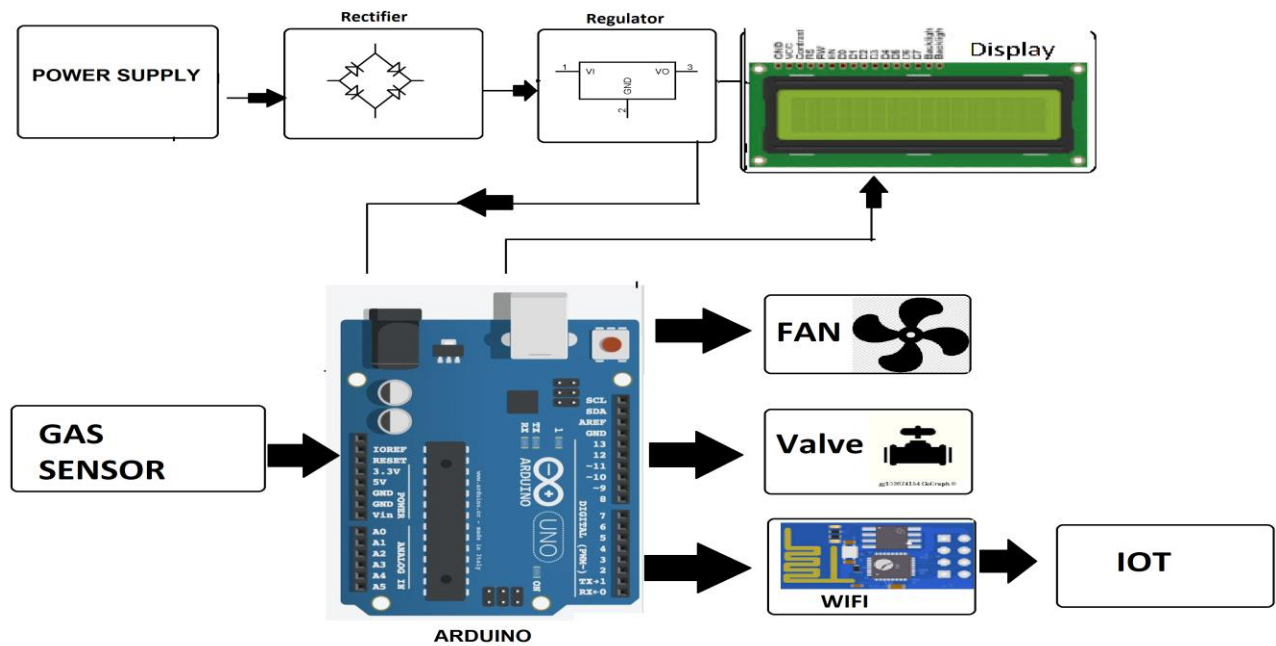# IOT based Intelligent Gas Leakage Detector Using Arduino

Many accidents occur in day to day life like explosion because of LPG leakage. Major harm is caused,

if gas leakage is not detected early. But now we can detect the gas leakage using the MQ5 gas

sensor. In this IOT gas leakage detector, device will get connected to WIFI, the minimum and

maximum parameter can be set accordingly. Such IOT as well as Arduino based gas leakage detector

systems can be installed in homes, hotels LPG gas storage areas. In this LPG gas detector system

senses the LPG gas using MQ5 gas sensor. This device will continuously monitor the level of LPG gas

present in the air. While monitoring, if the value of LPG gas in air is within the set limit then the RGB

LED on the circuit will glow green giving a safe sign. And whenever the gas exceeds above the

predefined limit than the RGB LED will glow red and simultaneously solenoid value will turn off and

update it over IOT. This Arduino and IOT project will help in detecting gas leakage in the surrounding.

Block Diagram:

Hardware Specifications

Arduino

LCD

Wi-Fi module

Dc fan

Gas sensor

Buzzer

Regulator

Crystal Oscillator

Resistors

Capacitors

Transistors

Cables and Connectors

Diodes

PCB and Breadboards

LED

Transformer/Adapter

Push Buttons

Switch

IC

IC Sockets

Software Specifications

- Arduino Compiler
- Programming Language: C