

Hardware

1 Arduino Wi-Fi Library

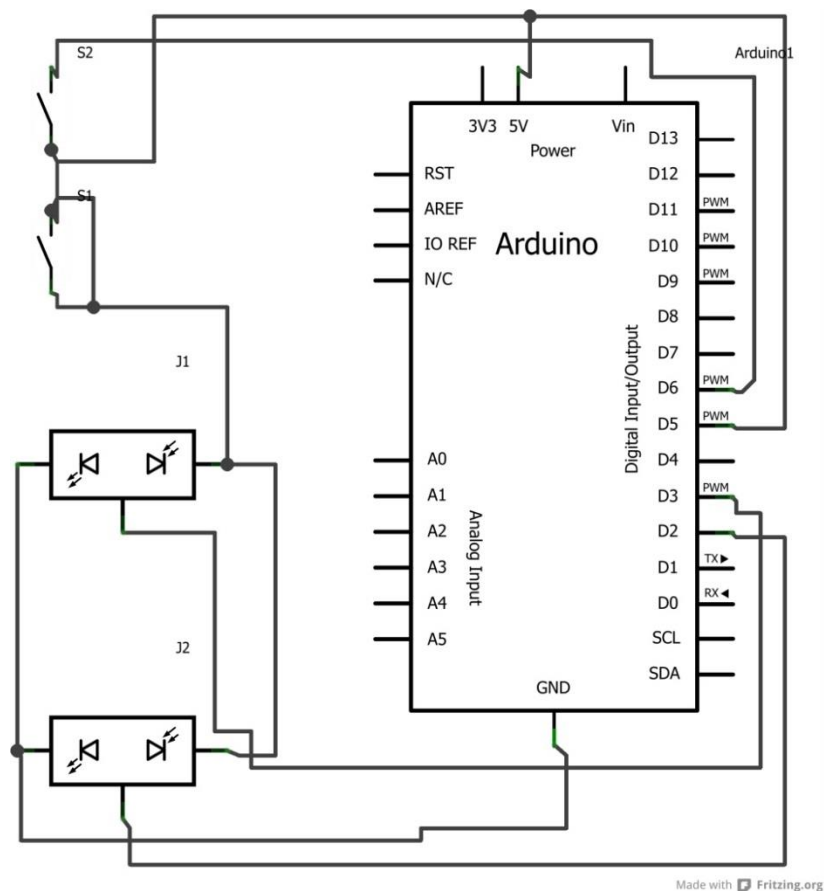
For information on installing libraries, see: <http://arduino.cc/en/Guide/Libraries>

2 Door Module

The hardware used in the door module is:

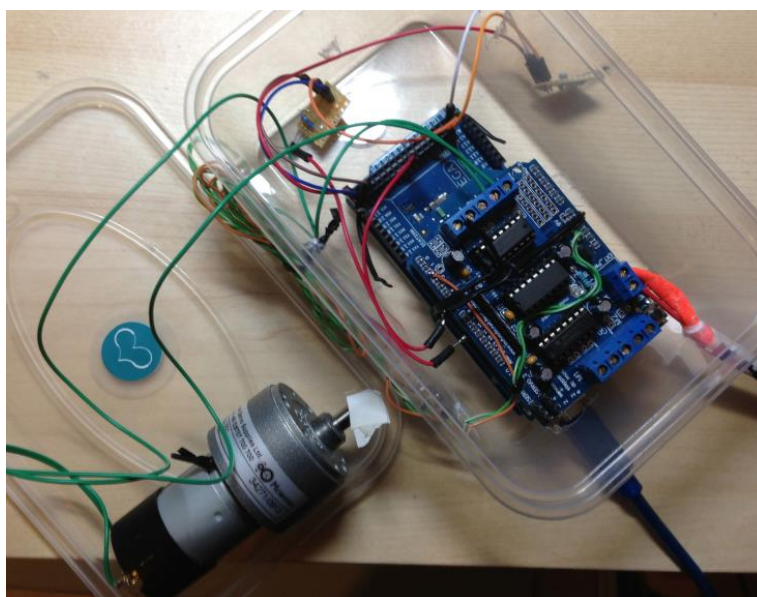
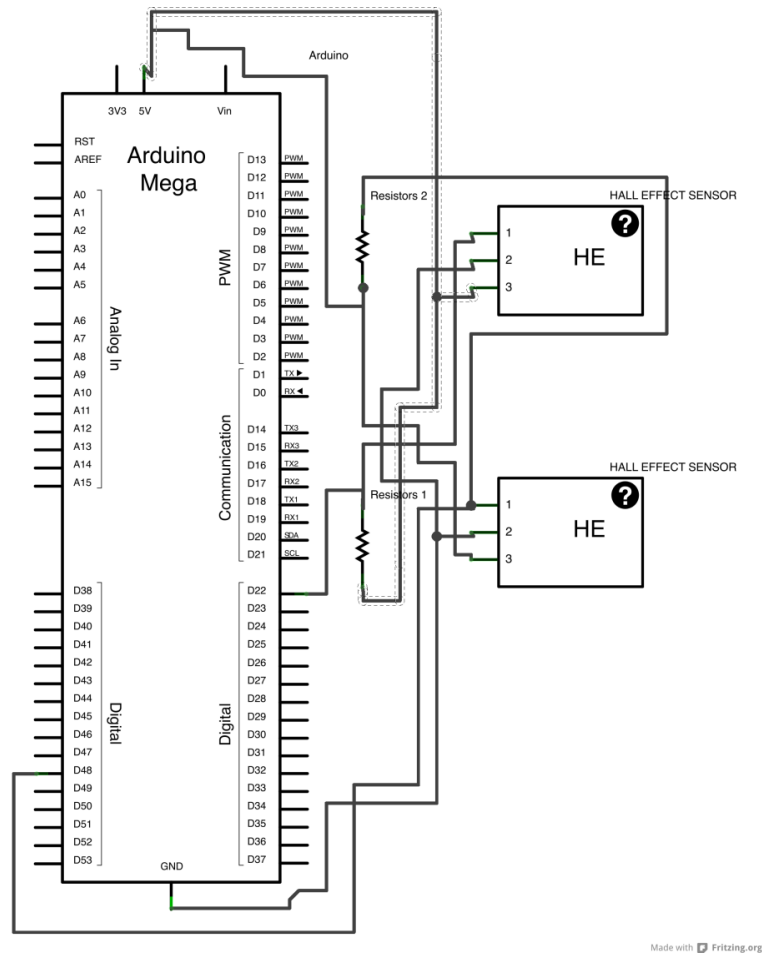
1. Arduino Mega
2. 2 PIR sensors to detect when someone is close to the door
3. 2 Magnetic switches to detect when the door is open
4. 1 Magnet
5. Stepper motor
6. Wi-Fi Shield
7. Motor Shield

