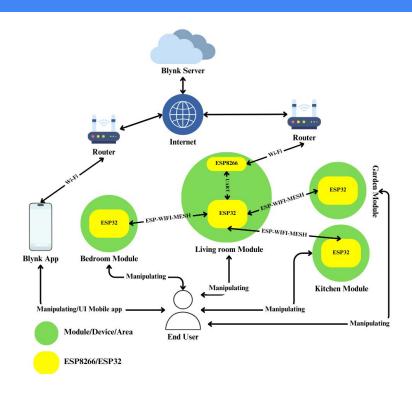
# Smart System for Garden & House

Using Free Blynk 2025

## Overall



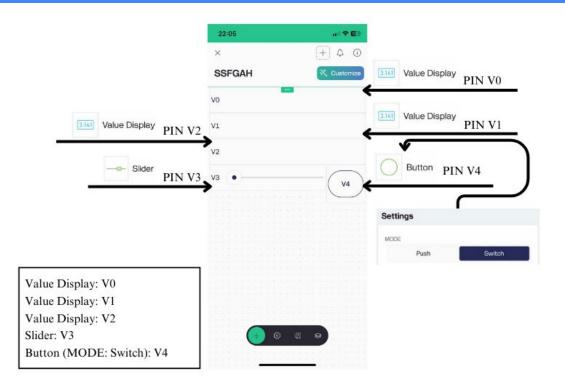
# Blynk - Events & Notifications

EVENT	EVENT	TYPE	E-MAIL	PUSH	Limit
NAME	CODE		то	NOTIFICATIONS	
				то	
RAIN	rain	Info	Device	Device Owner	1event/1min
			Owner		
THIEF	thief	Warning	Device	Device Owner	1event/1sec
			Owner		
252	252	Critical	Device	Device Owner	1event/1sec
			Owner		
GAS	gas	Warning	Device	Device Owner	1event/1min
			Owner		
SMOKE	smoke	Warning	Device	Device Owner	1event/1min
			Owner		

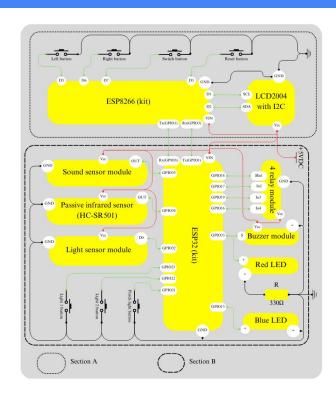
## Blynk - Datastreams - Virtual pins

NAME	PIN	DATA TYPE	MIN	MAX
MODULE NAME	V0	String		
MONITOR	V1	String		
PIECE	V2	String		
NUMERICAL ORDER	V3	Integer	0	100
SWITCH	V4	Integer	0	1

