ESP8266 Interface with DHT11 Sensor

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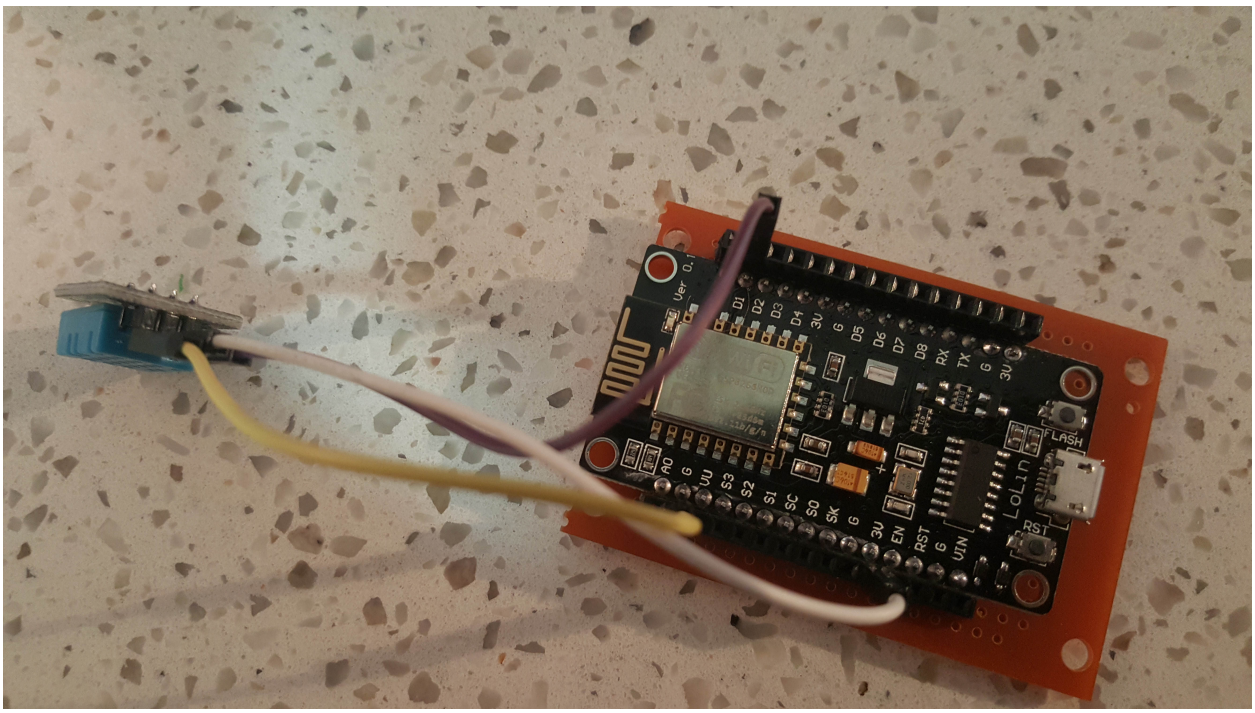
1 Outline

The proposed INFT3970 mjaor project required POC code for displaying and interfacing with a temperature sensor, in the following document and code the below units were used:

- ESP8266 NodeMCU unit [1]
- DHT11 Sensor Bundle [2]

Code associated with this document used the datapin: D1, interfaced as:

```
dht.setup(5, DHTesp::DHT11);
```



2 To Do

A number of changes are still required to interface correctly with a base ASP.NET MVC application [3], including the implementation of either:

- A RESTful API
- Sending of data to a predefined location within code.

Optimally we would implement a service setting behind a namespace accessible on the WAN as to best serve auto-association of devices with the correct service and avoid hardcoding many details beyond the FQDN.

References

[1] https://www.ebay.com.au/itm/New-NodeMcu-Lua-ESP8266-ESP-12E-CH340G-WIFI-Network-Development-Board-Module/162466934890

[2] https://www.jaycar.com.au/arduino-compatible-temperature-and-humidity-sensor-module/p/XC4520

[3] https://github.com/JayRovacsek/INFT3970