

DHT11 |
Sensor |
VCC ← 5V
GND ← GND
DATA → D2

## ### Notes

- \*\*Relay Module\*\*: Controls fan; use NO (Normally Open) → Fan live, COM → AC live.
- \*\*Buzzer\*\*: Active HIGH on D8.
- \*\*OLED\*\*: I2C connection, SDA=A4, SCL=A5.
- \*\*DHT11\*\*: Connected to D2. Pull-up resistor internal; optional  $10k\Omega$  between VCC and DATA.
- All components \*\*share common GND\*\* with Arduino.
- Make sure fan current ≤ relay rating.

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## Wiring Diagram (Text Version)

## **Component Pin Connections**

Component	Pin on Component	Arduino Pin / Connection	Notes
DHT11 Sensor	VCC	5V	Power
	GND	GND	Ground
	DATA	D2	Digital input
OLED Display	VCC	5V	Power
(SSD1306 128x64)	GND	GND	Ground
	SDA	A4	I2C Data
	SCL	A5	I2C Clock
Relay Module	VCC	5V	Power
	GND	GND	Ground
	IN	D9	Relay control
Fan	Live wire	Relay NO	Relay switches fan power
	Neutral wire	AC Neutral	Direct to mains
Buzzer	+	D8	Active HIGH
	-	GND	Ground