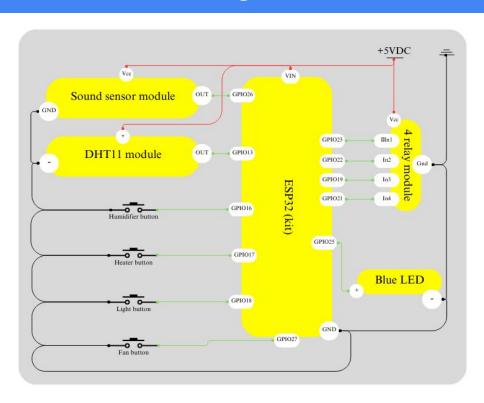
## Blynk - Dashboard



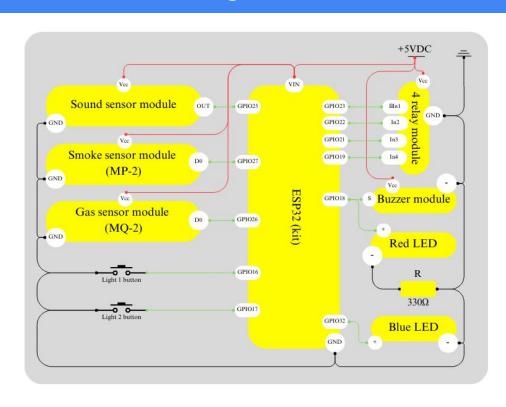
## Living room module - Circuit diagram



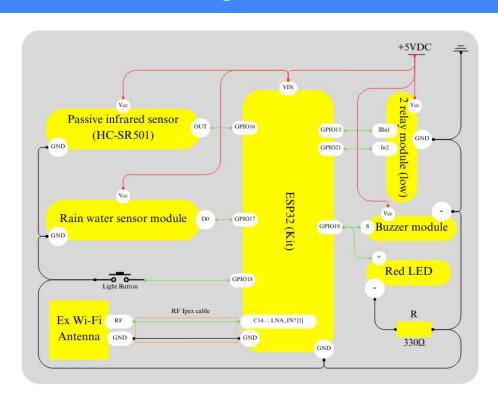
#### Bedroom module - Circuit diagram



# Kitchen module - Circuit diagram



# Garden module - Circuit diagram



# Living room module - Array of pieces\*

STT	ID	Name	Sign	Туре	Value Type	Value (default)	From Module	Event Code
1	100	252 Recourse*	252	EVENT_TYPE	BOOL_TYPE	0	Living Room	252
2	101	Thief Detection	Thi	EVENT_TYPE	BOOL_TYPE	0	Living Room	thief
3	102	Light Detection	LD	SENSOR_TYPE	BOOL_TYPE	0	Living Room	
4	103	Porch Light	PL	CONTROL_TYPE	BOOL_TYPE	0	Living Room	
5	104	Porch Light A Mode	PLAM	CONTROL_TYPE	BOOL_TYPE	1	Living Room	
6	105	Light 1	L1	CONTROL_TYPE	BOOL_TYPE	0	Living Room	
7	106	Light 2	L2	CONTROL_TYPE	BOOL_TYPE	0	Living Room	
8	107	Clap Switch Mode	CSM	CONTROL_TYPE	BOOL_TYPE	1	Living Room	

<sup>\*</sup>pieces: piece is a self-defined control/monitor object; \*252 Recourse: "Signal 252 is used to signal when someone cannot escape and needs immediate rescue" [2].

## Bedroom module - Array of pieces

STT	ID	Name	Sign	Туре	Value Type	Value (default)	From Module	Event Code
1	200	Temperature	Te	SENSOR_TYPE	INT_TYPE	0	Bedroom	
2	201	Humidity	Hu	SENSOR_TYPE	INT_TYPE	0	Bedroom	
3	202	252 Recourse	252	EVENT_TYPE	BOOL_TYPE	0	Bedroom	252
4	203	Light	L	CONTROL_TYPE	BOOL_TYPE	0	Bedroom	
5	204	Clap Switch Mode	CSM	CONTROL_TYPE	BOOL_TYPE	1	Bedroom	
6	205	Fan	Fa	CONTROL_TYPE	BOOL_TYPE	0	Bedroom	
7	206	Fan A Mode	FaAM	CONTROL_TYPE	BOOL_TYPE	1	Bedroom	
8	207	Fan Te Thresh	FaTT	CONTROL_TYPE	INT_TYPE	23	Bedroom	
9	208	Heater	Не	CONTROL_TYPE	BOOL_TYPE	0	Bedroom	
10	209	Heater A Mode	HeAM	CONTROL_TYPE	BOOL_TYPE	1	Bedroom	
11	210	Heater Te Thresh	НеТеТ	CONTROL_TYPE	INT_TYPE	18	Bedroom	
12	211	Humidifier	н	CONTROL_TYPE	BOOL_TYPE	0	Bedroom	
13	212	Humidifier A Mode	НАМ	CONTROL_TYPE	BOOL_TYPE	1	Bedroom	
14	213	H Hu Thresh	ННиТ	CONTROL_TYPE	INT_TYPE	40	Bedroom	

You can change the threshold by "moving" to the threshold piece and turning the switch to on, numerical order is now used to show the threshold value, turn the switch to off to save.

