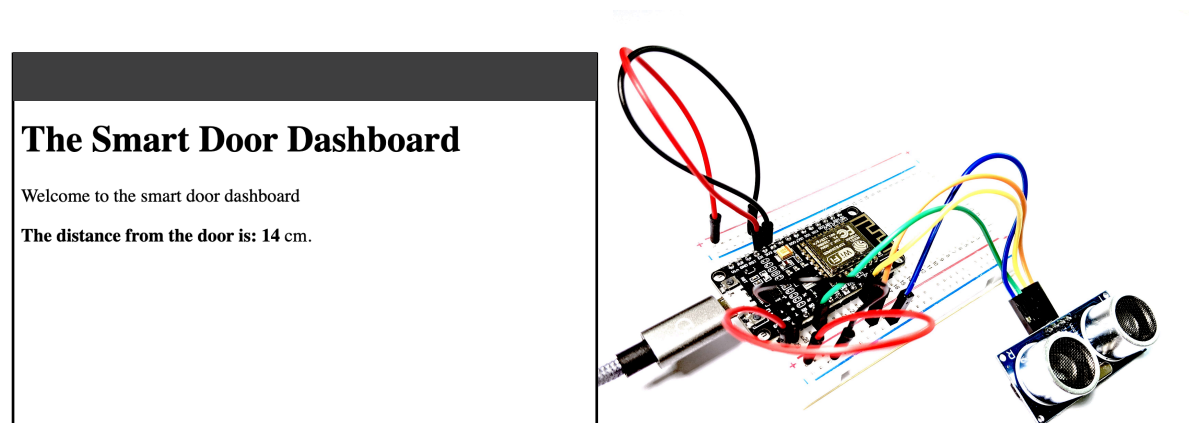


Smart Door

Part two: The web server dashboard

Project description:

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



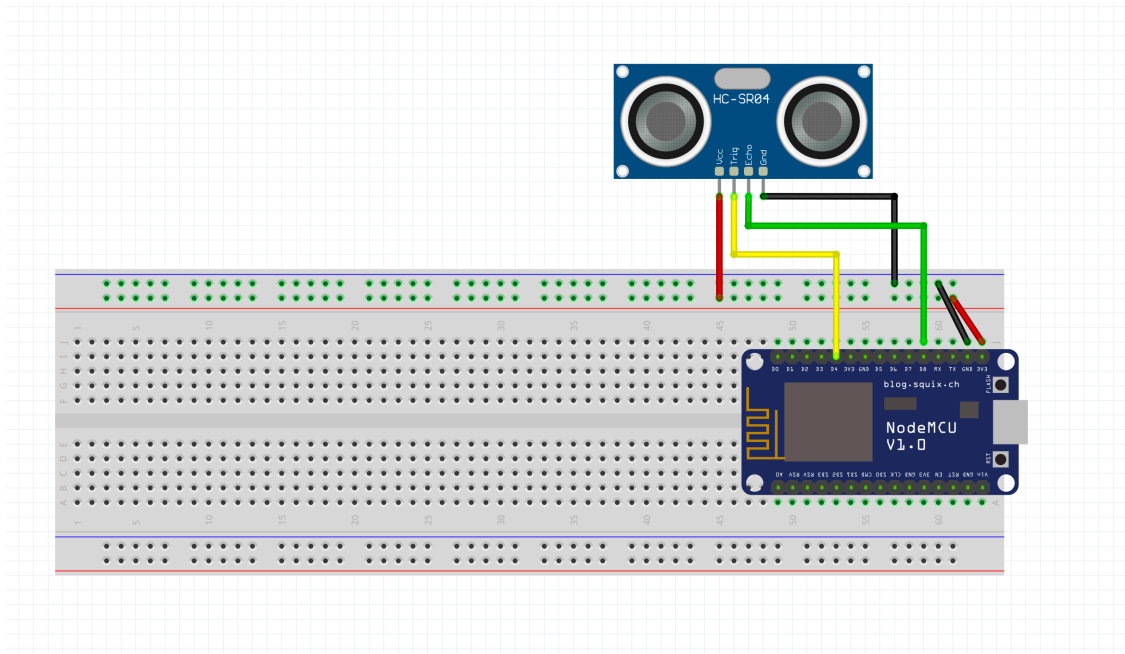
Project objectives:

