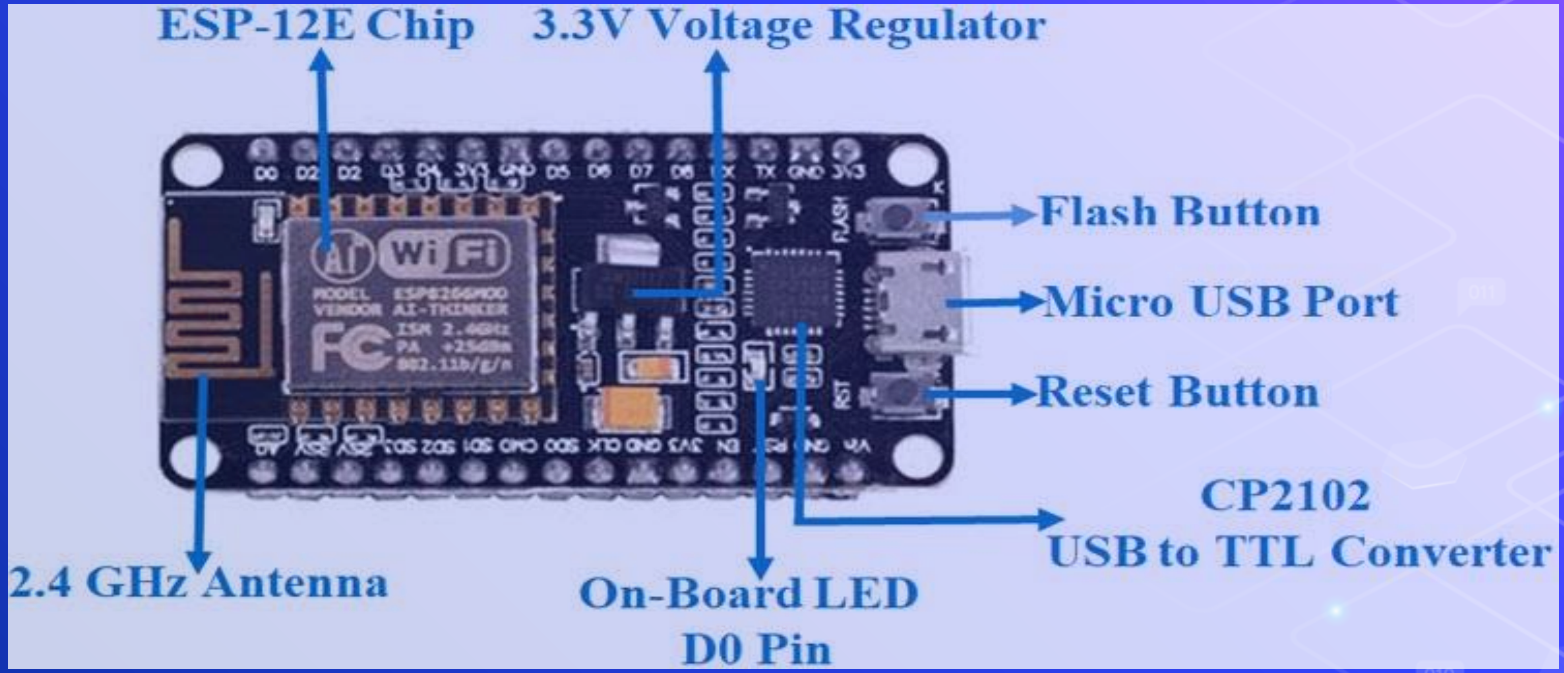
# INTRODUCTION TO NODEMCU

# Agenda:

1. About Nodemcu
2. About Arduino IDE
3. About digital and analog pins
4. About sensors
5. About esaycodeging

# About Nodemcu

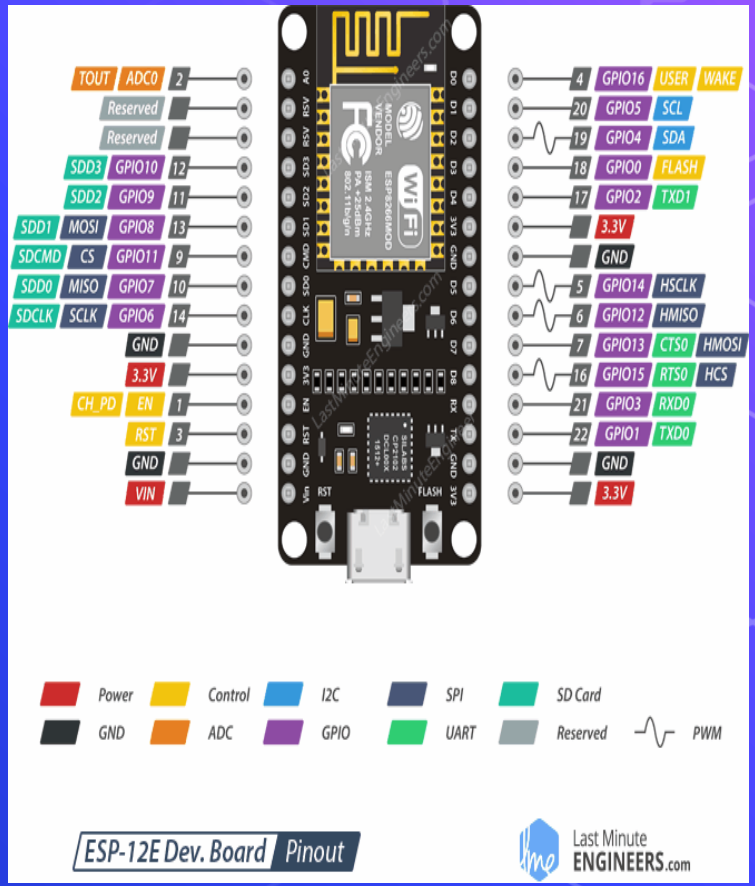
1. NodeMCU is an open-source Lua based firmware and **development board** specially targeted for IoT based Applications. It includes firmware that runs on the ESP8266 Wi-Fi SoC from Espressif Systems, and hardware which is based on the ESP-12 module.


ESP-12E Chip
3.3V Voltage Regulator
Flash Button
Micro USB Port
Reset Button
CP2102
USB to TTL Converter
2.4 GHz Antenna
On-Board LED
D0 Pin

# About Nodemcu digital and analog pin

When performing INPUT and OUTPUT tests on the pins, we obtained the following results:

1. digitalWrite did NOT work with GPIOs 6, 7, 8, 11,and ADC (A0)
2. digitalRead did NOT work with GPIOs 1, 3, 6, 7, 8,11, and the ADC (A0)
3. analogWrite did NOT work with GPIOs 6, 7, 8, 11,and ADC (A0) (GPIOs 4, 12, 14, 15 have hardware PWM, and the others are by software)
4. analogRead worked only with the ADC (A0),6, 7, 8, 11 do NOT work for the above four commands



