# **Cheers Third Sprint**

Master Practical: Edge Computing and the Internet of Things - Team GAD

Aziz, Daniel, Gustav

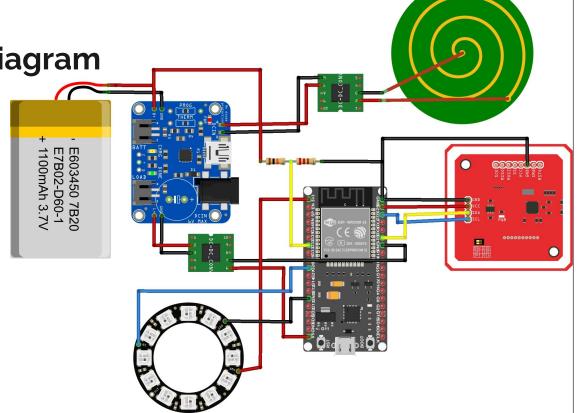
## **Planned Tasks for Sprint 3**

- Improve Hardware Prototype
  - Add battery and ZigBee
  - Fix NFC problem
- Expand gateway functionalities
  - Add a game
  - o Reduce communication with the cloud
- Expand cloud functionalities

**Current Wiring Diagram** 

 Until now only on the pegboard

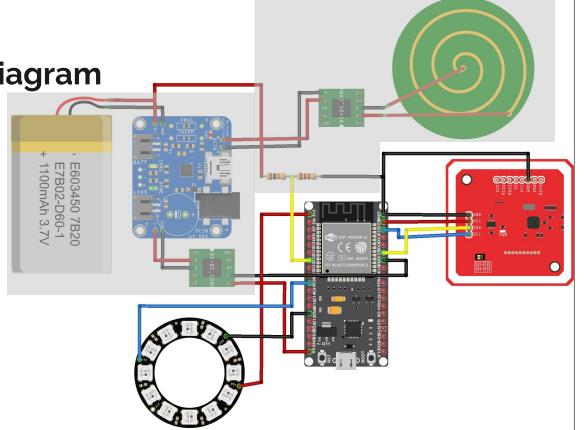
 Reduced setup for the demo



**Current Wiring Diagram** 

 Until now only on the pegboard

 Reduced setup for the demo



#### **NFC Modules and Case**

- NFC modules work better when the cables are not behind them
- New Case
  - waiting for ZigBee
  - and Batteries





#### **Gateway Cloud Connection**

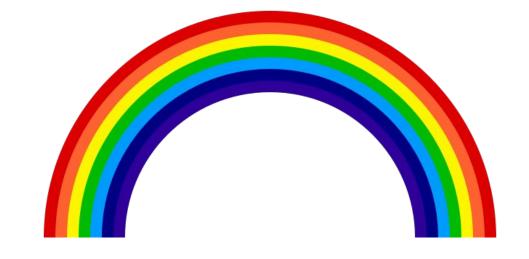
- Database was added to the gateway
- Push data only to the cloud when user leaves the event (e.g. club)
- Decoupled cups with user





### **Gateway Gamemode**

- Light up according to the current promille
- Rainbow colors in relation to alcohol traffic violations
- Auto-update after purchasing new drinks



0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3

#### **New Future Work**

- Reusable module in cup that detects drug concentration in liquids
- Communicate with ESP
- Alert club when detected and light up in a specific color + blink
  - → Avoid getting drugged

### **Problems in this Sprint**

- ZigBee modules were detected but could not be used
- Zigbee holds us back a bit
- Some things just took much longer than expected
  - lack of experience

### Plans for the next sprint

- Finalize hardware prototype
  - o 3D Case
  - o maybe Zigbee
- Improve gateway functionalities
- Evaluate the whole system