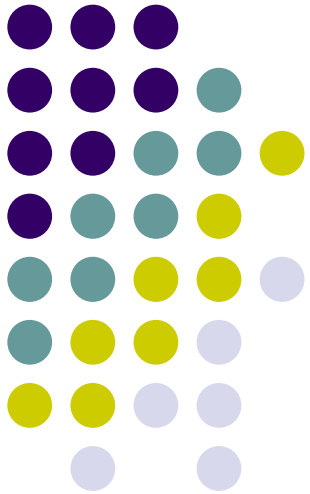
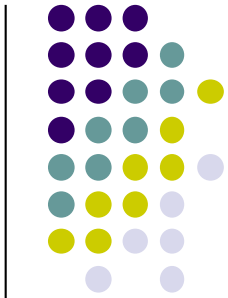
SCM
Sistemas de Comunicação Móvel

2nd Graded Assignment



Goals



To further explore NodeMCU's WiFi libraries

- Client/Server communications
- Access Point

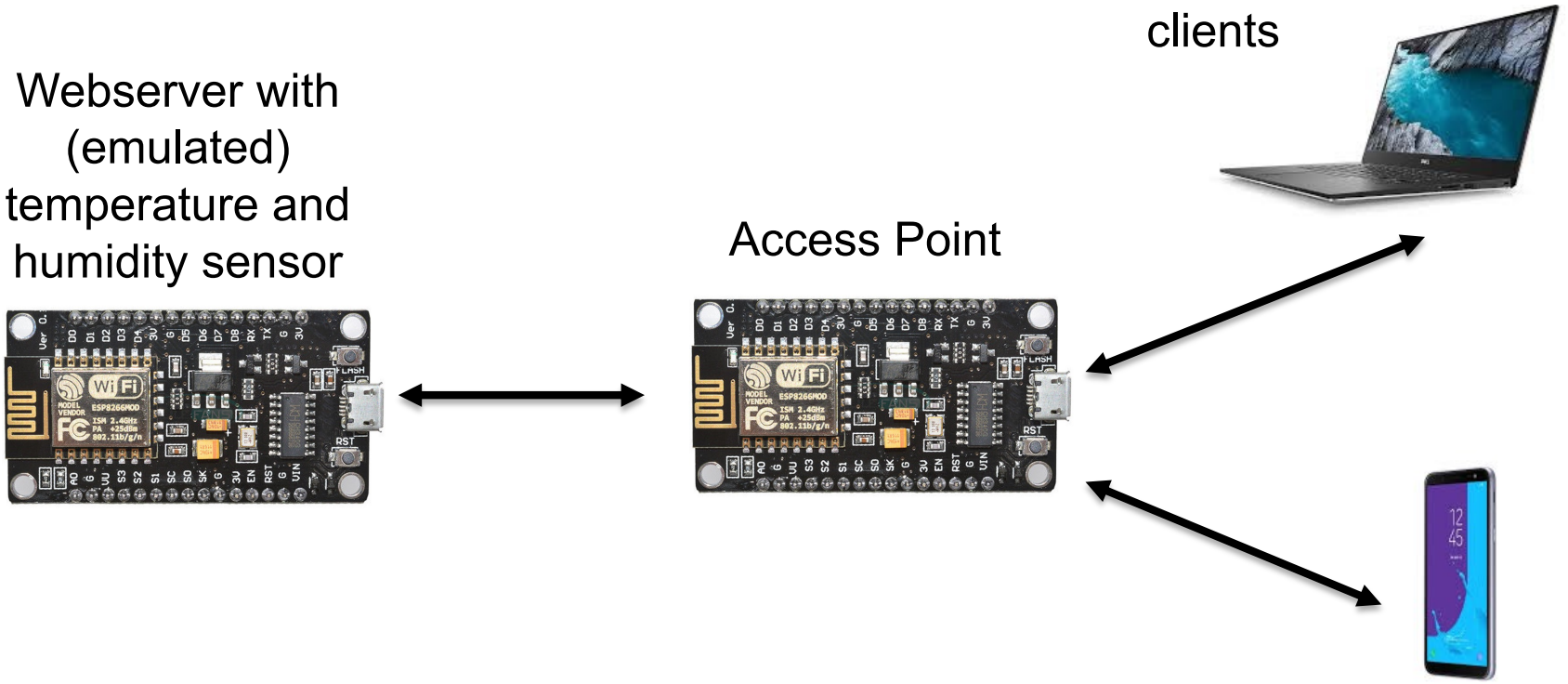
Delivery date:

- October 15th, 2022 (evaluation in the Oct/17th PL class)

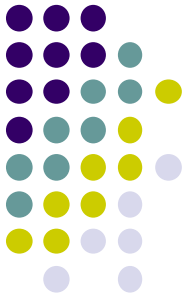
Documentation – WiFi library:

- https://arduino-esp8266.readthedocs.io/en/latest/esp8266wifi/readme.html

Assignment description
Reference Scenario

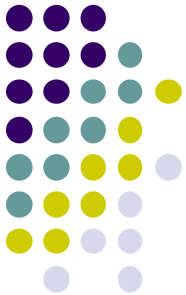


Assignment description
AP and Webserver with sensor's reads



- Considering the reference scenario presented in the previous slide and two Arduinos:
  - *Use one of the Arduinos to create an 802.11g access point in a user-selectable Wi-Fi channel (chosen by the user via serial console).*
  - *Use the other Arduino to build a simple webserver providing users with information about local humidity and temperature readings. The actual temperature and humidity values will be emulated, provided via the Arduino serial console (define the mechanisms to do so).*

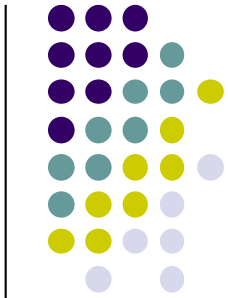
Assignment description
AP and Webserver with sensor's reads



- Test the setup using a cell phone or a PC connected to the same 802.11 networks and using a regular browser to get the temperature and humidity readings.

- On the Access Point, provide via the serial console status indicators such as:
  - used channel and SSID
  - connected devices
  - etc.

Assignment description
Delivery format:



- Short report, including:
  - *Student's name and number*
  - *<u>Optionally</u>, any remarks and comments you may want to provide (e.g., implementation options, found issues, devised solutions, etc.)*
  - *Printed source code (please properly comment your source code, so it becomes easy to understand it)*
  - *Delivery in InforEstudante up to October 15th*
  - *Live demo to be provided on the October 17th class*