

MINI PROJECT – II
(2019-20)

SMART KITCHEN

SYNOPSIS



Institute of Engineering & Technology

Team Members

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About the Project:

- The objective of this project is to provide security in the kitchen and to avoid hazards and mis happenings in the kitchen. We are using temperature sensor, gas sensor, humidity sensor which senses the increment of the particular threshold and when it reaches above that level it sends the notification to the user.
- A gas detector is a device that detects the presence of gases in an area, often as part of a safety system. This type of equipment is used to detect a gas leak or other emissions and can interface with a control system so a process automatically sends notification to the end user.
- Continuous temperature monitoring sensors ensure more accurate time and temperature controls in restaurant kitchens, which directly improves food safety and reduces food spoilage. Yet, less than 5% of companies within the restaurant and hospitality industries use automated sensors to track temperatures.

Motivation:

Not to be the bearer of bad news, but your kitchen is a land mine of disaster. Two thirds of home fires start in the kitchen, 480 people die a year in kitchen fires, and 350,000 people are injured by kitchen knives each year. The most common injuries are burns, fires and lacerations.

So, to avoid all the above injuries and accidents our smart kitchen project will provide most common methods to prevent accident and keep our kitchen and homes safe.

Future Prospects:

- We detect temperature of kitchen to make it suitable environment to work in.
- We use humidity sensor to sense the amount of humidity that goes high during cooking and provide user comfortable experience inside kitchen.
- We use smoke sensor to detect gas leakage in ppm and sends notification to end user through app whenever threshold is exceeded so avoid mishappening in kitchen.
- We will also provide user a monitoring app to monitor the environment of kitchen anytime and anywhere.
- The whole idea behind smart kitchen technology is making your home more convenience and saving your life from mis happenings.

Requirements:

a) Hardware:

- Node MCU
- Minimum Core i3
- DHT 11 Humidity and Temperature Sensor
- MQ6 Gas Sensor

b) Software:

- MIT App Inventor
- Firebase