**HAZARDOUS AREA MONITORING SYSTEM FOR INDUSTRIAL PLANTS POWERED BY IOT**

**BRAINSTROM**

**1. HAZARDOUS AREA MONITORING SYSTEM USING LORA MODULE:**

LORA- Long Range wide Area

In the industry plants, the hazardous area monitoring is important one. By using the lora module for that purpose we can easily identify the problem. Lora is an advanced type IOT device.

**ADVANTAGES:**

* Using lora module the user can get the data for wide area.
* Lora module transmit the data upto 13km for open surface and it can transmit the data upto 5km with interference.
* The both transmitter and receiver are work quickly.

**DIS ADVANTAGES:**

* Only the particular member can access the data in the lora module.
* Initial cost is more compare to Bluetooth and Zigbee technologies.

**2. HAZARDOUS MONITORING SYSTEM IN INDUSTRY USING EMBEDDED SYSTEM:**

In an industrial workplace, the safety and human lives and properties are key functions of health, safety and environment .By using embedded system in industry we will rectify this problems. The system will notify the user with a SMS.

**ADVANTAGES:**

* By using this system in industry we can clearly identify the problem in where it is created.
* Its having a GPS to identify the problem location
* In this system the lot of sensors are used so we can quickly rectify the problems.

**DIS ADVANTAGES:**

* The sensors are sometimes get overloaded so that will work not properly in sometimes.
* Output of this system is low when compare to LORA module.
* Initial cost is more.