

Smart Home Sense

IoT system for remote monitoring and control of home appliances.



Introduction to Smart Home Sense

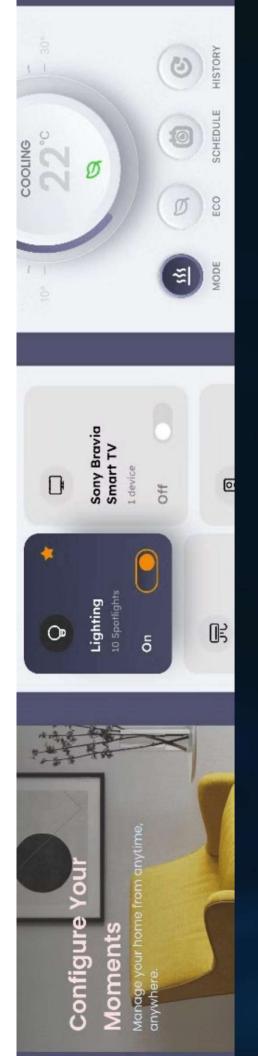
What is Smart Home Sense? Smart IoT system for remote appliance control and monitoring.

Problem

Manual appliance operation causes inconvenience and energy waste.

Solution

Automation and live monitoring improve convenience and efficiency.



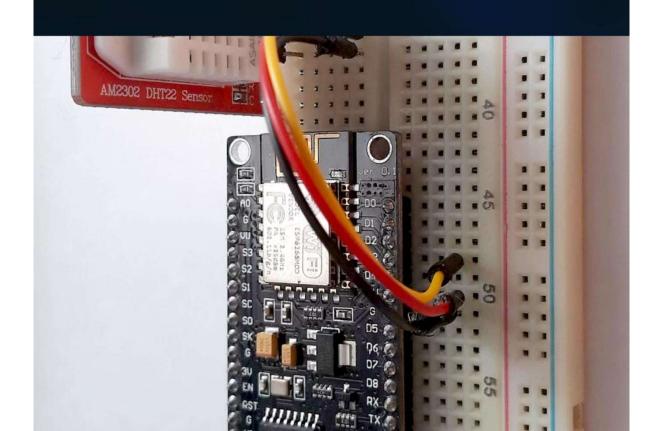
Key Features

Remote control via phone web interface

Auto appliance operation by room temperature

Live temperature and humidity monitoring

Real-time device status updates



System Components

NodeMCU/ESP8266	Wi-Fi enabled microcontroller
DHT11 Sensor	Measures temperature and humidity
Relay Module	Electronic appliance switching
Smartphone	User control web interface
Power Supply	Provides necessary circuit power

How It Works

Sensor

DHT11 captures temp and humidity

Microcontroller

NodeMCU processes data and connects Wi-Fi

Data Transmission

Sends info to smartphone web interface

User Control

User monitors and issues appliance commands

Appliance

Relay switches appliances ON/OFF

Web/App Interface

ON/OFF Appliance Buttons

Manual control over every device

Auto Mode Toggle

temperature-based Enable automatic control

Live temperature and

humidity display

Status Indicators **Environment Data**

Real-Time

status of appliances Current operational

to cole

Auto Mode Logic

Temp $> 30^{\circ}$ C

Fan or cooler turns ON

Temp $<= 30^{\circ}C$

Fan or cooler turns OFF



Advantages of Smart Home Sense

Remote control convenience anywhere

Energy savings through automation

Real-time monitoring of home environment

Reduces human error and effort

Use Cases

Homes – living rooms, bedrooms, kitchens

Offices – conference rooms and workspaces

Shops - retail and storage areas

Schools - classrooms

and staff rooms

Smart Home vs Traditional Home

High	Low	Energy Efficiency
Yes	No	Auto Function
Live	None	Temperature Monitoring
Mobile-based	Manual	Control
Smart Home Sense	Traditional Home	Feature

