IoT 제작

주 정 인

Open API

INDEX

01

상 세 일 정

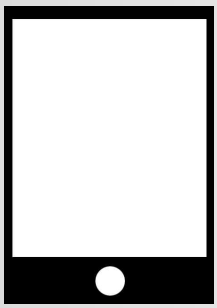
7/1	2	3	4	5	6	7
Open API 구조 확립 (~13)						
8	9	10	11	12	13	14
15	16	17	18	19	20	21
	Bluetooth API clustering					
22	23	24	25 APP connect	26	27	28
			bluetooth connect (~30)			
29	30	31	8/1	2	3	4
		bluetooth list (~8/5)				

5	6	7	8	9	10	11
		wifi connect (~13)				
12	13	14	15	16	17	18
	wifi list (~20)					
19	20	21	22 Module API	23	24	25
			connect(~9/3)			
26	27	28	29	30	31	9/1
2	3	4	5	6	7	8

구분	단계	내용	비고
UUID	1	bluetooth 장치의 UUID를 군집화	△
APP	2	bluetooth connect LIB	○
	3	bluetooth list LIB	△
	4	wifi connect LIB	○
	5	wifi list LIB	△
UNO	6	bluetooth connect	△
	7	wifi connect	
WEB	8	Log print	△

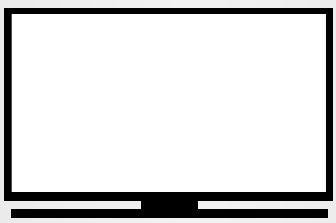
02

최 종 목 적



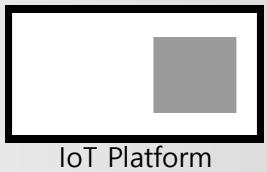
Smart Device

1. Bluetooth_connect
2. Bluetooth_list
3. WIFI_connect
4. WIFI_list
5. WEB_connect
+ Module_search
+ Voice_record_cmd
+ SNS_share



WEB SERVER

1. LOG_time
+ Module_list



IoT Platform

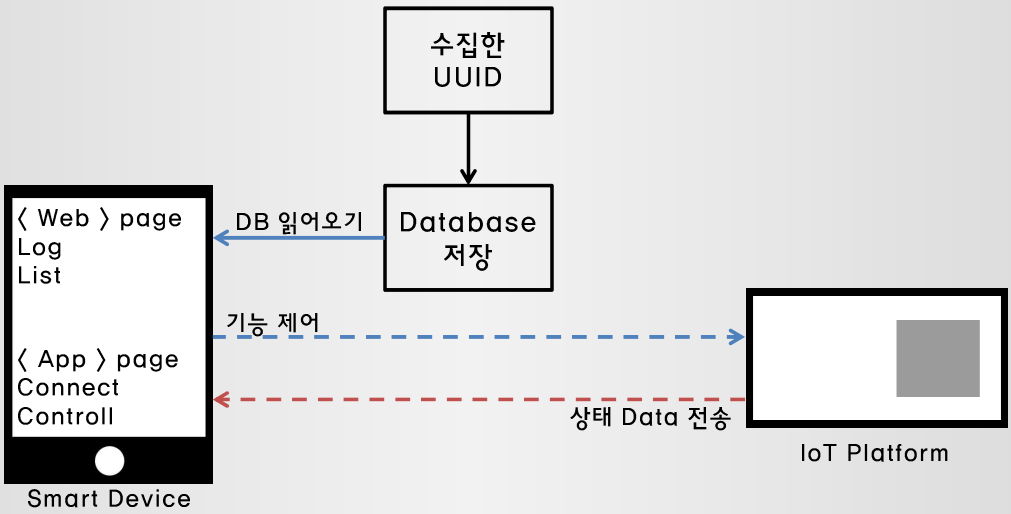
1. Bluetooth_connect
2. WIFI_connect
3. wire_PIN
+ LED_controll
+ Voice_record

» 편리한 개발 환경

function	Action
Bluetooth_connect	App과 IoT의 bluetooth 연결 요청
Bluetooth_list	Device에 연결된 bluetooth 장비 목록 읽기
WIFI_connect	App과 IoT의 WIFI 연결 요청
WIFI_list	Device에 연결 가능한 WIFI 목록 읽기
WEB_connect	App 실행시 Web 연결
LOG_time	시간형식에 맞는 log data 읽기
Module_search	Bluetooth와 wifi로 연결된 Module 탐색
Voice_record_cmd	녹음 기능 및 녹음 명령 전송
SNS_share	SNS 공유기능
Module_list	APP 에 연결된 Module을 WEB에 출력
LED_controll	LED 제어
Voice_record	녹음 기능

