LAB N°08

Iot System based Platform

Cloud and standalone

I. THEORY: (max 01 pages)

There are many IoT Cloud / Standalone platforms that target similar use cases as Ewelink, including Blynk, Arduino Cloud, and SmartThings, Openhab, MyOpenhab, Home assistant, Jeedom, etc. These platforms also aim to provide user-friendly experiences for home automation tasks and generally offer mobile apps for easy control and monitoring of connected devices. However, each platform may have its unique features, pricing, Open-source or proprietary, and compatibility with different IoT devices. It's essential to evaluate them and choose the well-known and the one that best fits your specific needs and requirements.

1- Cite 04 well-known of cloud / standalones platforms and compare them (use case, open, price, features).

II. ACTIVITY: (max 04 pages)

IoT platform cloud and or standalone

Consider a simple system based on Arduino with a push button to control a LED.

2- Connect this system experimenting one or two of the cloud-based platforms listed below.
3- Determine whether the communication is required only during configuration or constantly through the internet.
4- Control and monitor the status of the switch and the LED using a mobile phone and the platform.

A. Cloud-based:

1. Arduino IoT Cloud
2. eWeLink
3. Blynk
4. My-openhab
5. Other to define

B. Standalone:

Is it possible to install these platforms (as server) in standalone mode on Raspberry Pi and a PC, and if so, try at least one platform?

III. CONCLUSION