Internet of Things Semantic Arduino-based Sensor Device Prototype

SemIoT project - Semantic technologies for Internet of Things [1]

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17th FRUCT conference, 2015

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[1] <http://semiot.ru>

CoAP://

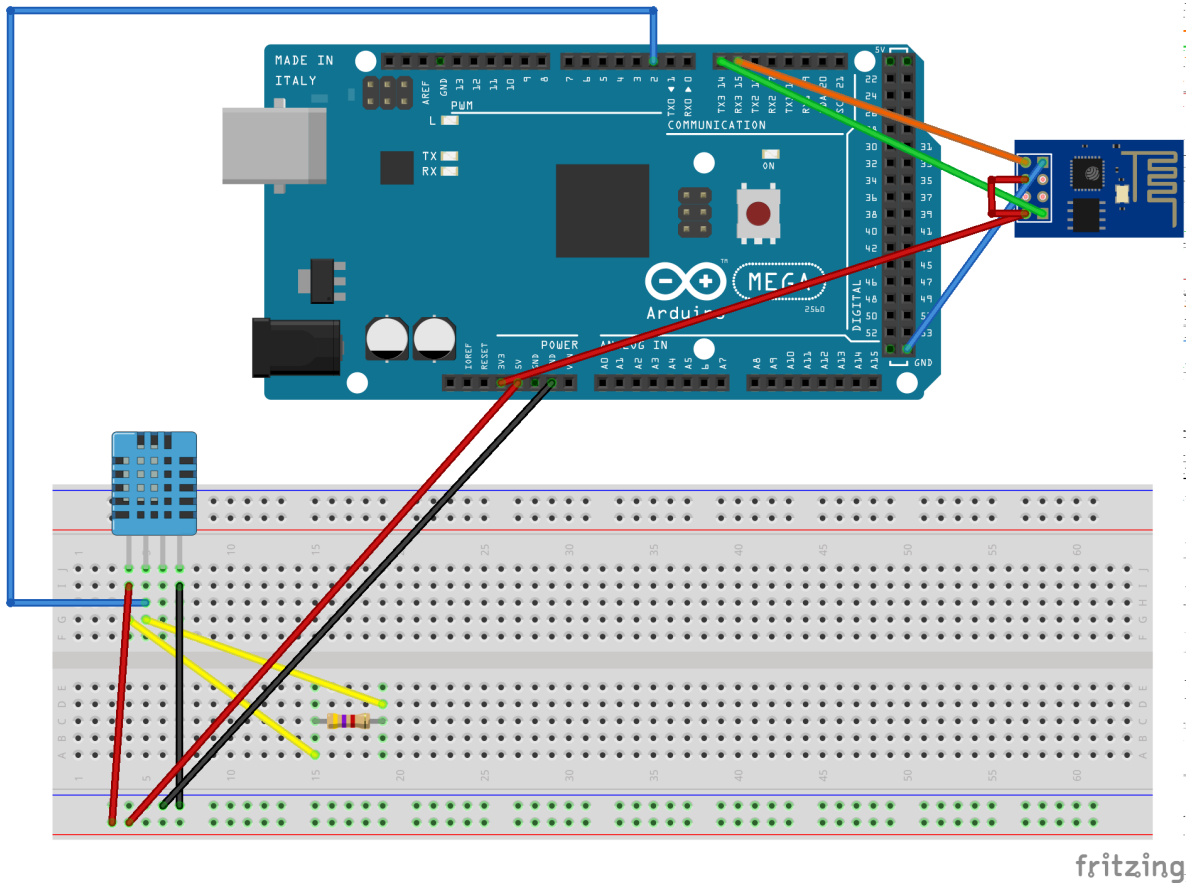
RFC 7252 Constrained Application Protocol

- REST model
- resources available under a URL
- access through GET, PUT, POST, and DELETE methods
- working via UDP protocol

/microcoap

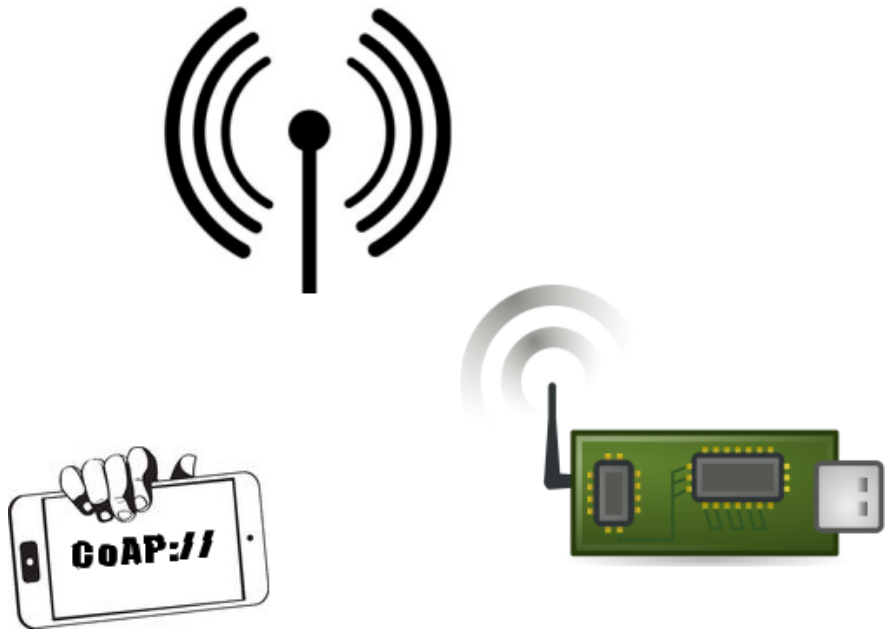
A C implementation that can be compiled for Arduino

- Implemented CoAP features:
  - CoAP GET, PUT, POST and DELETE methods
  - Initial clients support
  - Initial endpoints setup
- CoAP features required implementation:
  - Resource subscribe option
  - Full-fledged CoAP clients support
  - Appropriate endpoints setup



Arduino MEGA2560 with **ESP8266** WiFi-Module and **DHT11** temperature and humidity sensor

Future Plans: wireless device configurations tools (mobile application).



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