- Connect the ESP smart door circuit to your home WiFi
- Create a web server
- Create a dashboard to interact with the ultrasound sensor

The Smart Door Dashboard

Exercise Specifications

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



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

You should see an empty sketch like the following:

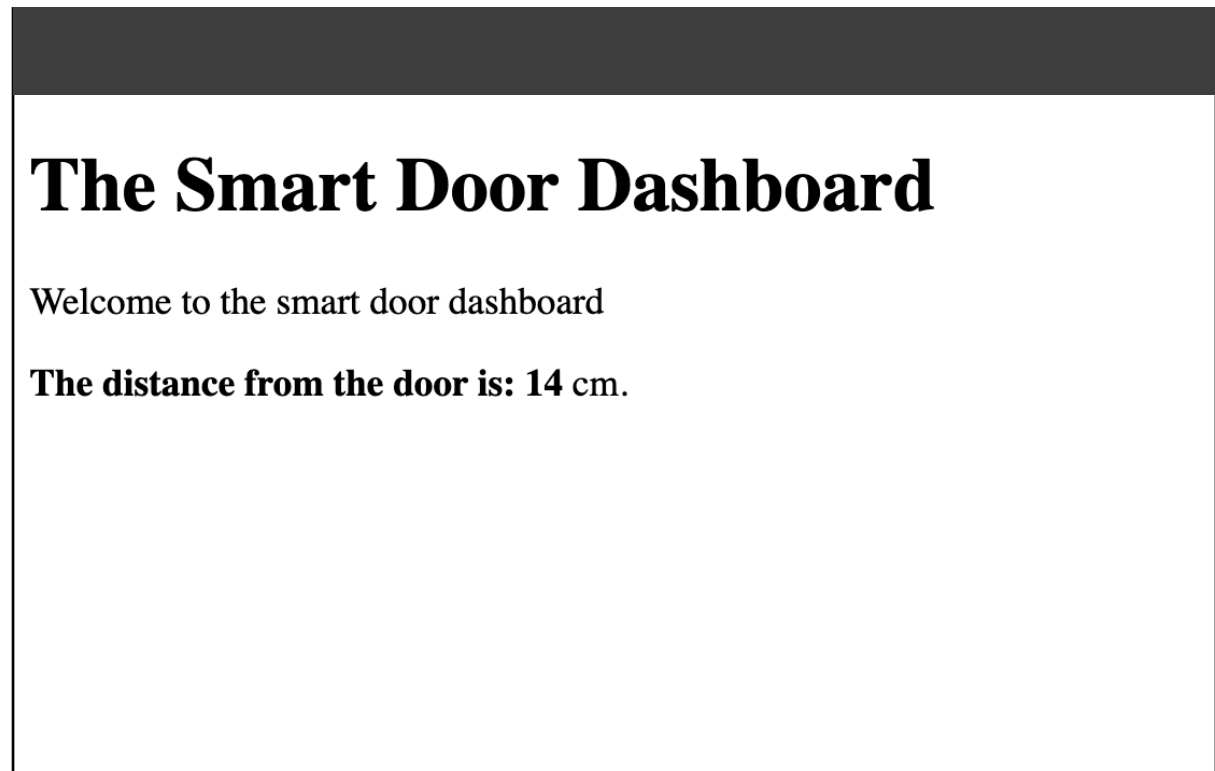


Feel free to save the sketch and rename it to something sensible:
smart_door_part2 for instance.

Now copy and paste the code that you wrote for the first part of the smart door exercise. You should have the code with the **distanceCentimeter()** utility function.

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 distance value.

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