

## **Scope of the Solution**

The solution focuses on building an IoT-enabled system that detects gas leaks and fire hazards using sensors connected to a Raspberry Pi Pico. It continuously monitors safety parameters like gas concentration and flame/temperature levels. When abnormal conditions are detected, the system triggers immediate alerts to ensure a fast response and prevent accidents.

The scope includes selecting suitable sensors, interfacing them with the microcontroller, writing the logic for detection, and enabling instant notifications during emergencies. The goal is to create a reliable and efficient early-warning mechanism to enhance safety in industrial, commercial, and home environments.