

Week 6

IoT Product

Planning

Raspberry Pi Hands On

week

ALTISSIMO

REGA



SEKAR



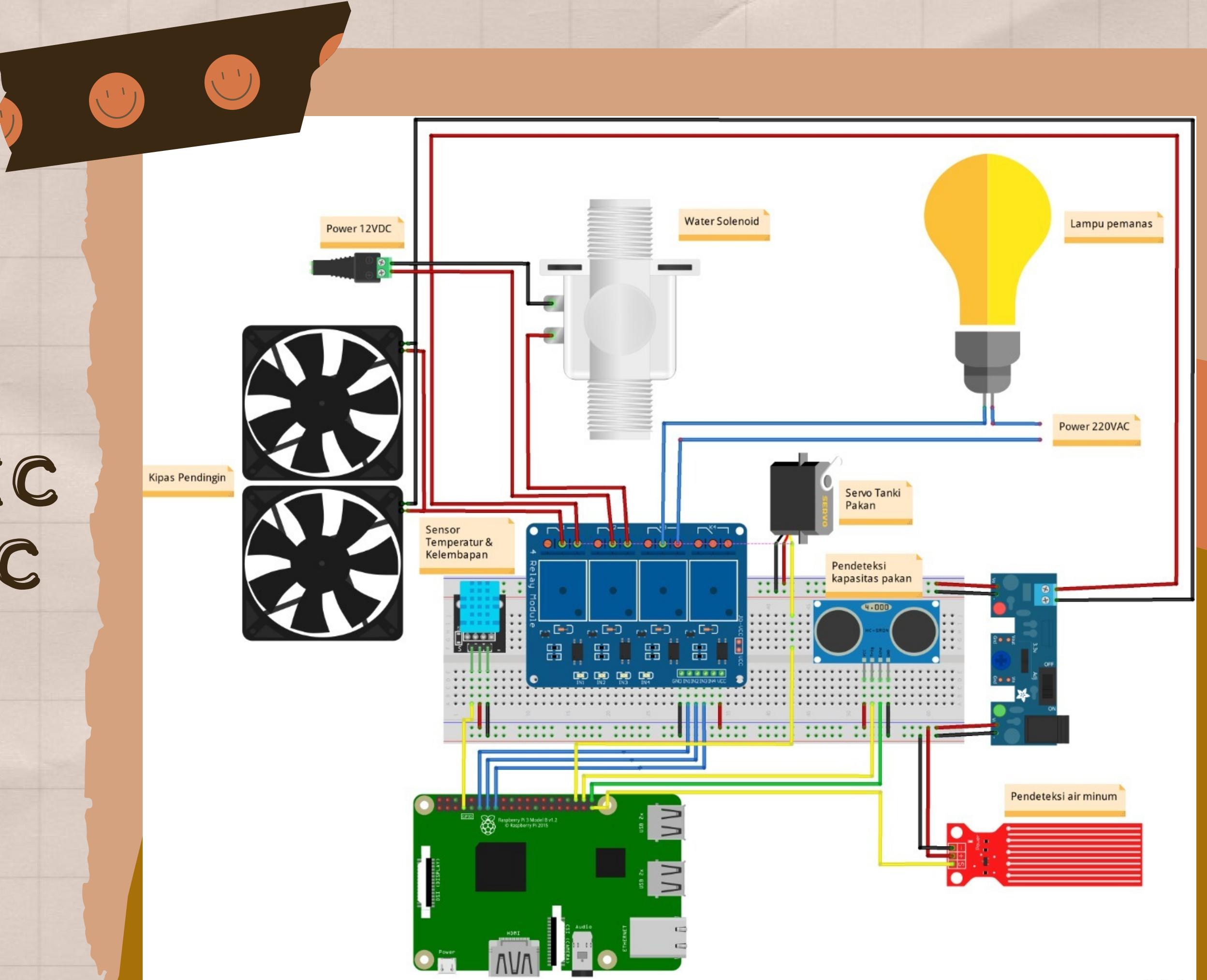
NASWA



FAJAR

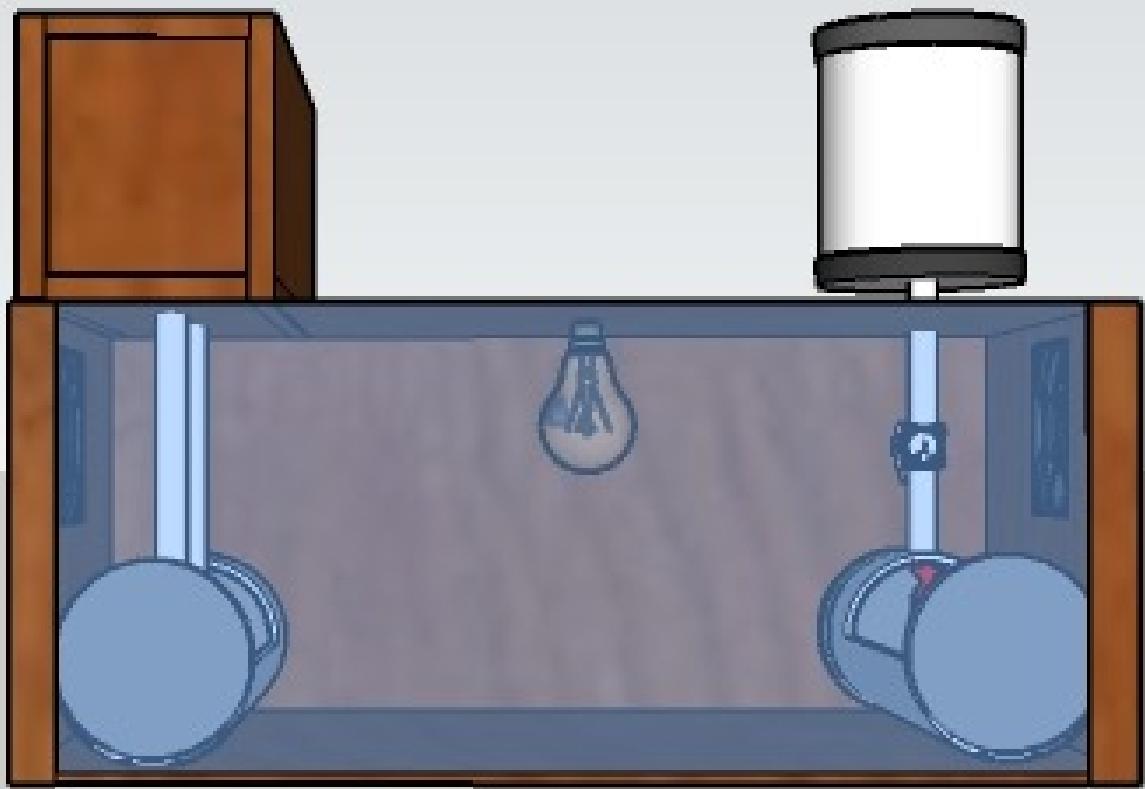


ELECTRONIC SCHEMATIC

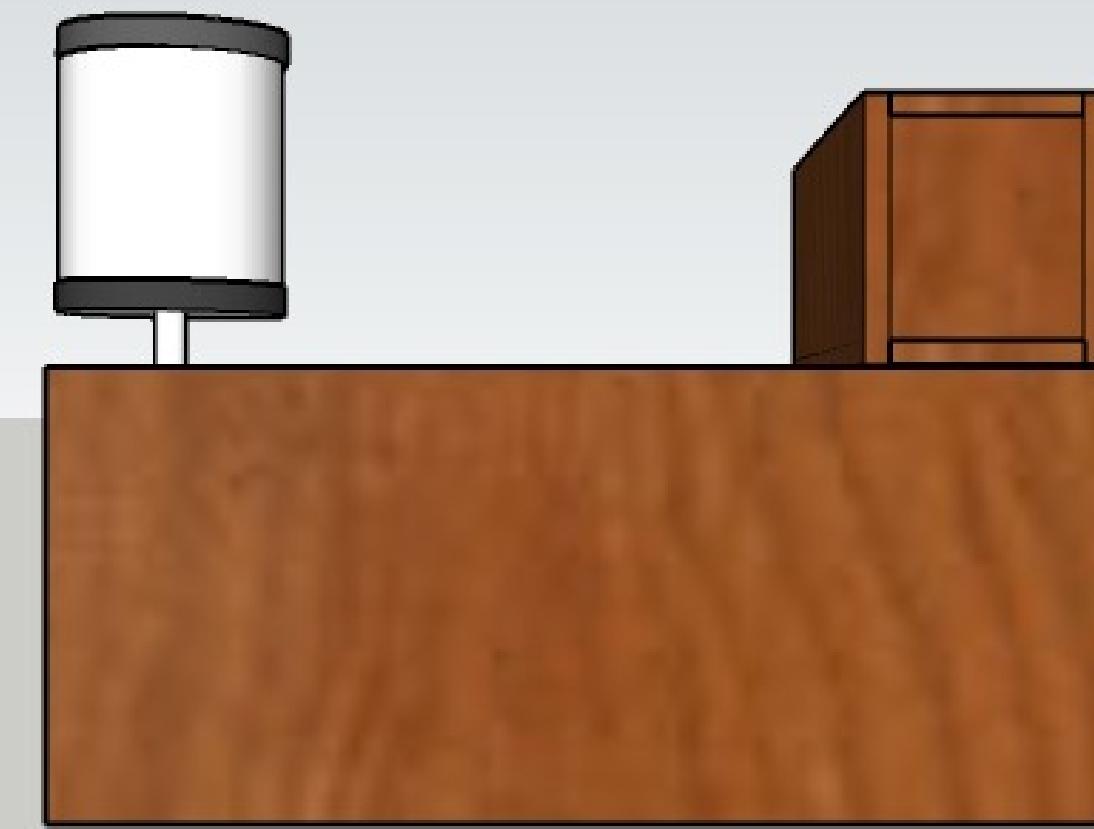




HARDWARE DESIGN



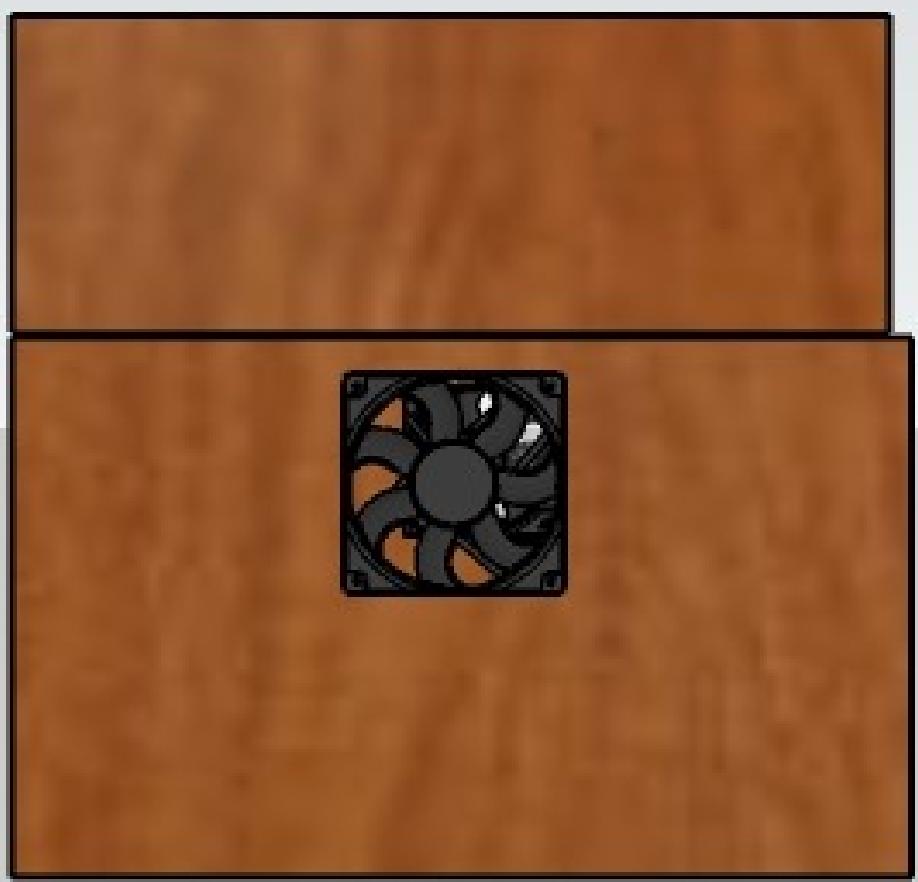
TAMPAK DEPAN



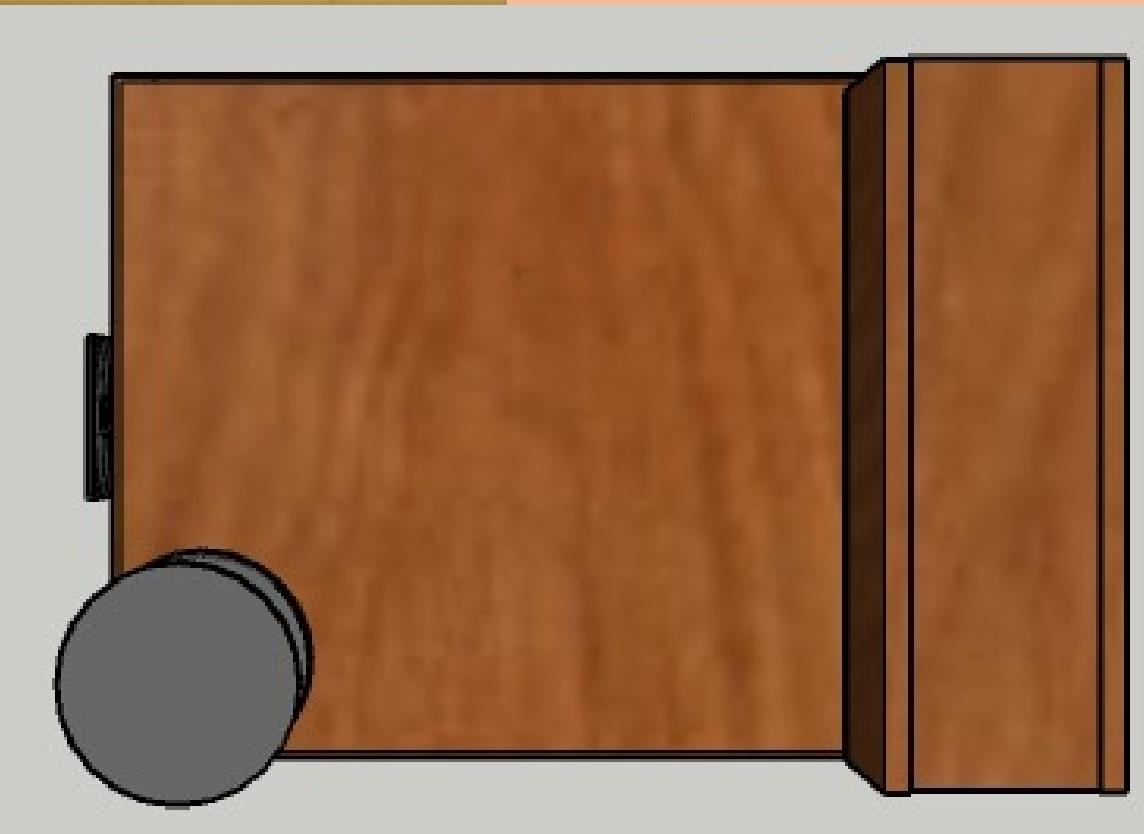
TAMPAK BELAKANG



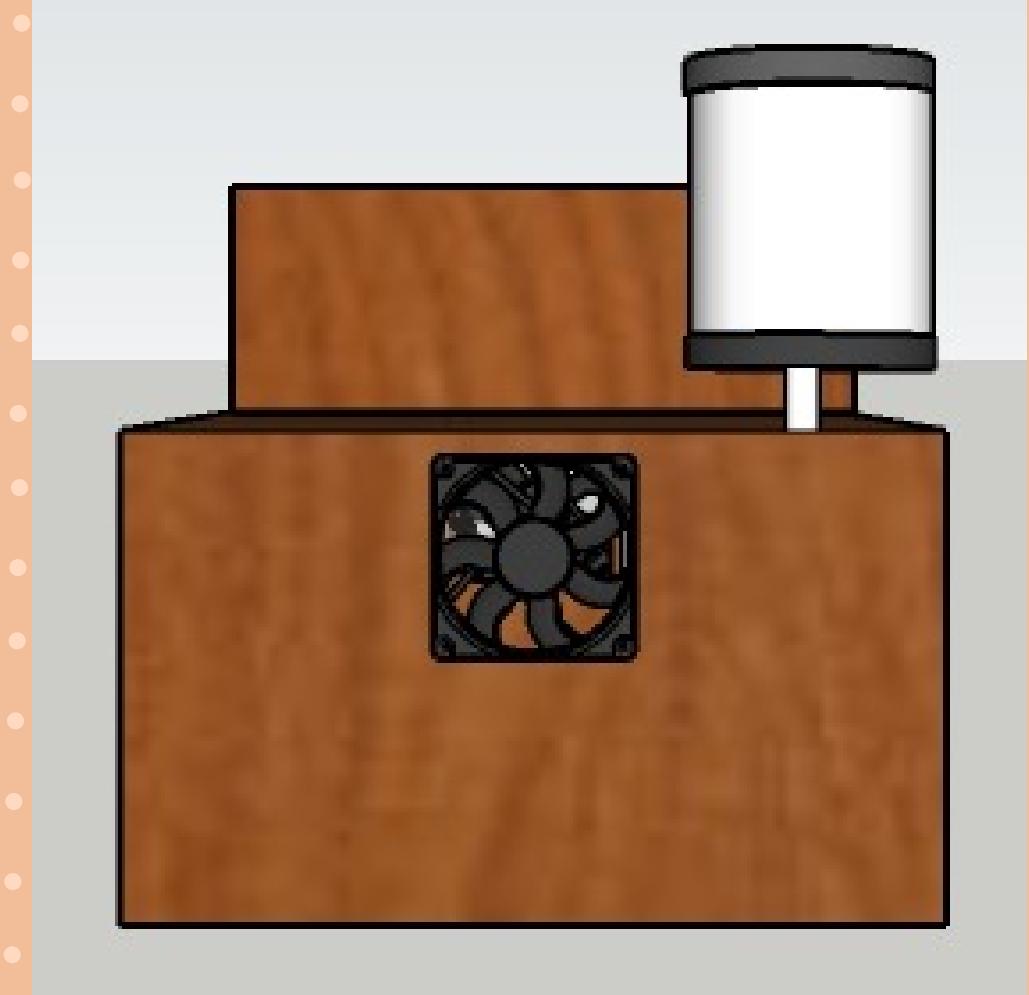
HARDWARE DESIGN



TAMPAK
SAMPING KIRI



TAMPAK ATAS



TAMPAK
SAMPING KANAN

BILL OF MATERIAL

Bill Of Material

Kelompok : Altissimo
 Nama Projek : Farmops (Automation, Monitoring, and Controlling Poultry Farm)

No	Komponen	Jumlah	Harga Satuan	Harga Total	Link Pembelian	Deskripsi
1	Sensor DHT11	1	Rp 13,500.00	Rp 13,500.00	https://shopee.co.id/MODULE-DHT11-SENSOR	Temperature dan kelembapan
2	Power Supply 12VDC	1	Rp 36,500.00	Rp 36,500.00	https://shopee.co.id/power-supply-12v-5a-psu-12v-5a-switching-power-supply	Digunakan untuk water solenoid
