ATRIA INSTITUTE OF TECHNOLOGY
DEPARTMENT OF CSE
Chrysalis 2022
Details of the project

Team name: TECH HIVE

Team representative: NAVYA.M , HARISH BUDARPU ,S BHAVYASHREE

Team members: VAISHNNAVI . P , SNEHA.I , DIXIKIA , MANASA B N, LAKSHMI GOVIND , ASHWINI S, CHANDRA SAI D, RAKSHITHA D,CHANDANA G, RUTHVIK OZA

Title of the project: **SMART HOME**

Sub title of the project : **SMART DOOR LOCK SYSTEM USING NodeMCU**

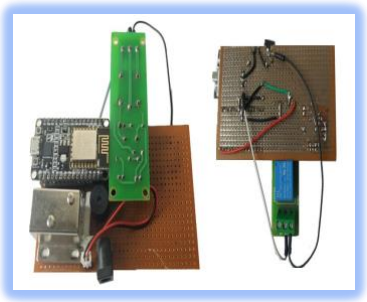
Team members: VAISHNNAVI . P , SNEHA.I , DIXIKIA , NAVYA.M

Brief description of the project:

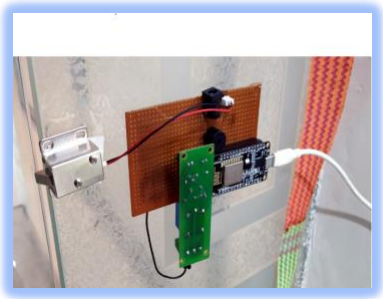
- IoT based Application
- Perform locking and unlocking operations on a door
- Part of Smart Home
- Sends alerts on the status of the device
- Connects to user’s door lock system

Picture of the sample model of your project:

Sl.no.	Component name	Quantity	cost	
1	**Solenoid Lock(12V)**	1	₹450	
2	**Battery**	1	₹100	
3	**Arduino**	1	₹200	
4 5 6	**Relay Module** **Bluetooth** **Dc socket**	1 1 1	₹200 ₹160 ₹100	
TOTAL COST: ₹1,210				



Block diagram of the working of your project:



Software used: Adafruit IO

Hardware components required for project:

Application areas of the project:

- This project can be used in industries, home, office, shops
- Can be used for garbage doors and gates

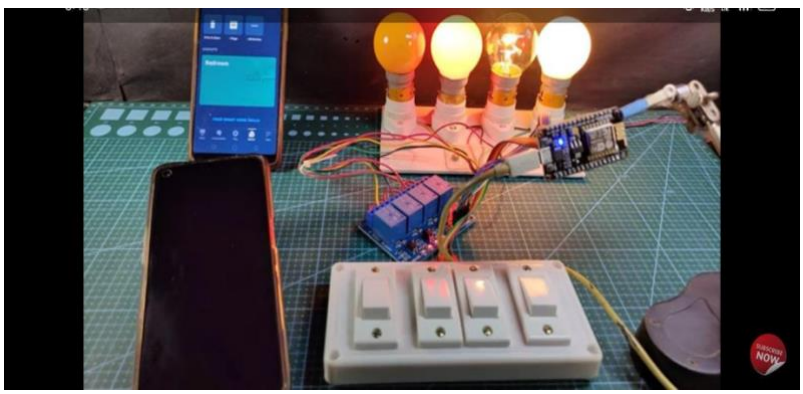
SUB TITLE OF THE PROJECT : SMART LIGHT

Team members: Harish , MANASA B N, LAKSHMI GOVIND , ASHWINI S, CHANDRA SAI D

BREIF DESCRIPTION OF THE PROJECT: In this project , we implemented latest technologies to design normal home into smart home where a person can operate devices by latest smart technologies.

Shown how to on the lights with google assisstant and alexa using NodeMCU to control relay with voice commands,phone operation and manual switches.

BLOCK DIAGRAM OF WORKING OF PROJECT PICTURE OF THE SAMPLE MODEL OF PROJECT:



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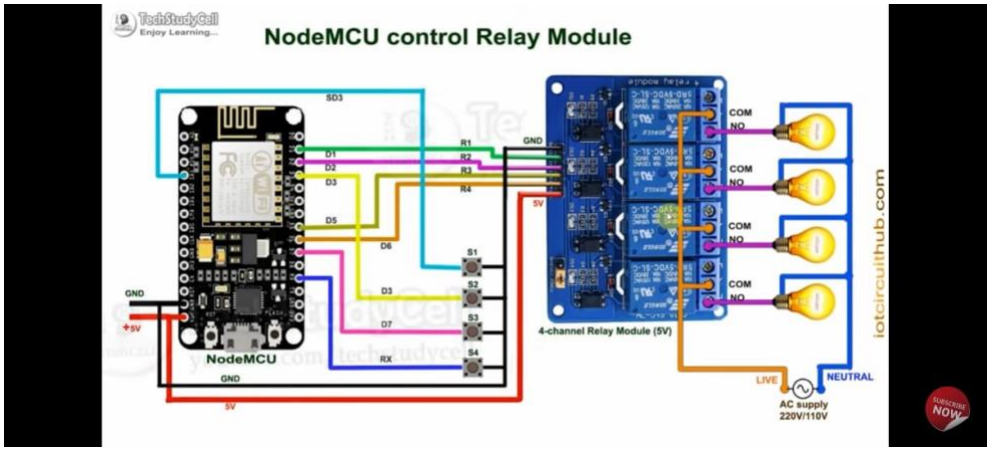


SOFTWARE USED: Siri pro,Alexa app and google assistant.