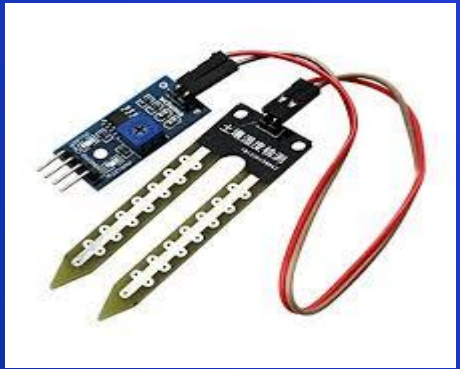
# ABOUT SENSORS

Digital and analog sensors

1. Electronic sensors or electrochemical sensors in which data conversion and data transmission takes place digitally are called as digital sensors. The digital sensor consists of majorly three components: sensor, cable, and transmitter. In digital sensors, the signal measured is directly converted into digital signal output inside the digital sensor itself.
2. There are different types of sensors that produce continuous analog output signal and these sensors are considered as analog sensors. This continuous output signal produced by the analog sensors is proportional to the measurand. There are various types of analog sensors; practical examples of various types of analog sensors are as follows: accelerometers, pressure sensors, light sensors, sound sensors, temperature sensors, and so on.

# Digital sensors

## Analog sensors



# EASY CODING

Easy coding is a site that helps people by making it easy to code by making the code  available in the block format that is similar to Google's blockly.