3	Water Selenoid	1	Rp 38,000.00	Rp 38,000.00	https://www.tokopedia.com/uccjakarta/solenoid	Membuka dan menutup aliran air untuk minum
4	Servo	1	Rp 17,500.00	Rp 17,500.00	https://www.tokopedia.com/cncstorebandung/cnc-towerpro-motor	Penggerak komponen untuk dibagian pakan
5	Water Level Sensor	1	Rp 6,500.00	Rp 6,500.00	https://shopee.co.id/sensor-for-arduino-sensor-air-tetesan-kedalam	Mendeteksi ketinggian air apabila air di wadah sudah mau habis
6	Lampu Pemanas	2	Rp 3,300.00	Rp 6,600.00	https://www.tokopedia.com/electricalmartid/lighting	Memberikan suhu panas saat suhu di ruangan dingin
7	Kipas PC	2	Rp 11,000.00	Rp 22,000.00	https://www.tokopedia.com/utamas/fan-dc-12v	Membuang hawa panas pada ruangan
8	Miniatur Ayam	3	Rp 10,000.00	Rp 30,000.00	https://shopee.co.id/miniatur-ayam-jantan-aya	Hiasan untuk di kandang
9	Sensor Ultrasonic	1	Rp 13,900.00	Rp 13,900.00	https://www.tokopedia.com/cncstorebandung/cnc-hc-sr04-sr04-ultrasonic-distance-sensor	Mendeteksi jarak
10	Papan Triplek 6mm	1	Rp 76,000.00	Rp 76,000.00	https://www.tokopedia.com/jakartabarattt/triplek-6-mm	Membuat kandang dan tempat pakan
