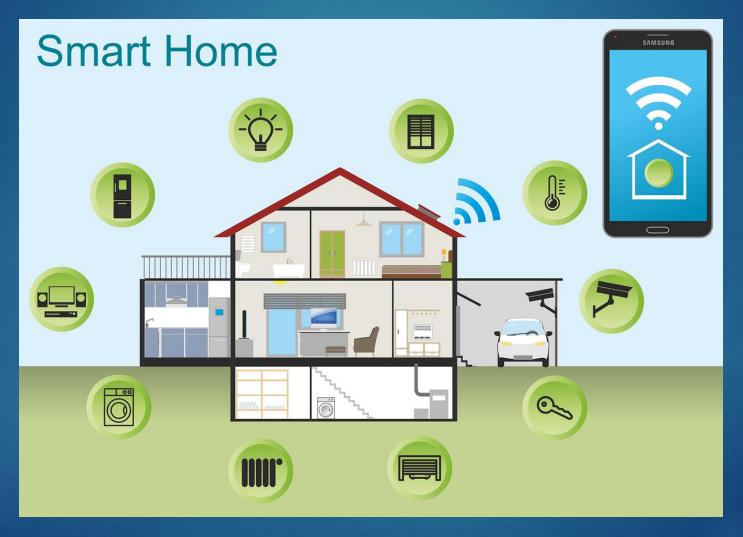
# IOT PROJECT

- Intranet of Titans

# Smart ome



## About Intranet of Titans:

#### o Team Members:

- Penumalla Aditya Pavani (2021101133)
- Kadali Lakshmi Nirmala (2021101126)
- Abhinay Maurya (2021101132)
- Vempati Siva Koti Reddy (2021101135)

## ABOUT SMART HOME:

## Our project involves

- Controlling electrical appliances using website
- Detecting arrival of vehicles and automatically opening the gate
- Monitoring Temperature and Humidity inside the home
- Detecting water level and giving alarm through buzzer

## **Gate Automation:**

- Ultrasonic sensor detects the motion of any vehicle which comes nearer to the Main gate.
- After detecting the vehicle, the gate opens automatically by using Servo Motor.
- This way it allows the vehicle inside.



### ☐ Components used:

- Ultrasonic Sensor
- Servo Motor



Ultrasonic Sensor



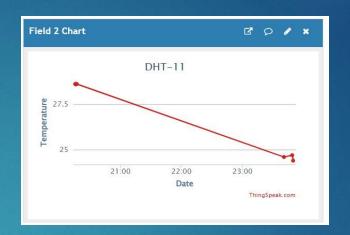
Servo Motor

#### ❖ MONITORING TEMPERATURE

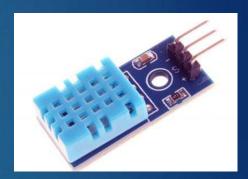
- Here we are monitoring the temperature in the home daily and sending the data to ThingSpeak.
- o The Sensor we use is DHT11.
- Beside is the Graph of the Temperature data sent to ThingSpeak.

#### \* MONITORING HUMIDITY

- Here we are monitoring the Humidity inside the home daily and sending the data to ThingSpeak.
- o The Sensor we use is DHT11.
- Beside is the Graph of the Humidity data sent to ThingSpeak.



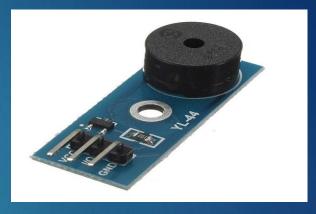




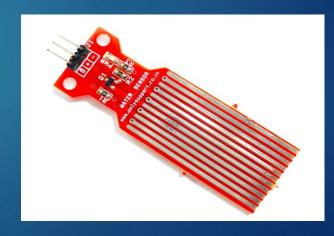
DHT11 Sensor

## \* Water Level Indicator

- o Here we are monitoring the level of Water
- o The Sensor we are using is Water Level Sensor.
- o If the Water level in the tank is high, it will give alert through buzzer...it is also helpful in saving water.



Buzzer



Water Level Sensor

### **Controlling Electrical Appliances:**

- We are turning lights on and off in every room through website.
- This way people could easily control
   electrical appliances from anywhere.
- It helps to control our home just by using Website.



### **Smart Parking:**

- We made a smart parking slot where the shutter(door)
  of that slot is being controlled from website.
- If you turn the button ON in the website, the shutter will open.
- After parking the car, if you turn the button OFF in the website, the shutter will close.
- Components we used to make this are Servo Motor & Jumper Wire.
- This is to park the car safely.





Servo Motor

## ADVANTAGES:

- Home Automation improves the quality of life of the residents.
- Due to Home Automation, the scope of human error is reduced and the system becomes more secure and robust.
- Due to the application of website we have complete manual control on all the appliances and as a result, the residents have more flexibility in the ways they can use their devices.

# THANK YOU