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| Air Quality Index Project 2 |  |

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| Project Objectives |  |
| * Find data relating to air quality | * Utilizing and incorporating coding fundamentals |
| * Analyze data to find conclusions | * Present visualization of data using JavaScript |

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| Task 1 | * Collect data from 500 cities worldwide for air quality statistics * Find latitude and longitude for the 500 cities (necessary for any API call) * Convert the data into a CSV file |
| Task 2 | * Use API calls to extract data from http://waqi.info/ * Combine data from API calls and city coordinates (latitude and longitude) * Load all the data into Mongo DB |
| Task 3 | * Once data is loaded into Mongo DB, analyze to determine Top/Lowest cities using Pandas * Create bar graphs, pie charts, and other plots using Matplotlib * Create a HTML page for visualization of data |
| Task 4 | * Extract data from Mongo DB/JSON for geomapping * Design HTML page to display data * Display charts/graphs using Plotly/Leaflet |
| Task 5 | * Showcase dashboard with final visualizations of data found * Provide drop downs showing additional information/data obtained * Create an interactive webpage highlighting conclusions |
| Considerations | The data we analyze will determine which cities have the highest pollution amounts/lowest pollution amounts. It will draw conclusions on what industries and technologies are contributing to pollution worldwide. |
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