TECHNICAL PROJECT REPORT

TITLE OF INVENTION / PROJECT : DOOR LOCK NOTIFICATION SENSOR

TEAM MEMBERS / INVENTORS:

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Section – 1 (IPR Related)

BRIEF ABSTRACT

- **Problem your project is solving:-**
  Intruder alarms are popular devices used in high security areas. Our electronic device is also designed to alert the user to an intrusion. There are different kinds of intruder detection alarms , some detect movements by using a laser , some use pressure variations etc but our project consists of a sensor and a control unit as main parts which are connected to each other.Our device could be installed at various locations in houses or offices specially near doors ,windows and almirahs.

- **How are you solving that (solution)?**
  In our project, we have made a home security system where we will be able to get the notification on our phone every time the door is opened. Here we are using NodeMCU and a Sensor.(The sensor which we are using is a magnetic door sensor and is readily available in electric shops. It is basically a reel switch that gets ON when subjected to a magnet nearby). It on detecting the breakage of the circuit sends message to NodeMCU which further communicates with the application named as IFTTT which sends notifications direct on our mobile phones.

- **Additional modifications that can cater to improved solution:-**
  Additional sensor can be used as a form of modification in the device which senses the motion automatically and whenever not in use it goes to sleep. This will enhance the durability of the product so that it could work with consuming less power and efficiently.

EXISTING STATE-OF-THE-ART AND DRAWBACKS IN EXISTING STATE-OF-THE-ART

S. No.	Existing state of art	Drawbacks in existing state of art
1	SENIOR WORLD Juvo Door Safety Alarm & Chime - Extremely Loud 120 Db Battery Operated With Password To Alert People & Deter Intruders. Link-https://www.amazon.in/dp/B077BBVTYM/ref=sspa_dk_detail_2?psc=1&pd_rd_i=B077BBVTYM&pf_rd_m=A1VBAL9TL5WCBF&pf_rd_p=5851cbbe-e524-4100-8b12-96516f61ddea&pd_rd_wg=xGT0e&pf_rd_r=M1F219RHR2CV0CEZBX39&pf_rd_s=desktop-dp-sims&pf_rd_t=40701&pd_rd_w=aTfxW&pf_rd_i=desktop-dp-sims&pd_rd_r=bcc3f7dd-ed56-11e8-b6fe-5586a9028193	1. Owner can't get to know the door/almirah locker status when away from home. 2. Consumes more power supply.
2	SMILEDRIVE® Smart Wireless WiFi Door Window Burglar Motion Sensor Alarm Security System Device-Get Mobile Notifications for Home Office Safety Link - https://www.amazon.in/SMILEDRIVE-Wireless-Security-Device-Get-Notifications/dp/B07884Z424/ref=sr_1_2?ie=UTF8&qid=1542741931&sr=8-2&keywords=wifi+door+sensor	1. Time consuming set up.