11	Papan Triplek 8mm	1	Rp 81,000.00	Rp 81,000.00	https://www.tokopedia.com/jakartabarattt/big-triplek-8-mm	Membuat kandang dan tempat pakan
12	Paku Triplek	2	Rp 13,000.00	Rp 26,000.00	https://www.tokopedia.com/homehardware-1/paku-triplek	Melekatkan antara triplek yang satu dengan yang lainnya
13	Acrylic	1	Rp 62,328.00	Rp 62,328.00	https://shopee.co.id/cm-i.70885018.7593729771?sp_atk=ac20def3-5	Dipasang pada bagian depan supaya bagian dalam ruangan dapat terlihat
14	Fitting lampu	2	Rp 1,850.00	Rp 3,700.00	https://www.tokopedia.com/cvsinarkurnia/fitting-lampu	Dudukan lampu pemanas
15	Lem Acrylic	1	Rp 30,000.00	Rp 30,000.00	https://www.tokopedia.com/lemacr/lem-akrilik	Perekat acrylic
16	Paralon ½ inc	2	Rp 7,100.00	Rp 14,200.00	https://shopee.co.id/1-2-inch-per-1-meter-pipa-paralon-1-2-inch-per-1-meter	Untuk saluran air dan pakan
17	Paralon 2 ½ inc	1	Rp 26,500.00	Rp 26,500.00	https://shopee.co.id/10350205::12:17680097650!144168946488!!!p	Wadah pakan dan minum
