath of Fresh Air'  
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# Goal



The screenshot shows a web page for 'Project Fresh Air Grand Rapids' by the City of Grand Rapids. The page has a dark blue header with the city logo and navigation links: Home, About, Air Quality Report, Air Quality Guide, and More. The main content area is white and features the heading 'Take Control of Your Health' and the subheading 'Sign up for air quality alerts today'. Below this is a sign-up form with two input fields for 'First Name' and 'Email'. A section titled 'I want to receive air quality alerts via:' contains three radio button options: 'Email', 'Text', and 'I or a family member are sensitive to poor air quality, and I would like to receive additional air quality information.' A link 'Not sure if this is you? See here for more details.' is provided below the options. At the bottom of the form is a blue 'SIGN UP' button.

**Project Fresh Air Grand Rapids**

Home About Air Quality Report Air Quality Guide More ▾

### Take Control of Your Health

Sign up for air quality alerts today

First Name

Email

I want to receive air quality alerts via:

☐ Email

☐ Text

☐ I or a family member are sensitive to poor air quality, and I would like to receive additional air quality information.

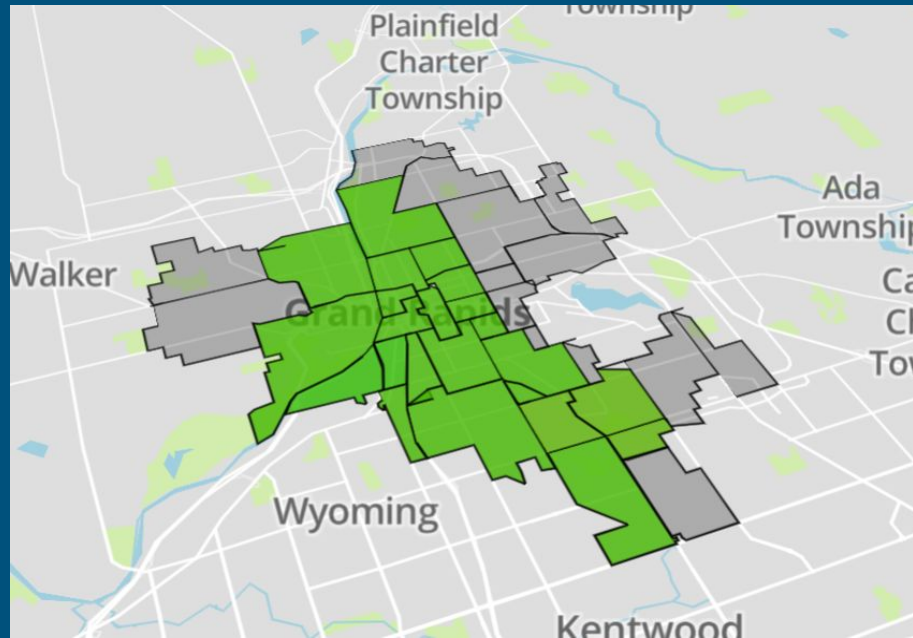
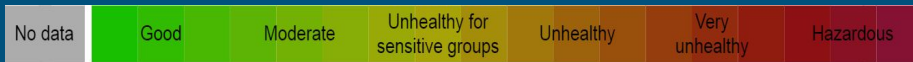
[Not sure if this is you? See here for more details.](#)

**SIGN UP**

- Inform citizens about the importance of air quality
- Create a system to alert citizens to poor air quality in the area
- Have an open source platform to download data on air quality

# Solution

- Web App
  - Django and Python
- Data Management
  - Noise Reduction Techniques
- Data Visualization
  - Plotly and Python
- Alert System
  - Email and Text Alerts Scripts



# Special Acknowledgements

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- Seamless IoT
- OST
- Mercy Health
- Professor Engelsma