

IoTify

Stack-Hardware

Hardware: Esp01, Esp32, led strip,
Ir sender and relay
Languages: C and C++ with esp SDK

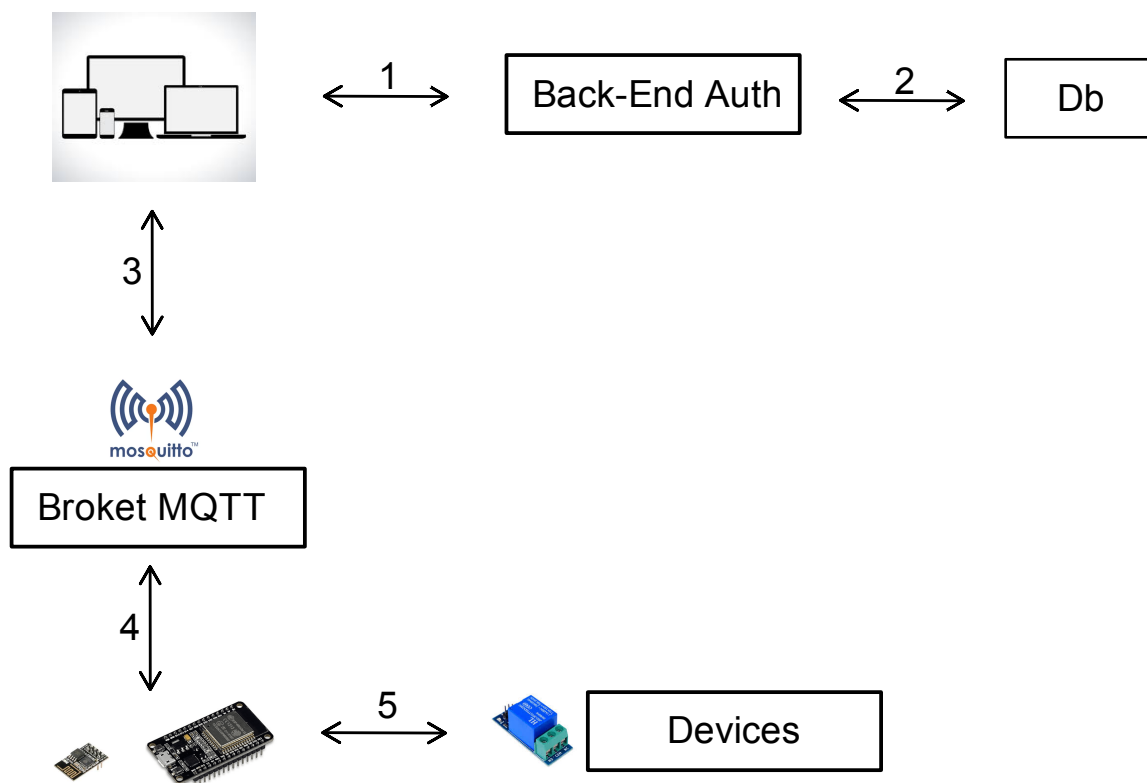
Stack-Communication

Broker MQTT - Eclipse Mosquito
Api Rest
Wifi

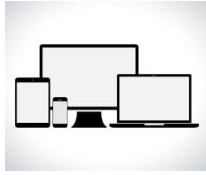
Tools Api - Auth and Control

Language: C# with dotnet
DataBase: Firebase and PostgreSql
Deploy and version control: docker and git

Data - Flow - Diagram



Esp - Setup



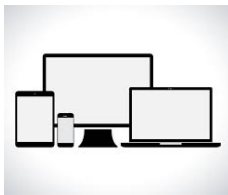
1
Connecting to the ESP's network



Ap - Mode
Waiting wifi Credentials
and esp functions

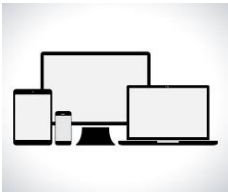
Generic Devices

The ESP is generic, then it gets the code using the OTA protocol to request the base code.



2
What is download link for the base code?

Back-End Update



3
Give to Esp wifi Credentials and
Download link for the base code



4
esp connects to wifi, then gets the base
code and updates itself for Ota

Back-End Update



3
Esp subscribes to its topic in MQTT Broker



Broket MQTT

the default topic is is generated by:
`user/{user_id}/device/{device_name}/status/{datetime}`