

**2020 Cloud IoT Services**  
**Homework Assignment #3**

2020. 05. 04

**Homework Assignment: Fire Management System**

1. AWS IoT Core **Applications**

- **Two applications** for the virtual IoT devices: [Fire Detector](#) (fire\_detector) & [Fire Sprinkler](#) (fire\_sprinkler)
- **One EC2-based application:** [Fire Management System](#) (fire\_management\_system)

2. Three Device Gateway **Topics**

- **'fire/alarm'**
  - [fire\\_detector](#) publishes a [fire alarm](#) to this topic when it detects fire. For every three seconds, it always publishes a fire alarm.
  - [fire\\_management\\_system](#) subscribes to this topic
- **'fire/sprinkler'**
  - [fire\\_management\\_system](#) publishes an [activation command](#) to this topic if it finds the fire alarm correct.
  - [fire\\_sprinkler](#) subscribes to this topic
- **'fire/alert'**
  - [fire\\_management\\_system](#) publishes a fire alert message to this topic
  - This topic is intended for broadcasting fire alert messages. Any system can subscribe to this topic.

3. **Permission Policies** for three Applications

**Report Submission**

1. **Deadline:** 2020. 05. 18 (Monday)

2. **Report**

- Document
  - ① The **steps** to have been taken to accomplish the tasks: 한 일들을 단계별로 구체적으로 설명
  - ② The **screen snapshots:** Web Console & Node.JS code 실행 화면을 캡처
- Node.JS code
  - ① Node.JS code (file sender & receiver): 실제 코드를 보고서에 포함