IoT-Workshop

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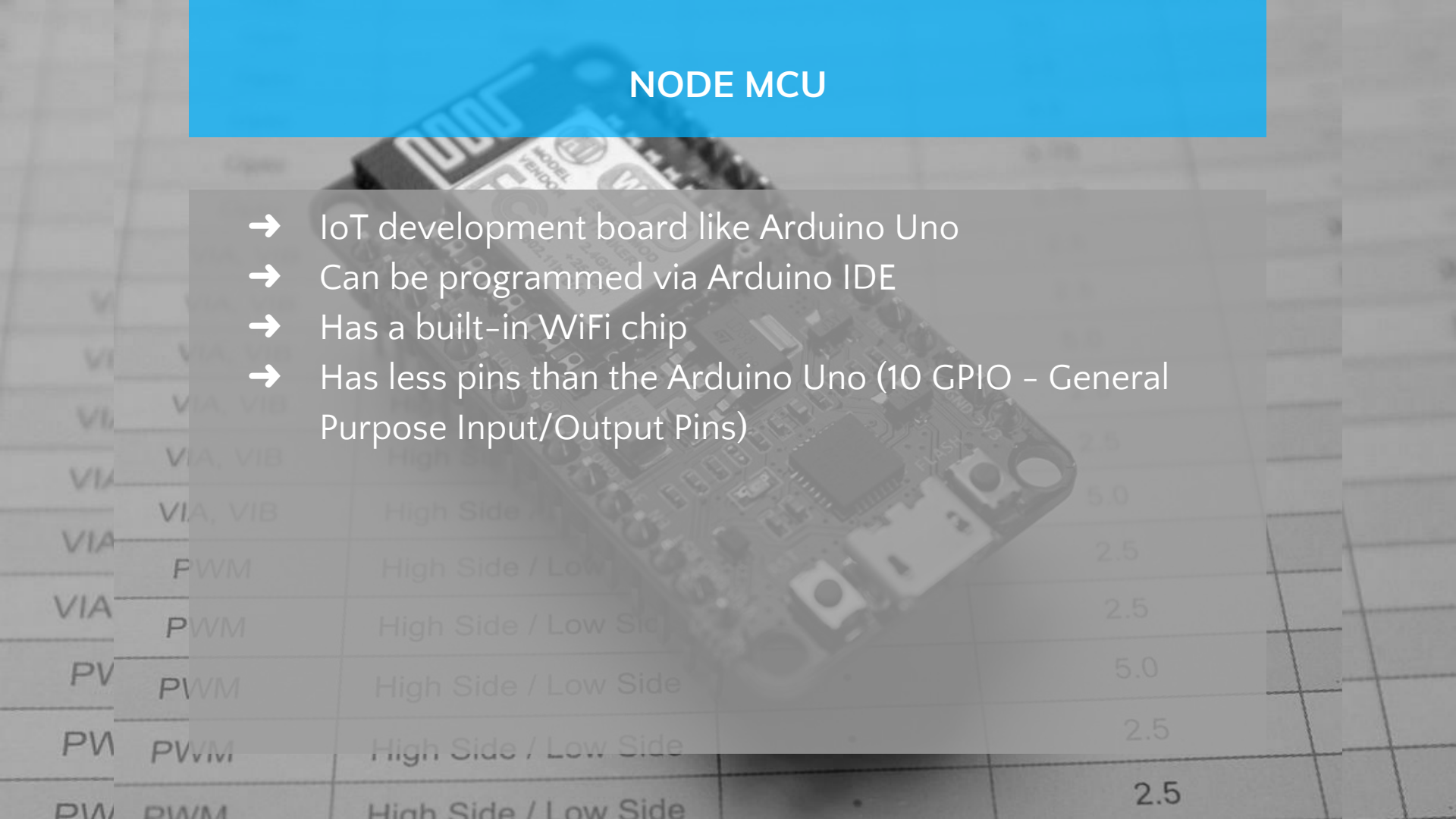
AGENDA

