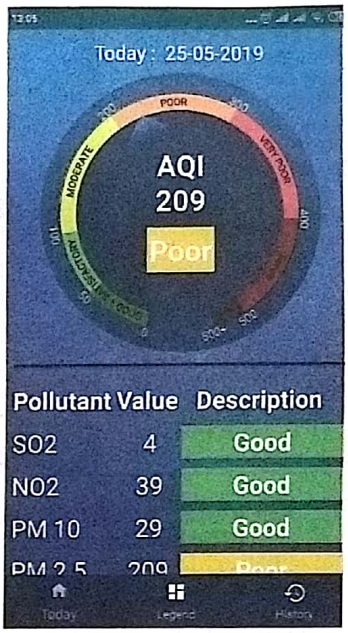
Students make app to gauge air quality in Pune

MIT-World Peace University traces greener steps as it plans to limit number of vehicles on its campus



The data will be computed at air quality control station which will then relay the information to the app made by six students

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Pune's tech-savvy youngsters have time and again showcased its penchant for innovation — in a bid to find solutions for various problems. In one such display, the engineering students at MIT-World Peace University have put together a mobile application that relays air quality information to its users. The creation follows the theme of the varsity's foundation day, 'beat air pollution'.

Six students from second-year BTech course in computer engineering came up with the idea for this app, 'Air Quality Index' that will give data calculated from an air quality control station. Both these elements are set to be launched later in June. Once functional, it will primarily talk air quality on four parameters—good, satisfactory, moderate and poor.

Aditya Khochare, one of the team members, said, "The air quality control stations measure the particulate through its multiple sensors. Then, it calculates the density on the basis particulate matter (PM) 1.0, 2.5 and 10. We have applied an algorithm that converts PM into air quality index which, according to the measurement, tells whether the air is good, satisfactory, moderate or poor."

As of now, the application can measure Kothrud's air quality, upto 4 km around the campus. It also gives health advisory (along with the risks) depending on the air quality by guiding the users on what to expect from the day. Apart from these routine updates, a user can also check weekly and monthly statistics as the entire data will be available on the application. The varsity will also launch a censor campaign to reduce the number of vehicles or limiting the access, keeping in mind the air pollution taking place due to the same.

Mangesh Bedekar, senior professor of engineering at MIT, said, "This application will give information about the air quality and how it will affect the health. We were happy that our students voluntarily stepped up to create this app. While engineering is all about developing similar features, this project also gave them hands-on experience in this sector."

Rajendra Shende, chairman of TERRE Policy Centre—who is also the guiding force of the university to trace greener steps — explained the alarming nature of the air quality situation and need to bring in curbs in whatever way possible at the soonest. Citing that four Indian is among world's top 20 polluted ones, he recounted the adverse impacts from a very young age. "PM 2.5 is tiny but deadly. Their presence has a direct impact on well-being. Thus, it is the need of the hour to generate awareness amongst the youngsters and inspire them to take corrective and preventive actions now. Setting up systems like the Air Quality Monitoring Station (AQMS) will foster this attitude. Also, the mobile app will provide real-time air quality along with some critical messages for preventive and corrective actions," he said.

MIT is also planning to take their project ahead to other major campuses like Symbiosis and Savitribai Phule Pune University among others.

Shende said, "If more campuses come together and launch similar initiatives, it will add to Pune's 'smart' quotient. We would be happy to take our project to these premises."

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