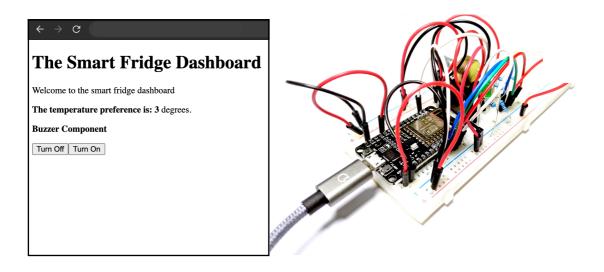
# **Smart Fridge**

Part three: The web server dashboard

### Project description:



In this exercise, you will work on your own to create a dashboard for the smart fridge circuit. Refer back to the smart chair part two exercise if you get lost in the process.



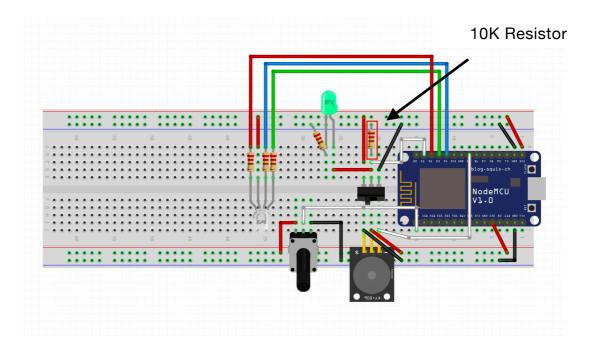
#### Project objectives:

- · Connect the ESP smart fridge circuit to your home WiFi
- · Create a web server
- Create a dashboard to interact with some of the components

## The Smart Fridge Dashboard

#### **Exercise Specifications**

You will work on the latest version of the smart fridge circuit:



Go ahead and create a new empty sketch from the Arduino IDE.

You should see an empty sketch like the following:

```
sketch jun17a §

void setup() {
// put your setup code here, to run once:
}

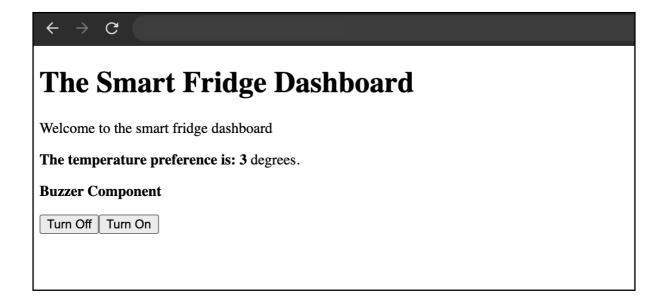
void loop() {
// put your main code here, to run repeatedly:
}
```

Feel free to save the sketch and rename it to something sensible: **smart\_fridge\_part3** for instance.

Now copy and paste the code that you wrote for the second part of the smart fridge exercise. You should have the code with the **fridgeTemperature()**, the **fridgeOn()**, the **trigBuzzer()**, and the **temperatureStatus()** utility functions.

Upload the sketch to your board and make sure that everything works as expected.

Try to add the code to replicate the following web page dashboard:



You are expected to attempt the following:

- WiFi: Write the code to connect the ESP board to your home wifi
- Web Server: Write the code to create and initialise a web server
- Routing: Add the appropriate routes and call back functions
- Dashboard: Write the code to replicate the above dashboard. Display the fridge temperature value and add two buttons to manually control the buzzer.

Refer back to the smart chair part two exercise if you need a refresh or additional hints to complete this exercises.