Title   : **Home Safety and Security system using IOT**

Document   : **Requirement Specifications**

Functional Requirements

- The system should monitor the following parameters:
    - LPG gas concentration level
    - Door/Window open status
- Display of gas leak status and door/window open status on local display and mobile app
- Different images on mobile app for normal and alert status indications
- Testing method for LPG gas leak detection to be specified
- Minimum update rate of parameters: 3 seconds
- Power supply: 5V (USB powered)
- Update on cloud database should be accessible to user for debugging purposes
- Current values of parameters should be made available to user in a mobile at any place with Internet connectivity

Non-functional requirements

- Should have compact custom PCB
- Display, gas sensor module and magnetic switch to be connected using polarized cables
- Should have low power consumption. Should be capable of being USB powered for program upload and debugging from a laptop