18	Paralon 3 inc	1	Rp 38,000.00	Rp 38,000.00	https://shopee.co.id/1-525818705?sp_atk=584164d5-9664-431d-876	Sebagai tangki air minum
19	Sok ½ inc	2	Rp 980.00	Rp 1,960.00	https://shopee.co.id/t-1-2-inc-sok-pvc-1-2-inch-socket-sambungan-pipa	Sambungan paralon antara paralon saluran dan selenoid
20	Sok 2 ½ ke 3 inc	1	Rp 13,000.00	Rp 13,000.00	https://shopee.co.id/ploksok-rucika-3-x-2-1-2-inci-sok-sambungan-pipa	Sambungan paralon antara paralon saluran dengan paralon tangki
21	Dop 2 ½ inc	4	Rp 3,950.00	Rp 7,900.00	https://shopee.co.id/3-2-1-2-inc-aw-tutup-pipa-penutup-paralon-2-1-2-inc	Penutup pipa paralon pakan dan minum
22	Kabel Jumper F-F 30cm	2	Rp 6,175.00	Rp 12,350.00	https://shopee.co.id/kneck/kabel-jumper-female-to-female-30-cm?sp_atk=584164d5-9664-431d-876	Menghubungkan komponen-komponen
23	Relay Module 4 Channel 5V	1	Rp 29,000.00	Rp 29,000.00	https://www.tokopedia.com/protronics/relay-module-4-channel-5v	Untuk lampu, fan 1, fan 2, dan selenoid
Jumlah Total			Rp 606,438.00			