03

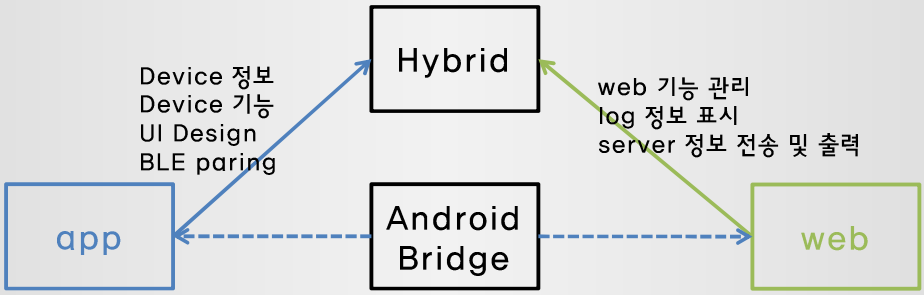
UUID Data Collect



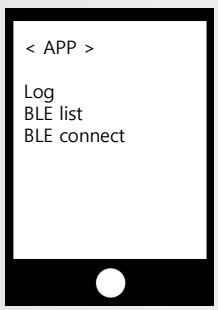
수집한 UUID를 기반으로 WebApp을 통해 IoT Controll

04

Hybrid Application lib



Android Bridge class 를 통해 app과 web의 데이터 교환



Application page 1

Application page 2

App 하나만으로 web 기능을 사용, 관리 가능

05

참조

UUID collect

BrowseGroupDescriptorServiceClassID	00001001-0000-1000-8000-00805F9B34FB
PublicBrowseGroupServiceClass	00001002-0000-1000-8000-00805F9B34FB
SerialPortServiceClass	00001101-0000-1000-8000-00805F9B34FB
LANAccessUsingPPPServiceClass	00001102-0000-1000-8000-00805F9B34FB
DialupNetworkingServiceClass	00001103-0000-1000-8000-00805F9B34FB
IrMCSyncServiceClass	00001104-0000-1000-8000-00805F9B34FB
OBEXObjectPushServiceClass	00001105-0000-1000-8000-00805F9B34FB
OBEXFileTransferServiceClass	00001106-0000-1000-8000-00805F9B34FB
IrMCSyncCommandServiceClass	00001107-0000-1000-8000-00805F9B34FB
HeadsetServiceClass	00001108-0000-1000-8000-00805F9B34FB
CordlessTelephonyServiceClass	00001109-0000-1000-8000-00805F9B34FB
AudioSourceServiceClass	0000110A-0000-1000-8000-00805F9B34FB
AudioSinkServiceClass	0000110B-0000-1000-8000-00805F9B34FB

```
    public static class Basic {
        public static UUID service = UUID.fromString("0000fee0-0000-1000-8000-00805f9b34fb");
        public static UUID batteryCharacteristic = UUID.fromString("00000006-0000-3512-2118-0009af100700");
    }

    public static class AlertNotification {
        public static UUID service = UUID.fromString("00001802-0000-1000-8000-00805f9b34fb");
        public static UUID alertCharacteristic = UUID.fromString("00002a06-0000-1000-8000-00805f9b34fb");
    }

    public static class HeartRate {
        public static UUID service = UUID.fromString("0000180d-0000-1000-8000-00805f9b34fb");
        public static UUID measurementCharacteristic = UUID.fromString("00002a37-0000-1000-8000-00805f9b34fb");
        public static UUID descriptor = UUID.fromString("00002902-0000-1000-8000-00805f9b34fb");
        public static UUID controlCharacteristic = UUID.fromString("00002a39-0000-1000-8000-00805f9b34fb");
    }

    public static class Information {
        public static UUID service = UUID.fromString("0000fee0-0000-1000-8000-00805f9b34fb");
        public static UUID Characteristic = UUID.fromString("00000007-0000-3512-2118-0009af100700");
        public static UUID descriptor = UUID.fromString("00002902-0000-1000-8000-00805f9b34fb");
    }
```