ABSTRACT

Device maintenance problem in daily life can be solved with manual monitoring, but that is not recommended for the room that need stable temperature.

This Final task provides AC maintenance management problem for IoT Laboratory PT. Telkom Indonesia, by using several IoT *devices* and mechanism as follow: HTTP protokol communication between IoT *Device* with Cloud ANTARES and MQTT protokol communication between Android Application with Cloud ANTARES, microcontroller (MCU) ESP-12E equipped with WiFi Modul, DHT22 to measure temperature periodically, TSOP 34838 IR Receiver and IR Blaster for controlling and ANTARES as IoT Platform.

Continuing the previous research on making Air Control *Device* Based on IoT, android application in this final project called "Teknografer", meet the requirements demanded by Telkom DDS. Teknografer can perform Automation of IoT device registered by user, and user can do Automation setting with IFTTT function.

Keyword: Internet of Things, ANTARES, ESP-12E, HTTP, MQTT.