MQTT Hands-On Cheat Sheet

Code repository:
https://github.com/relayr/ESP8266_Lua - USE 'WORKSHOP-07-07-2016' BRANCH

Toolchain and prerequisites:

1. Install the USB to UART driver:
   http://www.wemos.cc/downloads/

2. Install the esptool:
   https://github.com/themadinventor/esptool ('pip install esptool')

3. Build / download the firmware:
   http://nodemcu-build.com/ or
   http://nodemcu-build.com/builds/nodemcu-dev-13-modules-2016-07-07-09-28-02-float.bin (direct link to binary)
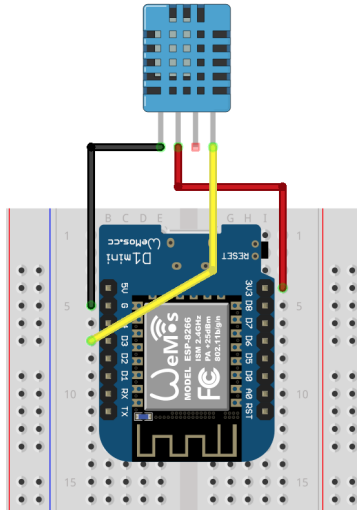
4. Flash the Wemos with the firmware:

   ```
   esptool.py --port /dev/ttyUSB0 write_flash -fm dio -fs 32m -ff 40m 0x00000
   ```
   /path/to/firmware.bin

5. Download the Esplorer IDE
   http://esp8266.ru/esplorer/

6. Create a relayr developer account:
   https://dev.relayr.io/

7. Create a model and a device on relayr Dashboard

Hardware:

8. Connect the DHT sensor to Wemos.

ESP8266 code:

9. Clone / download the ESP8266_Lua repository:
    ('WORKSHOP-07-07-2016' BRANCH)

10. Modify the 'config.lua' file with your credentials.

```lua
-- Replace with the desired network SSID.
ssid = '<my SSID>',
-- Replace with the desired network SSID.
psk = '<psk here>',
```

```lua
-- User ID for MQTT basic auth. This is the device ID for
the
-- relayr cloud.
user = '<device ID>',
-- User password for MQTT Basic Auth.
password = '<password here>',
-- This is just a convenience that allows you to identify
the
-- client on the MQTT bro ker. It can be anything you
choose.
client_id = '<client_id>',
```

11. Upload the files to Wemos (8266) flash drive; use Esplorer.

12. Run the 'app.lua' file -> dofile('app.lua')