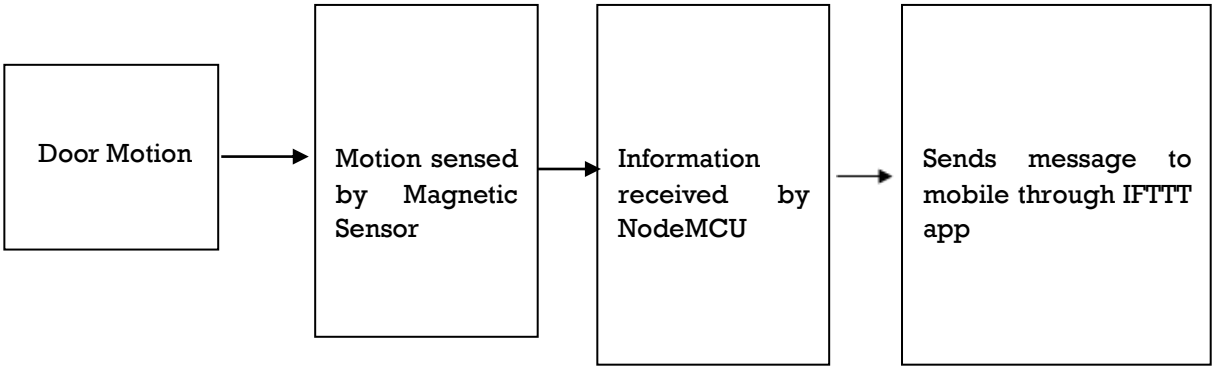
NOVEL/ADDITIONAL MODIFICATIONS THAT YOU CAN PROPOSE TO IMPROVE UPON DRAWBACKS

- Instant Notification
- Plug and play
- Less power consumption

ADVANTAGES

- A sense of Comfort
- Constant Protection
- Compact Size

BLOCK DIAGRAM

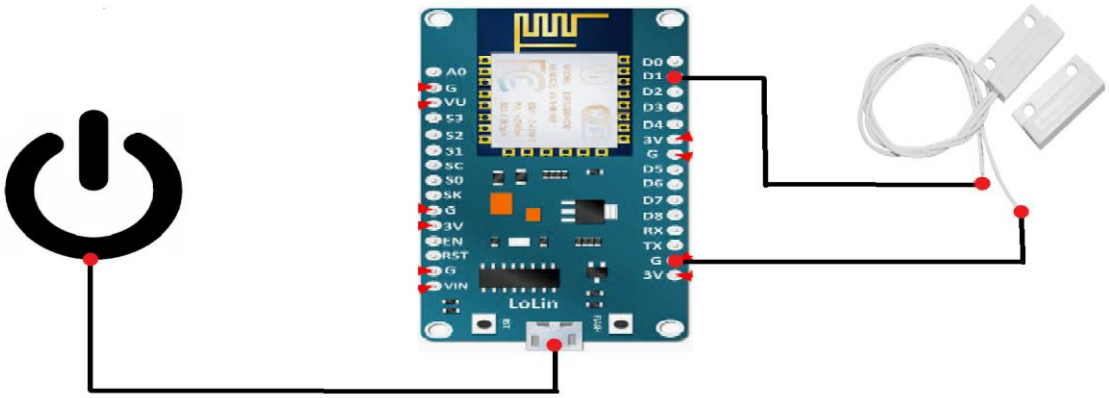


Section – 2 (Real Project)

MATERIALS

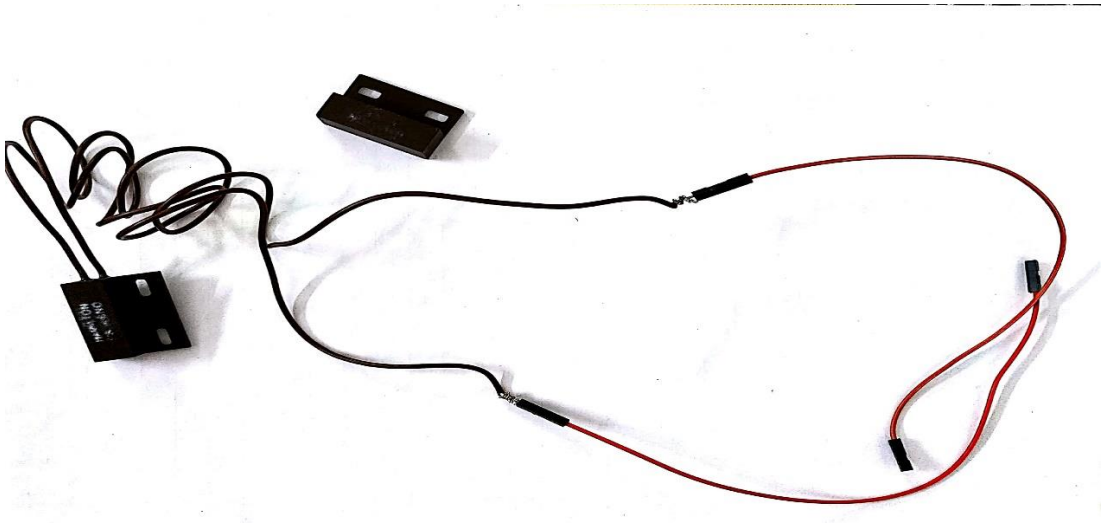
- NodeMCU – 1pc. (ESP8266) with WIFI Module
- Jumper Wires – 2 pc.
- Power Bank - 1 pc. (2000 mAH)
- Magnetic Sensor – 1pc