PROCESS FLOW



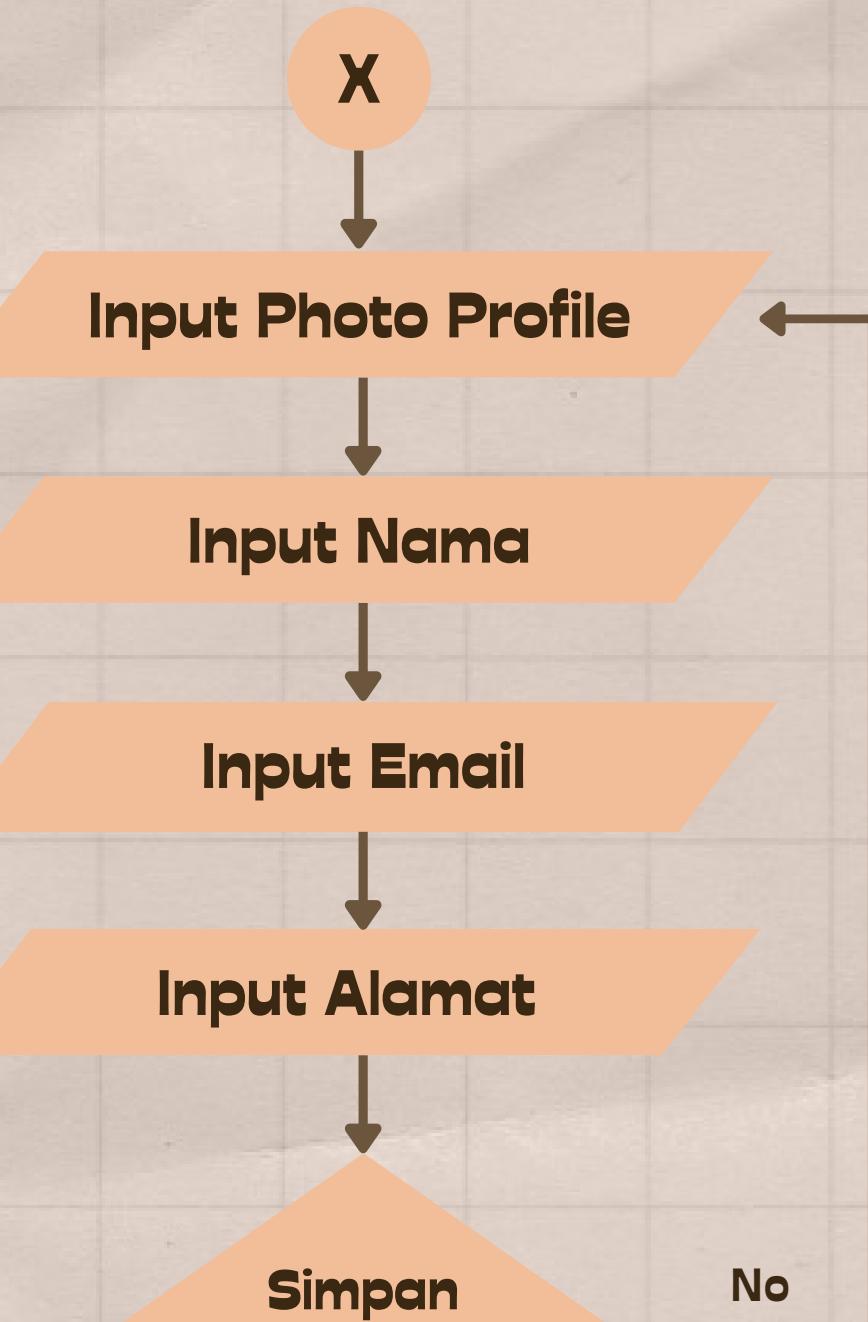
WEBSITE

Tampilan Awal

Mulai

Tampilan Awal

