

Model Development Phase

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|---------------|-------------------------------------|
| Date | 10 June 2024 |
| Team ID | 739850 |
| Project Title | Air Quality Index Analyzer using ML |
| Maximum Marks | 5 Marks |

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

| Feature | Description | Selected (Yes/No) | Reasoning |
|---------|---------------------------------------------|-------------------|------------------------------------------|
| PM2.5 | Particulate matter with a diameter < 2.5 μm | Yes | Critical indicator of air quality. |
| PM10 | Particulate matter with a diameter < 10 | Yes | Influences respiratory health. |
| NO2 | Nitrogen dioxide concentration | Yes | Common pollutant from vehicle emissions. |

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|------------|------------------------------|-----|------------------------------------|
| SO2 | Sulfur dioxide concentration | Yes | Results from industrial processes. |
|------------|------------------------------|-----|------------------------------------|

| | | | |
|----------------|-------------------------------|-----|------------------------------------------|
| CO | Carbon monoxide concentration | Yes | Harmful to human health. |
| NO | Nitric oxide | Yes | Affects pollutant levels and dispersion. |
| Toluene | Geographic | Yes | Specific to regions pollution levels. |