RedAlert
Fire Detection System

By DOS Project Group 9

RedAlert
Introduction

- A Prototype of Fire Detection System
- Connected via Ethernet
- IoT CEB (Cloud, Edge and Beneath) Architecture

RedAlert
System Architecture

- Sensor
- Actuator

- Connection

- Dashboard
- Database

RedAlert
Component Details

Device

- Xinu OS
- Flame Sensor (Digital)
- Temperature Sensor (Analog)
- Alarm Button
- Buzzer
- Red Light
- Green Light

Edge

- Developed in Java
- Register Device in Cloud
- Monitor Device Online/Offline
- Reduce Cloud Processing Workload

Cloud

- Developed in Ruby on Rails
- Web Dashboard
- Store Data in MySQL DB

RedAlert
Main Features

- Alarm Trigger
  - Flame Sensor
  - Button
- Alarm with Sound and Light
- Alarm on All Devices
- Temperature Reporting
- Device Auto Discovery
- Dashboard
  - Monitoring
  - Alarm Dismission
  - Device Alias Assignment

System Demonstration

RedAlert
Glad to Have You