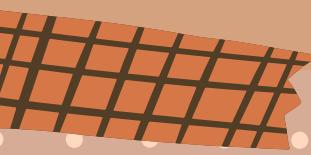
X



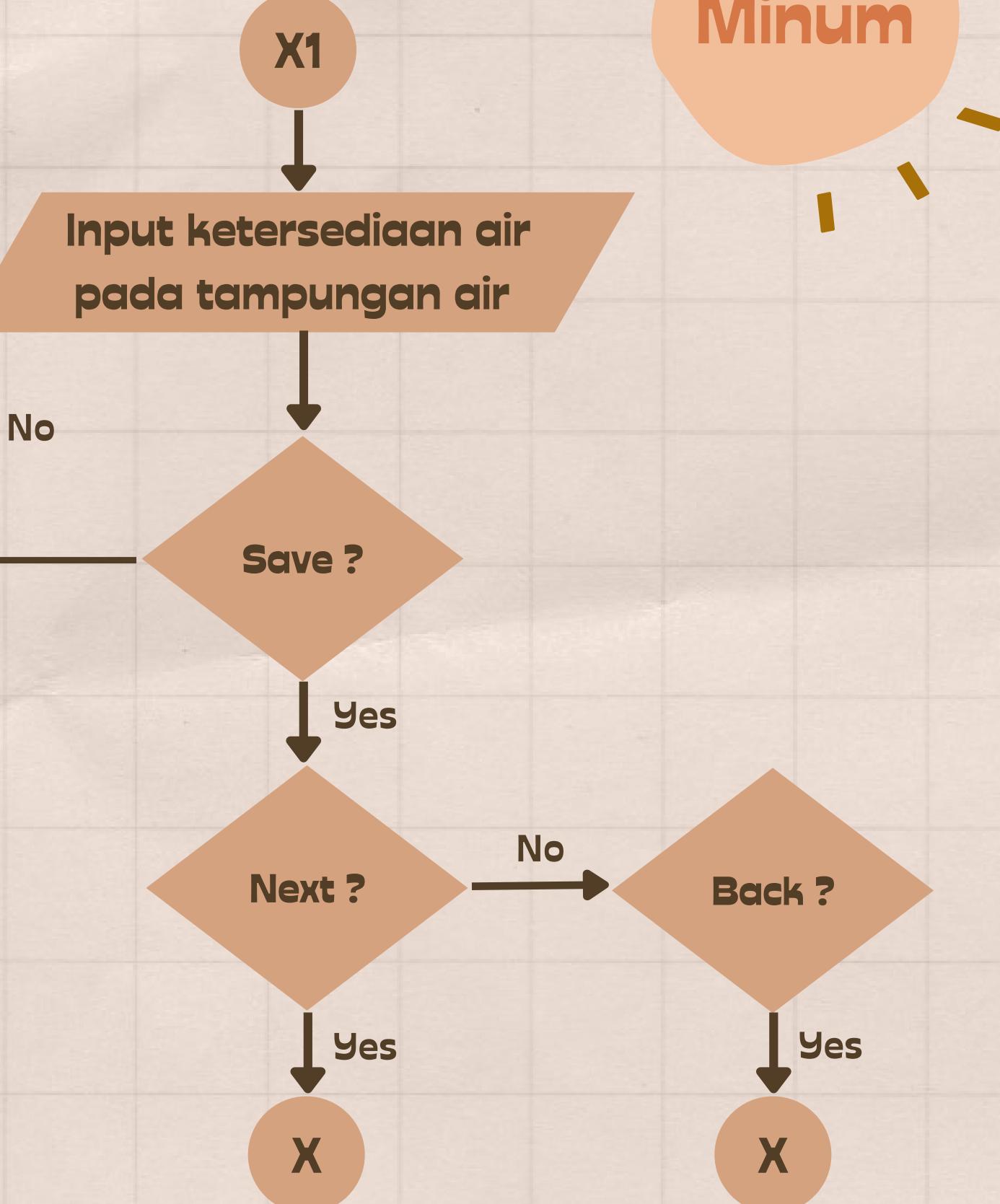
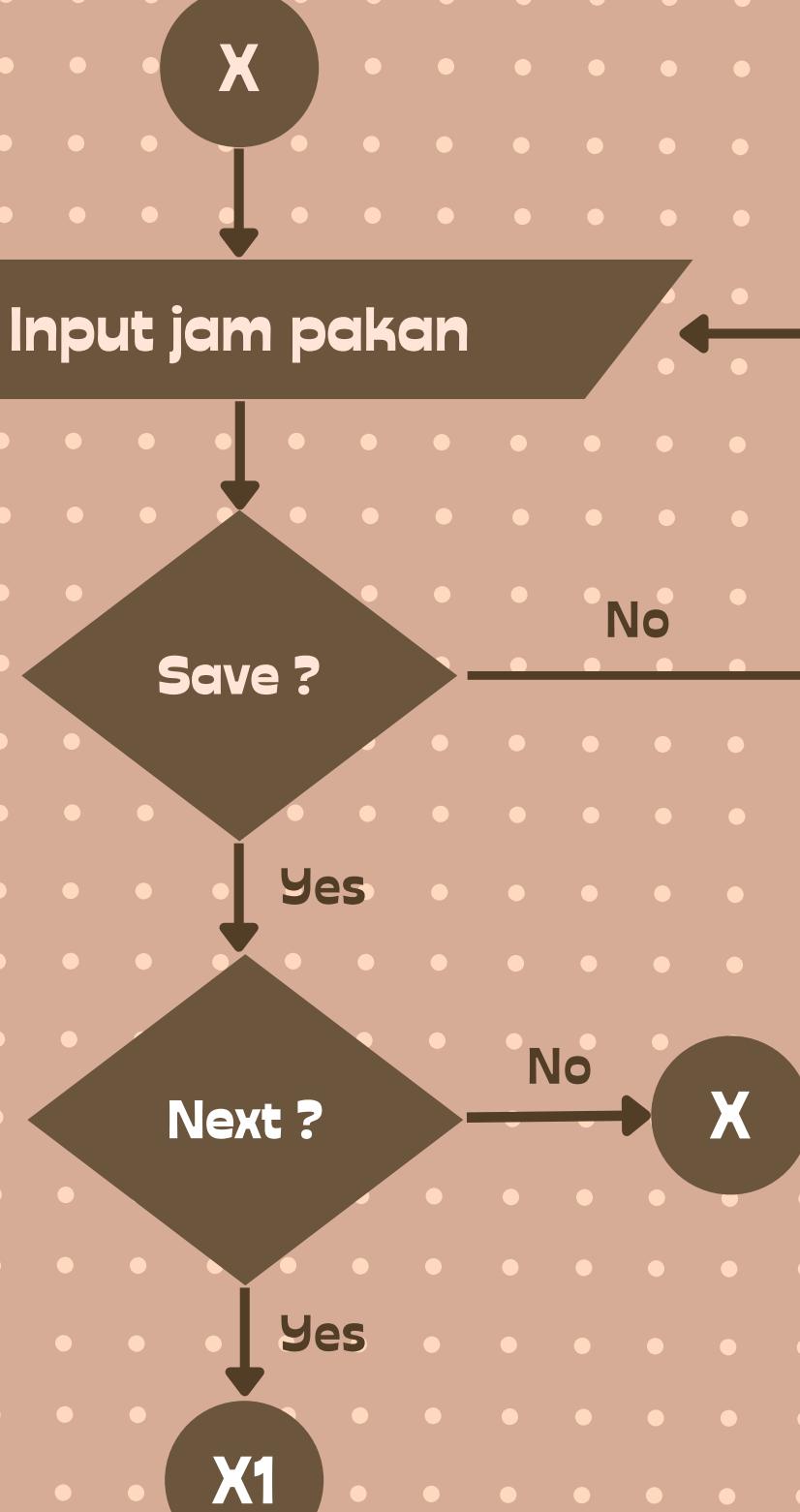
Akun