CIRCUIT DIAGRAM



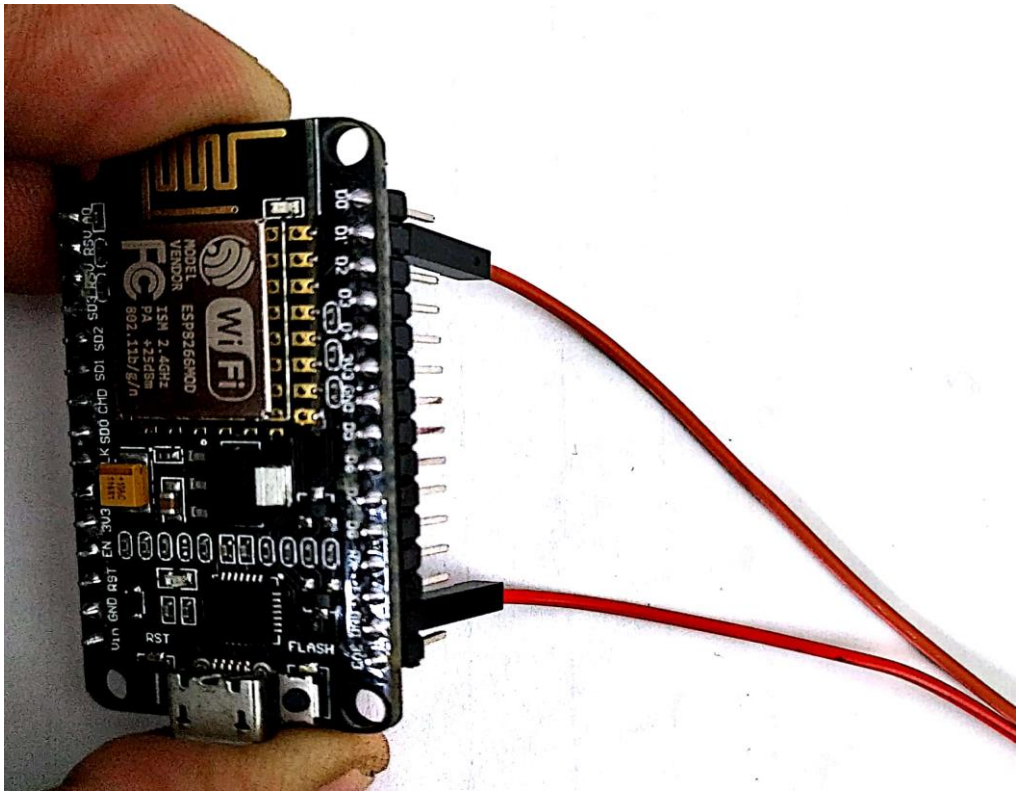
Steps of Circuit Completion

STEP 1. Magnetic Sensor is connected to the Jumper Wires.

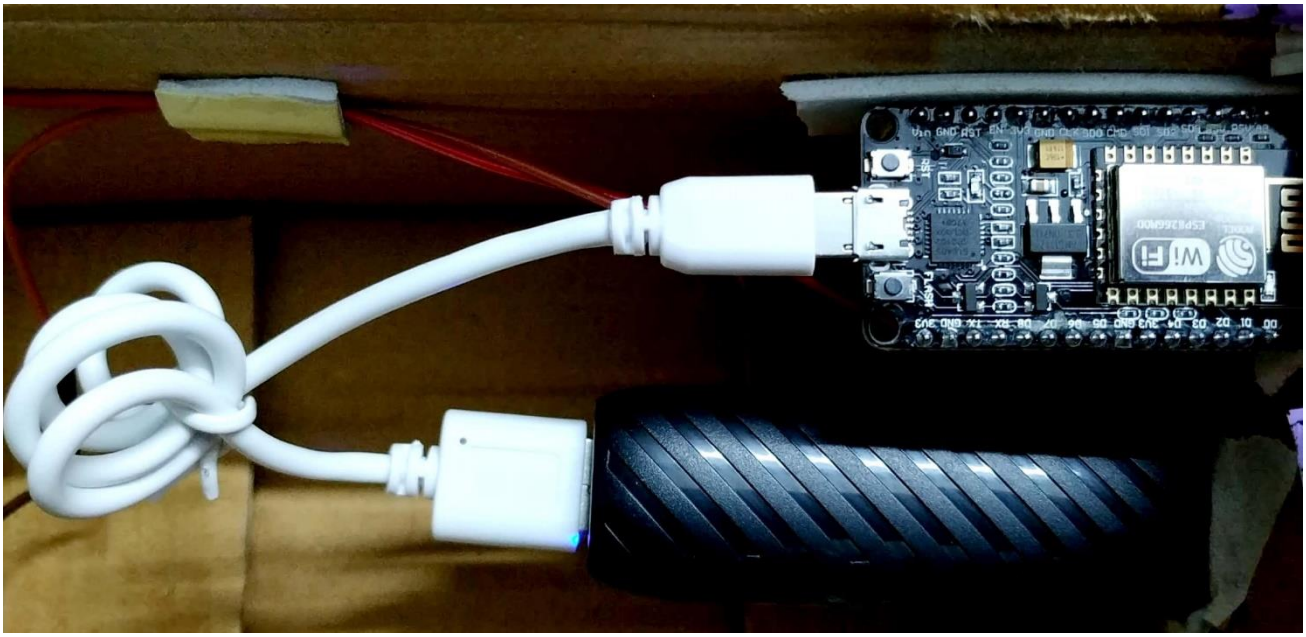


STEP 3. Take Node MCU(ESP8266) Module.

