

**Model Development Phase**

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| Date | 10 June 2024 |
| Team ID | 739763 |
| 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.

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



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| --- | --- | --- | --- |
| **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. |