End

WEBSITE



Pakan



Minum

WEBSITE

Suhu Dingin

X2

Input batas suhu dingin

No

Save ?

Yes

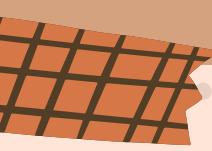
Next ?

No

Back ?

Yes

X3



Suhu Panas

X3

Input batas suhu panas

No

Save ?

Yes

Next ?

No

X3

X1

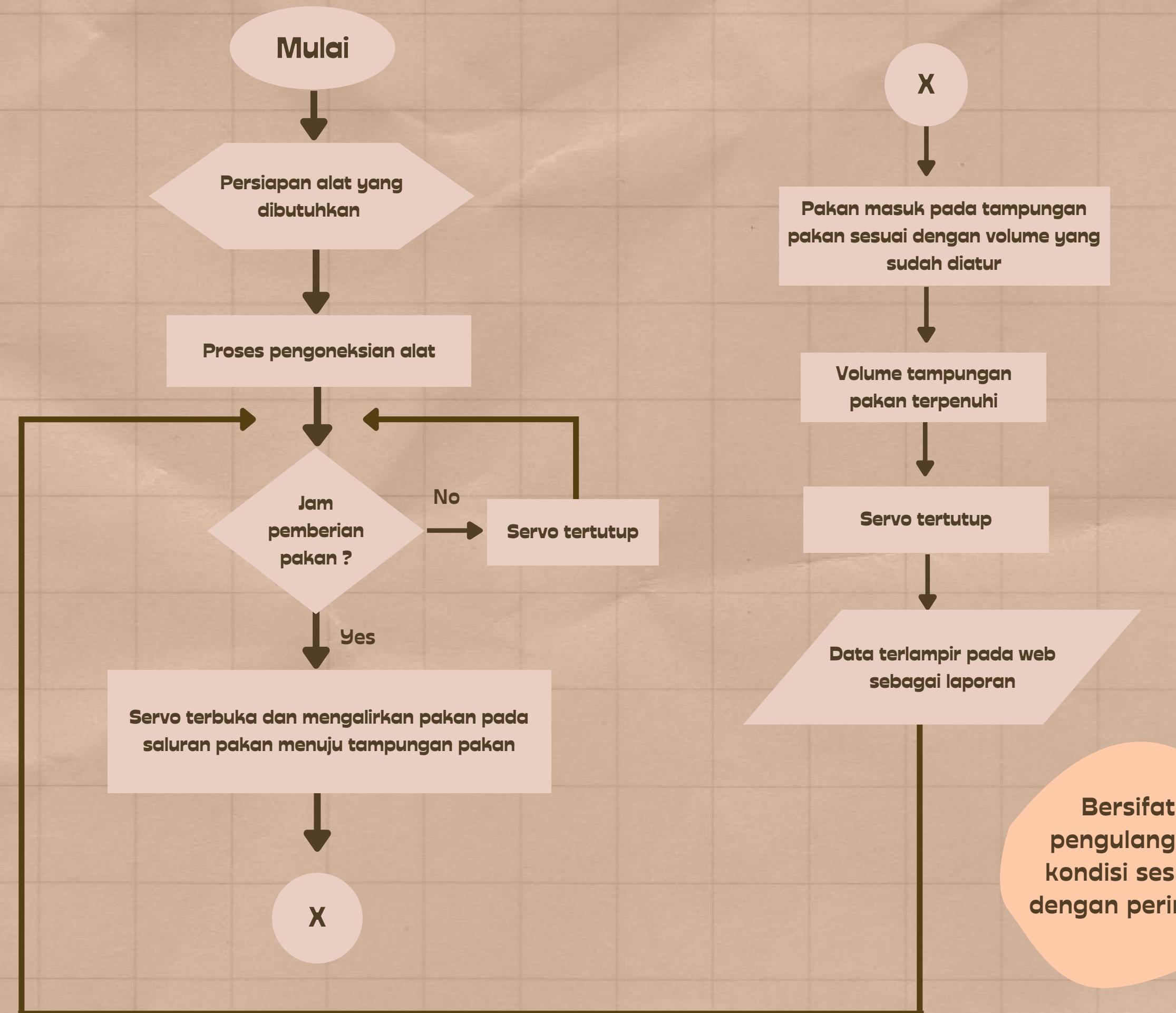
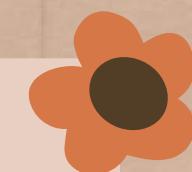
Yes



