

Intelligent and Communicating Systems, ICS

2nd Year Specialty SIL G02,

LAB N°09

Iot System based Platform

Wifi-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**. These platforms also aim to provide user-friendly experiences for home automation tasks and offer mobile apps for easy control and monitoring of connected devices. However, each platform may have its unique features, pricing, and compatibility with different IoT devices. It's essential to evaluate them and choose the one that best fits your specific needs and requirements.

- 1- Compare theme.
- 2- Cite 04 other well-known other categories 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.

A. Cloud-based:

- 1. Connect this system using the Blynk cloud-based platforms, a user friendly application for home automation.
- 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.
- 5- Other similar platforms exists, you can try one of them (eWeLink -Arduino IoT Cloud).

B. Standalone:

2. Is it possible to install Blynk (Or any other) platform in standalone mode on Raspberry Pi and a PC, and if so, try at least one platform?

III. CONCLUSION