



# SMART STOVE

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# Contents

- ❑ Existing Situation
- ❑ Proposed Solution
- ❑ Architecture Block Diagram

# Existing Situation

Kitchen is a major part of the home which is having several utilities. Cooking being a multitask requires a certain level of skill and precision, also kitchen is an environment where safety is a prime concern. There is still lot of scope to improve users comfort and safety in this environment.

- If un-monitored there is a chance of hazardous situations because of overheating
- There are very fewer fail safe mechanisms in case of smoke or gas leak
- Refilling the gas cylinder at right time is a major concern for the kitchen user

# **Proposed Solution**

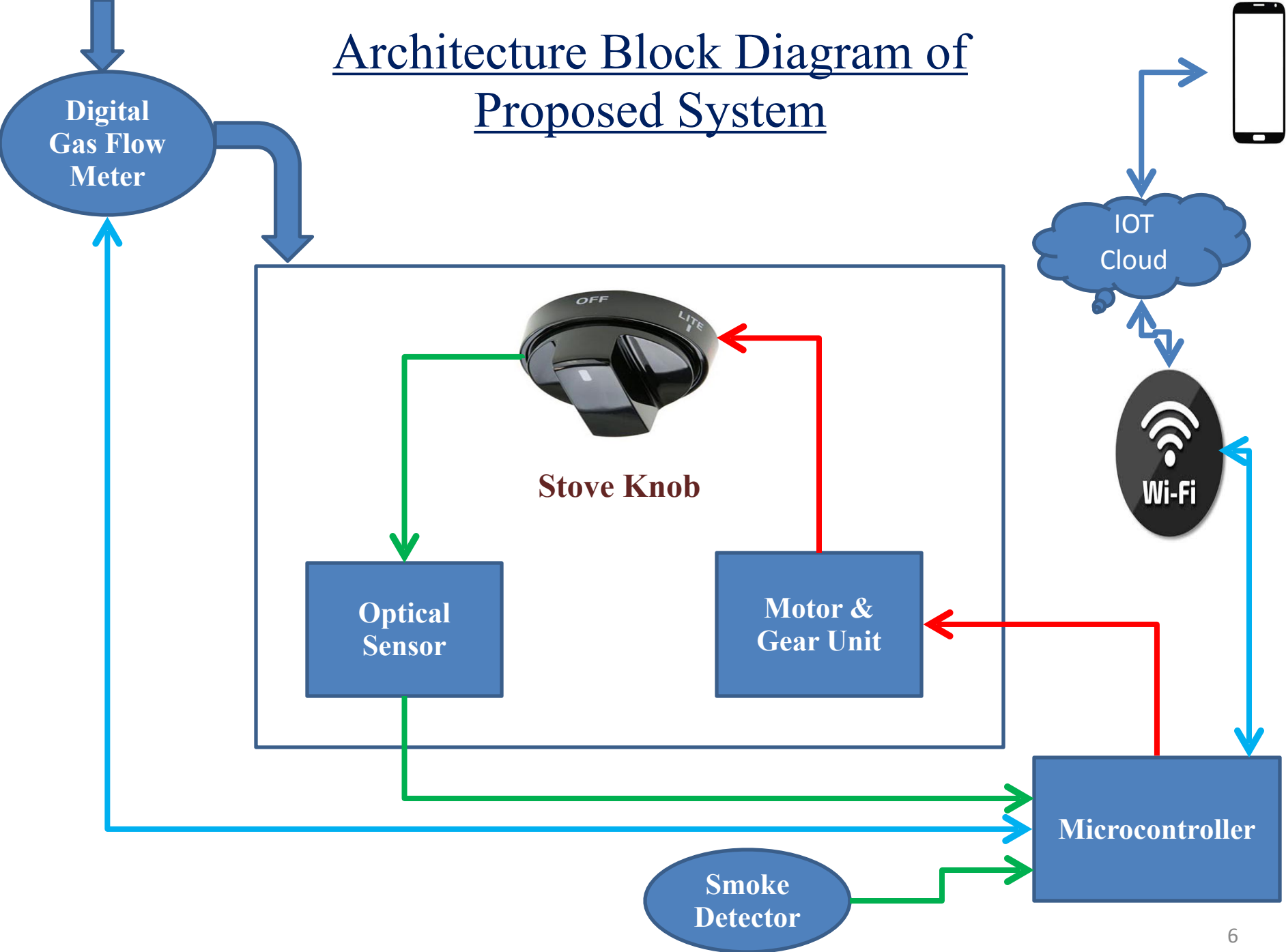
## **Smart Stove**

- Indication of burner status to the user when away from kitchen.
- Control of stove knob from mobile app.
- Monitor the amount of gas used. This data can be used for automatic refilling and give energy usage report to the user.
- Automatic shut down of the stove in case of smoke detection.

# System Components

- **Optical sensors** can be used to detect the mechanical position of the knob.
- **Motor and gear units** can be used to control the knob.
- **Digital gas flow meters** can be used to record the amount of gas consumed and to regulate the gas flow.
- **Smoke detectors** can be used to detect smoke in the kitchen
- **Micronotroller** will hold the control logic for the proposed solution and also relay the system data to the Wifi chip
- **Wifi chip** collects the data from the MC and sends to the cloud in the form of Telemetry data

# Architecture Block Diagram of Proposed System



Thank you!