Introduction to IoT

1. IoT Intro Presentation

2. Setup Development Environment

- Install Arduino IDE, for more information see the Official documentation
  - Installing ESP8266 NodeMCU Board in Arduino IDE 2.0
- How to install CH340 driver - Driver Download Section

3. Hardware Review

- Dev Board: Wemos D1 Mini
- Microcontroller: ESP8266 12-E Chip ESP8266 hardware review

4. Soldering

Here it gets practical! You need to solder the microcontroller and some of the sensors, which you will need in the next session.

5. Coding Warm-up

Now let's check if your Microcontroller works. Also, you will learn how to upload your first sketch. Basic Blink example:

Blink.ino

```
void setup() {
  // initialize digital pin LED_BUILTIN as an output.
  pinMode(LED_BUILTIN, OUTPUT);
}

// the loop function runs over and over again forever
void loop() {
  digitalWrite(LED_BUILTIN, HIGH);  // turn the LED on (HIGH is the
voltage level)
  delay(1000);                      // wait for a second
  digitalWrite(LED_BUILTIN, LOW);   // turn the LED off by making the
voltage LOW
  delay(1000);                      // wait for a second
```

```
}
```

Additional information

Additional information: Introduction to IoT - Sensors and Data processing

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Last update: **2023/08/28 23:47**