HARDWARE COMPONENTS REQUIRED FOR PROJECT:

Sl.no	Component name	Quantity	Cost
1.	NodeMCU	1	591
2.	4 Channel 5V SPDT relay Module	1	399
3.	Push buttons	4	-
4.	Bulbs	4	200
5.	Bulb Holders	4	199
6.	Jumper wires	-	179
Total cost			1568

Key Benefits of IoT-Enabled Smart Lighting

Save money by switching to more energy-efficient LED bulbs.

Set schedules to ensure that lights are off when they aren't needed – or control lighting schedules

remotely as a security measure when you're away from home or out of town.

Adjust the color or dimness of lights in different rooms or individual bulbs

APPLICATIONS

- They are used at home
- Banks
- And also used in Street lights

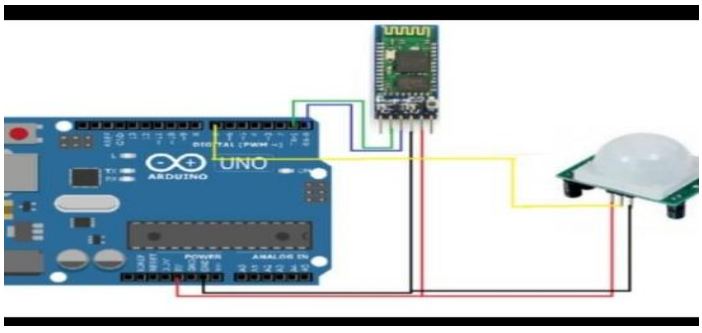
SUB TITLE OF THE PROJECT : SECURITY SYSTEM

Team members: S BHAVYASHREE , RAKSHITHA D,CHANDANA G, RUTHVIK OZA

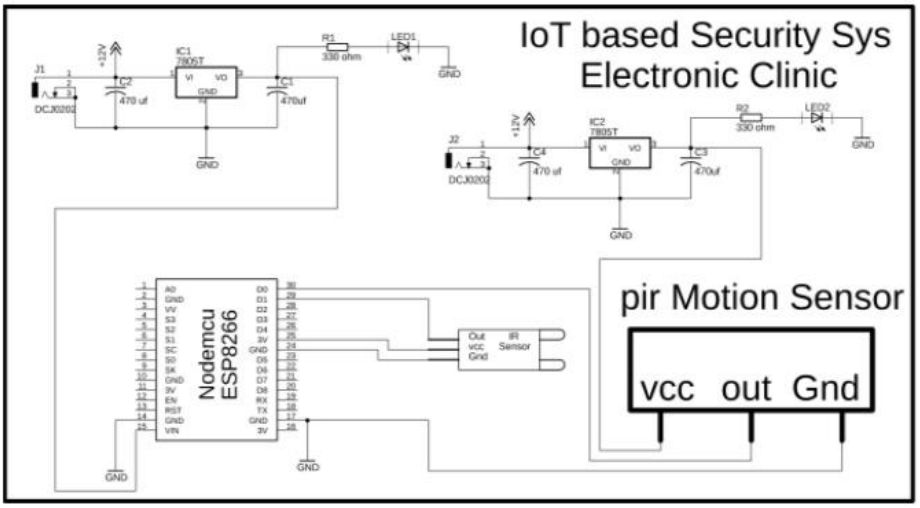
Brief description of the project:

- Safety and security of any living or working place is one of the most primary concern
- Today's security systems include CCTV surveillance which is not affordable to everyone and many of these does not trigger the alarms. Thus a cost effective and fast reactive security system is required
- This system consists of PIR sensors and ultrasonic sensors, these sensors detect the intrusion through any access points and generate the pulses.

Picture of the sample model of your project:



Block diagram of the working of your project:



SOFTWARE USED: Arduino

HARDWARE COMPONENTS REQUIRED FOR PROJECT:

Sl.no	Component name	Quantity	Cost
1.	Nodemcu ESP8266	1	359
2.	IR sensor	1	65
3.	WIRES	1	125
4.	Regulated 5V supply	1	359

APPLICATIONS

- Home security systems
- Industrial security system
- Bank security system
- Organisational security system