Objectives of the project

The main objective of the project is to monitor the pollutants emitted from an industry/factory and predict the future dispersion of these pollutants also to then output these results in the form of reports for industries/factories.

To accomplish the main objective can be broken down into 3 sub-objectives which can be defined as

* Sensor module: to create a series of gadgets which can measure the emission parameters and the meteorological parameters and also that can withstand the environment conditions present near the stack/chimney and transmit this information to a server.
* Prediction module: this module uses machine learning models with data acquired from the cloud server to predict future emission parameter values.
* Air dispersion module: to create a module that simulates the movement of fluid particles (pollutant) in air using air dispersion models with meteorological data.