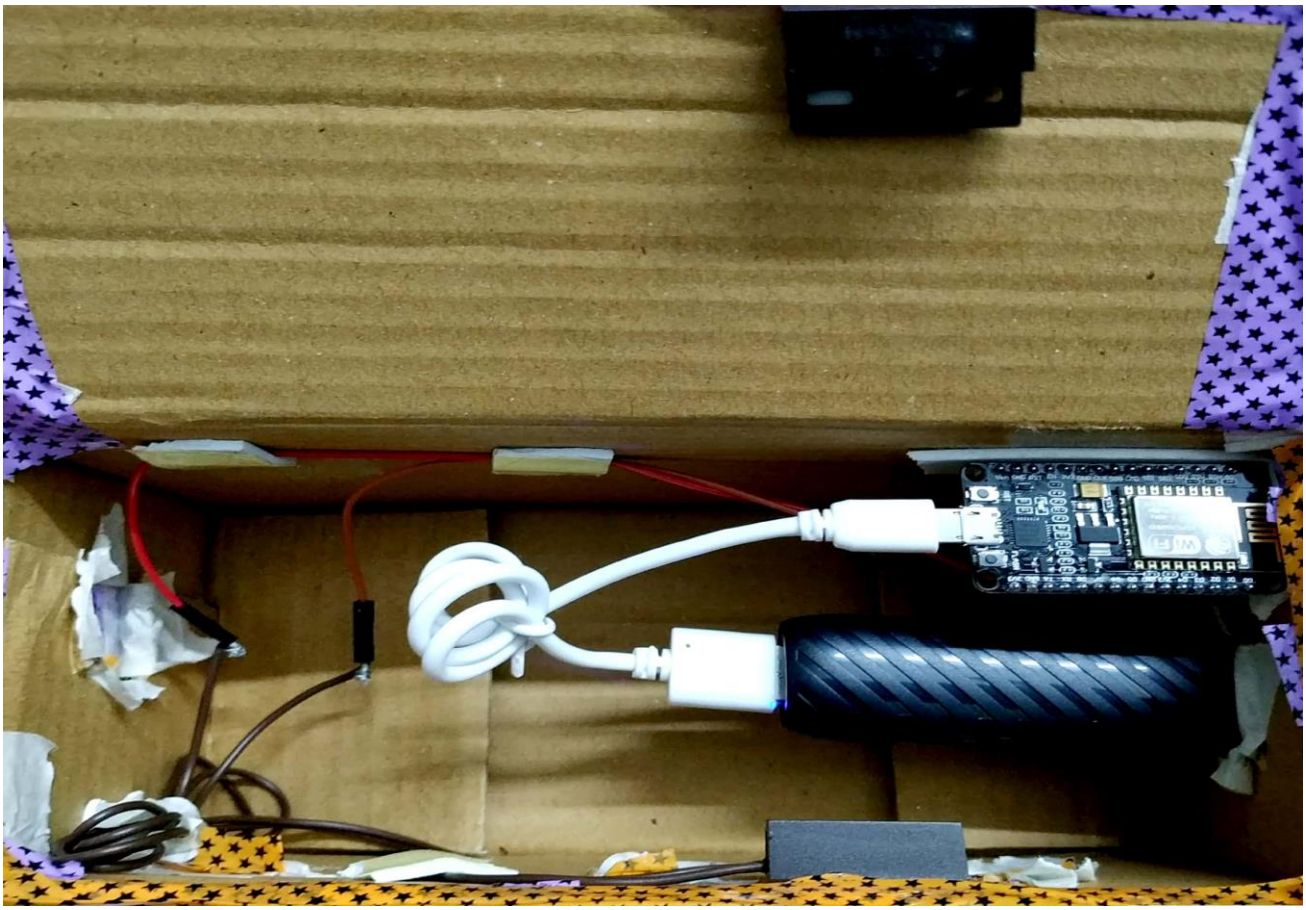
STEP 3. Node MCU is connected with the Jumper Wires at the pins D1 and GND.



STEP 4. NodeMCU is connected to Power Bank as a power supply.



STEP 5. The final product called **"DOOR LOCK NOTIFICATION SENSOR"** is ready to use.



PROGRAM CODE

LINK- https://github.com/groverankit12/Door-Lock-Notification-Sensors