**Project title** : **Gas Leakage Monitoring & Alerting System**

**Team members**:

Deepak Krishna P

Vishal S R

Bharath Kumar S

Santhosh S

**Team mentor:**

Ms Angelina Royappa

**Introduction:**

The Internet of Things is a developing theme of specialized, social, and monetary centrality. Customer items, tough goods, cars and trucks,modern and utility segments,sensors, and other regular articles are being joined with Internet availability and amazing information systematic capacities that guarantee to change the manner in which we work, live, and play. Projections for the effect of IoT on the Internet and economy are amazing, with some foreseeing upwards of 100 billion associated IoT gadgets and a worldwide financial effect of more than $11 trillion by 2025. The Internet of Things (IoT) is an essential theme in innovation industry, strategy, and designing circles. This innovation is encapsulated in a wide range of arranged items, frameworks, and sensors, which exploit headways in processing power, gadgets scaling down, and organize interconnections to offer new capacities. The expansive scale usage of IoT gadgets guarantees to change numerous parts of manner in which we live. For shoppers, new IoT items like Internet-empowered machines, home mechanization parts, and vitality the executive’s gadgets are pushing us toward a dream of the "savvy home'', offering greater security and vitality effectiveness. IoT frameworks like arranged vehicles,savvy traffic frameworks, and sensors implanted in streets and scaffolds draw us nearer to "brilliant urban areas'', which help limit clog and vitality utilization. IoT innovation offers the likelihood to change horticulture, industry, and vitality creation and dissemination by expanding the accessibility of data along the esteem chain of generation utilizing arranged sensors.

**Problem Statement:**

Liquid Petroleum Gas (LPG) is a highly flammable chemical that consists of mixture of propane and butane. LPG is used for cooking at home, restaurant, and certain use for industry. They have certain weaknesses that make the gas leakage occur. The leakage of gases only can be detected by human nearby and if there are no human nearby, it cannot be detected. But sometimes it cannot be detected by human that has a low sense of smell. Thus, this system will help to detect the presence of gas leakage.

**.** Furthermore, gas leakage can cause fire that will lead to serious injury or death and it also can destroy human properties. This system was developed by using IoT to give real-time response to the user and the nearest fire station.

**.** LPG gas cylinders are used in our homes for various purposes. Cooking and heating water are a major part of the same.

**.** Hence it would not be wrong to say that it is an integral part of our life. However, there have been cases in the past about accidents due to gas leakage.The basic objective of the project is to provide a security system to prevent a caused due to the leakage of gas

**.** Gas leakage leads to various accidents resulting into both financial loss as well

as human in injuries. In human's dail life, environment gives the most significantimpact to their health issues. The risk of fires, explosion, suffocation, all are based