

For Gateway and Node following libraries will be required

Node Libraries

1. #include <Dictionary.h> download from github from given link
<https://github.com/arkhipenko/Dictionary>
2. #include <SPI.h> Built in Arduino Library
3. #include <LoRa.h>
from library manager search Lora and install the library given by Sandeep Mistry
4. #include "StringSplitter.h" download from github from given link
<https://github.com/aharshac/StringSplitter>

Gateway Libraries

1. #include <WiFi.h> built in library
2. #include <AsyncTCP.h> download from github from given link
<https://github.com/me-no-dev/AsyncTCP>
3. #include <WebServer.h> built in library
4. #include <EEPROM.h> built in library
5. #include <ThingsBoard.h> // ThingsBoard SDK
Search thingsboard in library manager and install it
Remaining are already installed
6. #include <Dictionary.h>
7. #include <SPI.h> // include libraries
8. #include <LoRa.h>
9. #include <StringSplitter.h>

If missing library appears simply copy its name for example if StringSplitter.h is missing appears copy this name and google it like this

Google: StringSplitter.h Arduino

First link would be of github or Arduino forum go there and download the library and add it

Hardware Board Installation

To use esp32 microcontroller you will have to install the esp32 board from the board manager therefore go to the Tools->Board->Board Manager. Now search for esp32 and install it. After installing select DOIT ESP32 DEVKIT V1 board.