1 Assemble your box

2 Write your own code

3 Connect

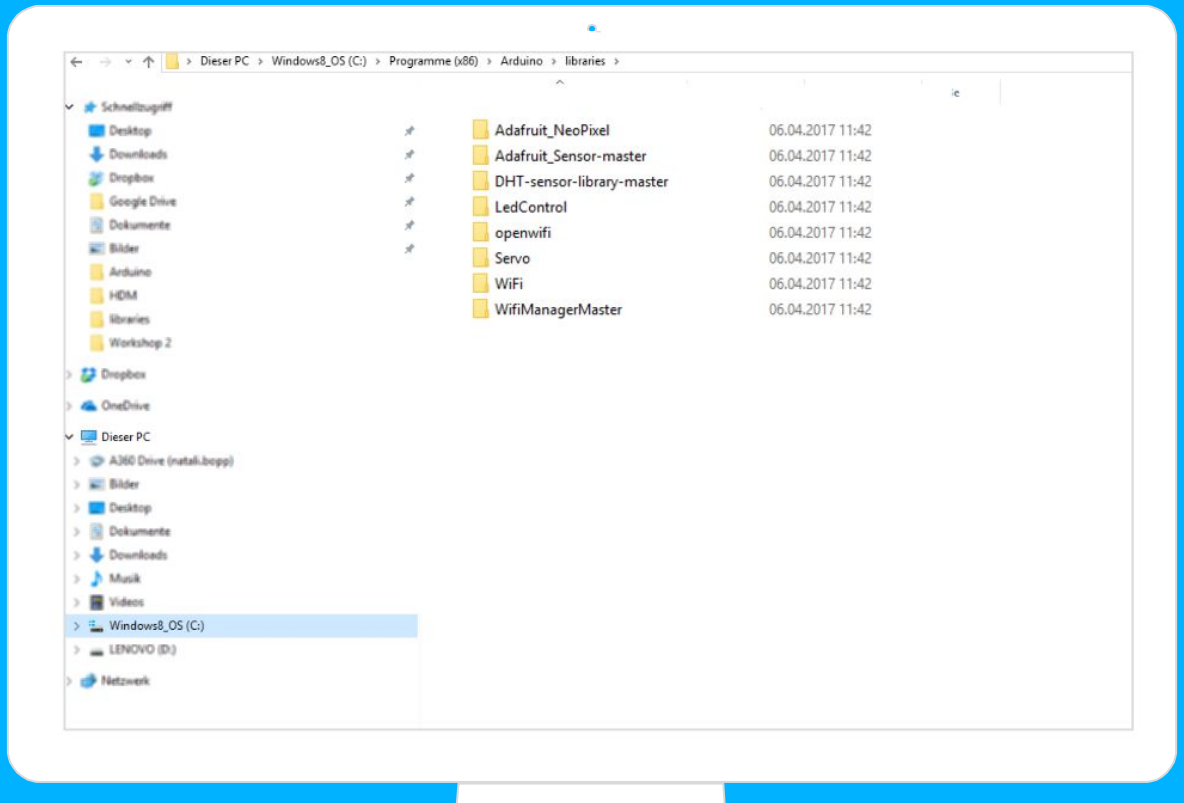
NODE MCU



- IoT development board like Arduino Uno
- Can be programmed via Arduino IDE
- Has a built-in WiFi chip
- Has less pins than the Arduino Uno (10 GPIO - General Purpose Input/Output Pins)

DID YOU INSTALL THE LIBRARIES?

http://www.arduino.cc/en/Guide/Libraries



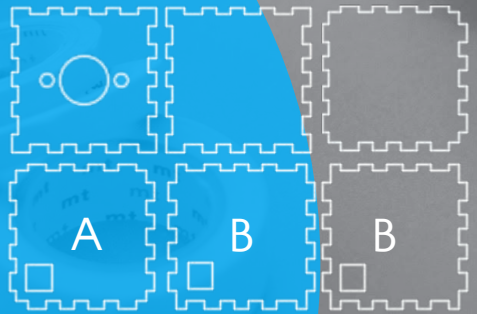
BUILD!

