**PROJECT DEFINITION DOCUMENT**

1). **Name of the Project** - Emission Control System

2). **Domain of the Project** - Environmental Security

3). **Description of the Project** – Global warming is the unusual rapid increase in Earth’s average surface temperature over the past century primarily due to the greenhouse gases released due to the emission from automobiles and various electronic appliances. Our project specifically aims to monitor the emission rate of different pollution causing bodies and to provide with the remedies in order to prevent them from exceeding the threshold.

4). **Scope of the project**

* Designing a platform for customers to buy automobiles and electronic appliances
* Continuous monitoring of emissions for the appliances like AC, Refrigerator and automobiles through sensors (IOT)
* Maintenance and service authority sends messages to user on a timely basis for their product’s maintenance
* Incurring costs and taxes to the user if emission is more than a threshold limit
* Sensors send information alerts to both users and managing authority regarding emissions along with the parts responsible for higher emission
* Managing authority sends message to user regarding replacement of the faulty parts, and users can in turn order parts from a one stop local E-Commerce chain for all kinds of replacement parts
* The local E-Commerce chain has an inventory management system for their parts that is connected with higher level global chain
* Risk analysis on the basis of emission of different harmful gases (using JFreeChart)
* Effects of increasing pollution on economic growth of a nation
* The analytics will involve users being able to see daily\weekly\monthly emissions. Managing authority can monitor emissions of all users and see total pending costs of users, the E-Commerce admins can manage their inventory sales, system admin can see emission levels and their corresponding implication on a particular city, state or country level.

5). **Conclusion** - Much is being done to control, monitor and rectify damage done by pollutants. The problems are diverse and some are only being recognised but it is important to keep a close control over pollutants so that we can maintain the environment in an acceptable condition for future generation.