Below the schematic for the module is shown. For simplicity reasons this does not include the Motor Shield and Wi-Fi Shield.



3 Arduino Blinds Module

The Arduino blinds module is similar to the door module, in a sense that it uses both the Motor Shield and the Wi-Fi Shield. It is also similar in principal, however here we do not have the motion sensors. In addition to this, the Hall Effect sensors replaced the reed switches.

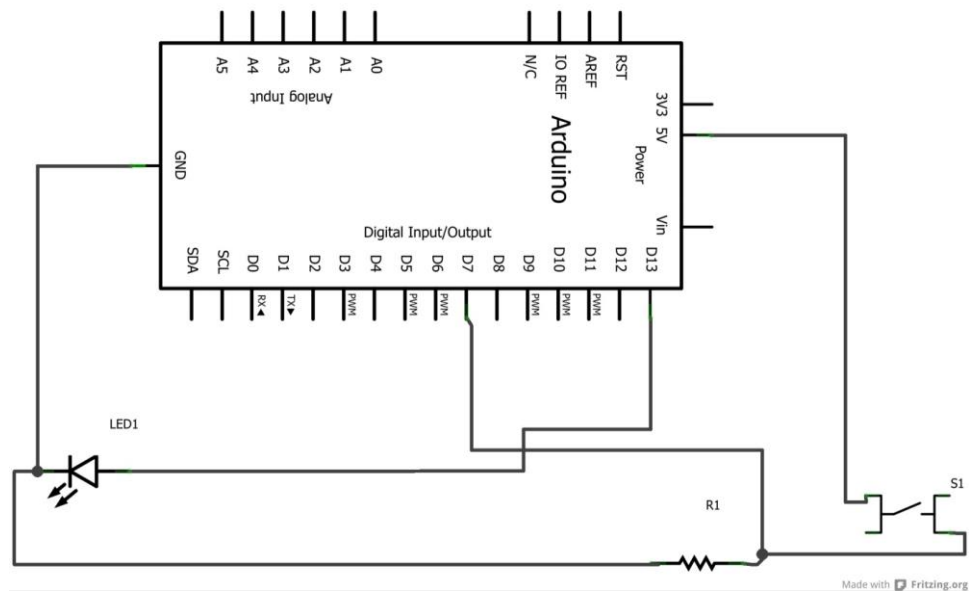


4 Basic Arduino Sensors (Button & PIR)

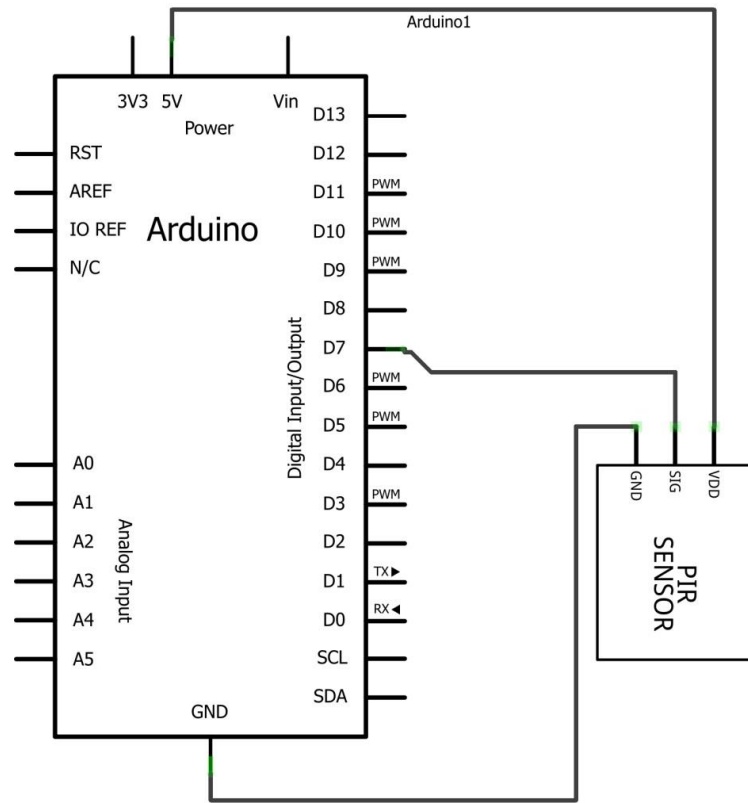
For the Arduino modules that were not as complex as the door opener, we used the following hardware:

- Arduino Uno board
- Arduino Wi-Fi shield
- Small resistors
- Button switch
- PIR sensor

Button



PIR Sensor



Made with