THE HARDWARE

1x Node MCU
1x Breadboard
1x Lightstrip
1x Button

THE BOX

1x Bottom
1x Top
1x Side A
2x Side B
1x Side Plexi



ASSIGN
MENT

Changing LED color

- Implement a color change for the led strip.
- With each button push color changes.
- The light strip serves as output.
- Hint: make a switch case or random on button press

SOLUTION

Changing LED color

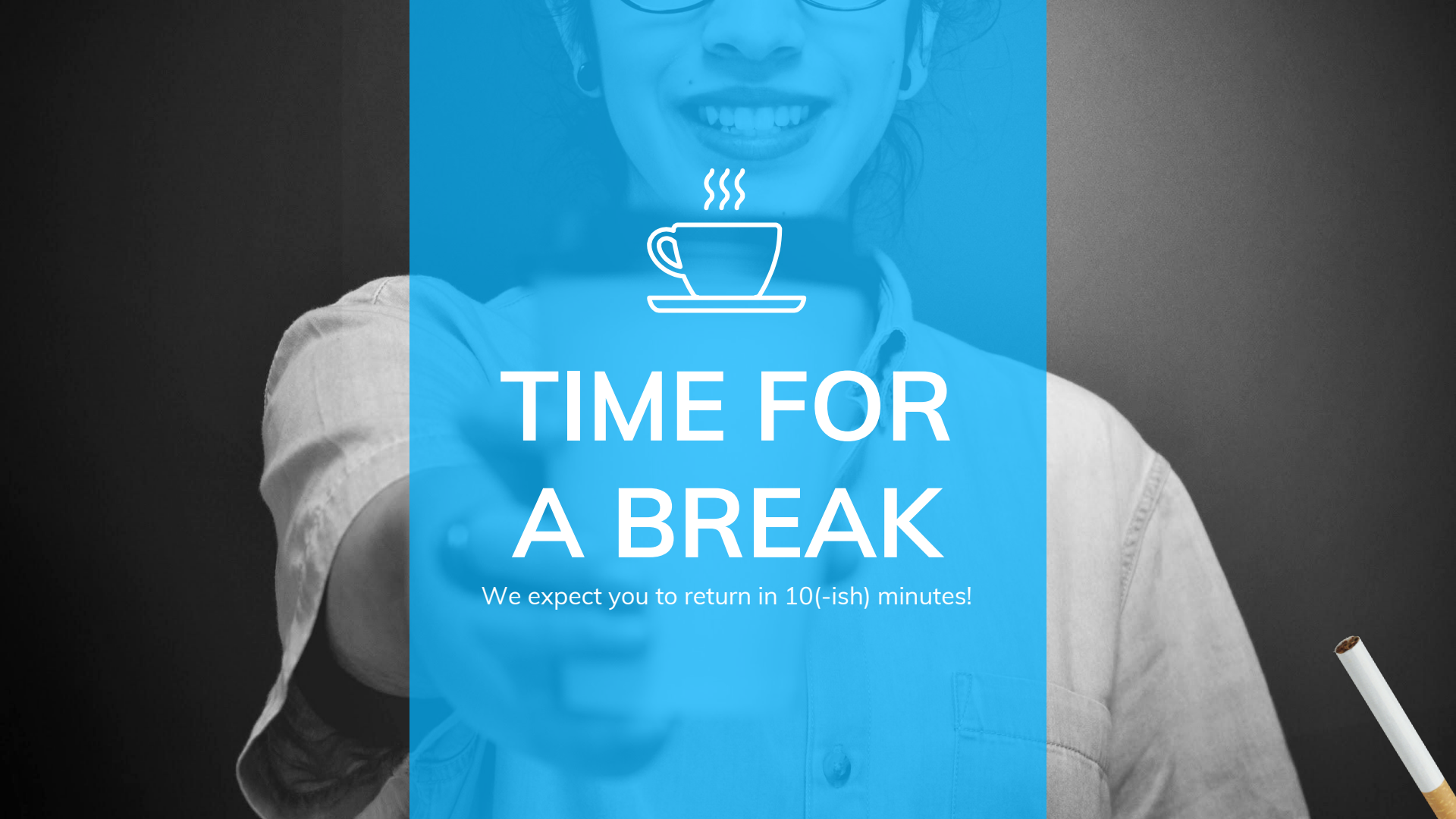
➜ The solution can be found on Slack!

THE BINARY COUNTER

- Implement a binary counter.
- With each button push the number goes up.
- The light strip serves as output.
- Example: 6 ⇒ 0110

THE BINARY COUNTER

➜ The solution can be found on Slack!


TIME FOR
A BREAK
We expect you to return in 10(-ish) minutes!

THE WEB OF BOXES

- Connect your box to other boxes!
- Look at the web interface and see the results!

THE WEB OF BOXES

➜ The solution can be found on Slack!

THANK YOU!

Any questions? Contact us!

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