Project Synopsis

**Project Title :- Safety System for Home and Vehicle**

**Project is based on**

**Technology**:- IoT (Internet of Things)

**Programming language**:- Embedded C

**Abstract**

Safety management system is a project based on Internet of Things technology. In this system, it ultimately aims to the safety of our home and loved ones. This project is related to day to day fear of every person. There are many scenarios we have observed from 2 years in which people are driving their vehicle after drinking lot of alcohol. Because of which, accidents of drink and drive cases are increasing. Also, some people have lost their homes because of fire suddenly burnt because of gas leakage when there was no one in the home. People don’t get to know about their home status when they are away from home. By using internet of things technology, in which microprocessors and many sensors are used to collect data and know about our home and vehicle from anywhere on the globe.

**Features**

* Get SMS when your gas cylinder or Gas pipeline is leaking.
* Get SMS whenever your vehicle is driven by having alcohol.
* Refuse to ignite the car engine when driver is drunk.
* Get the service from anywhere on the globe.

**Planning of Work**

We have set an algorithm of number of steps to complete the project that meets our budget, time limit, requirements and the quality or accuracy of the project. We have set an clear vision about the need of our project in the society to change the meaning of home safety with good security and good communication platform which will have no limit.

**Step 1:- Connect the sensors and microprocessors**

In this step, we will be researching for the most updates versions of sensors and microprocessors which can make our project with more accuracy and reliability. All the sensors will be connected to microprocessor to process the information from the collected data from the sensors.

**Step 2:- Give a good communication platform**

In this step, we will research and decide a good communication platform to let the user know about their home status from almost anywhere from the world. Eg. Internet, GSM or 4G.

**Step 3:- Programming the microprocessor**

In this step, we will program the microprocessor to process the data and give the result as we need.

**Requirements of the project**

* Microcontroller like arduino or ESP8266
* GSM Module
* MQ15 sensor
* MQ06 sensor
* Alcohol Sensor