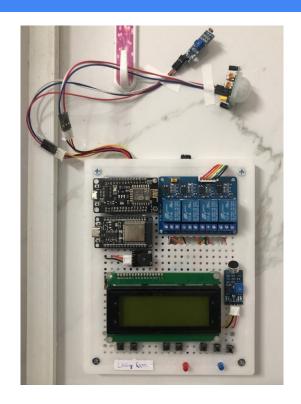
# Kitchen module - Array of pieces

STT	ID	Name	Sign	Туре	Value Type	Value (default)	From Module	Event Code
1	300	Smoke	Sm	EVENT_TYPE	BOOL_TYPE	0	Kitchen	smoke
2	301	Gas	Gas	EVENT_TYPE	BOOL_TYPE	0	Kitchen	gas
3	302	252 Recourse	252	EVENT_TYPE	BOOL_TYPE	0	Kitchen	252
4	303	Light 1	L1	CONTROL_TYPE	BOOL_TYPE	0	Kitchen	
5	304	Light 2	L2	CONTROL_TYPE	BOOL_TYPE	0	Kitchen	
6	305	Clap Switch Mode	CSM	CONTROL_TYPE	BOOL_TYPE	1	Kitchen	

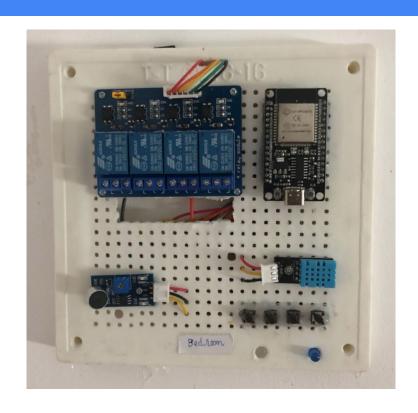
# Garden module - Array of pieces

STT	ID	Name	Sign	Туре	Value Type	Value (default)	From Module	Event Code
1	400	Thief Detection	Thi	EVENT_TYPE	BOOL_TYPE	0	Garden	thief
2	401	Rain Detection	Rain	EVENT_TYPE	BOOL_TYPE	0	Garden	rain
3	402	Light	L	CONTROL_TYPE	BOOL_TYPE	0	Garden	
4	403	Light A Mode	LAM	CONTROL_TYPE	BOOL_TYPE	1	Garden	

# Living room module - Hardware



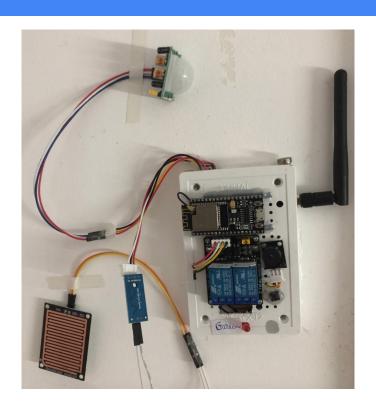
#### Bedroom module - Hardware



## Kitchen module - Hardware



#### Garden module - Hardware



#### References

- [1] Espressif Systems, "ESP32-WROOM-32 Datasheet Version 3.4", Espressif Systems, 2023, URL:
- https://www.espressif.com/sites/default/files/documentation/esp32-wroom-32\_datasheet\_en.pdf;
- [2] Gosho Aoyama, "Thám Tử Lừng Danh Conan", POPS Anime YouTube channel, Episode 673: Tình Huống Khẩn Cấp 252 (Part 1), URL: https://www.youtube.com/watch?v=M6-2xRDpVzk.

#### **Author**

Full name: Ngô Quang Tịnh

YouTube channel: youtube.com/@devserapps\_open-source