ALAT

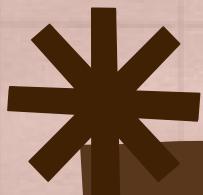


Pemberian Pakan

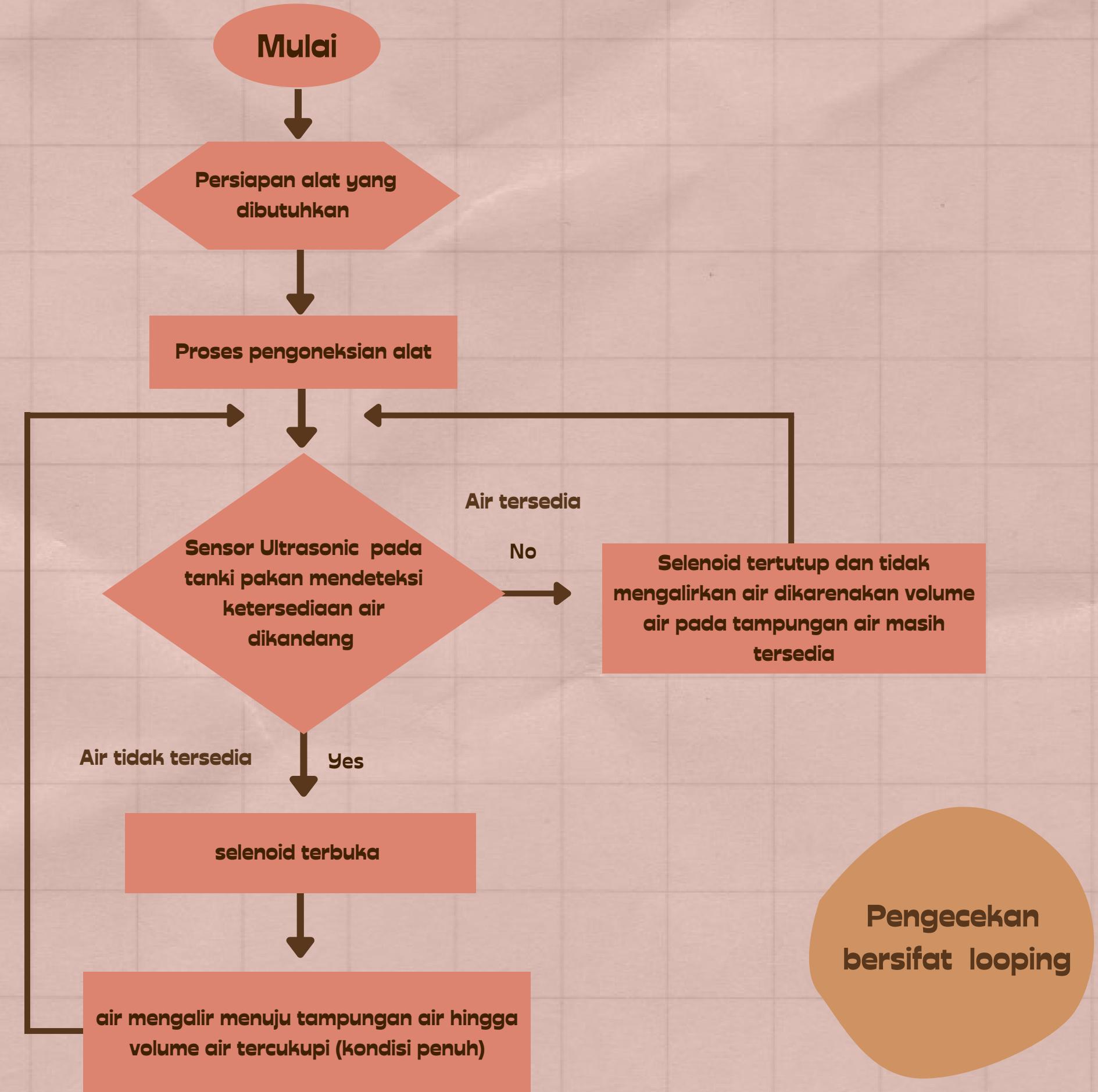


Bersifat pengulangan kondisi sesuai dengan perintah

ALAT



Pemberian Air



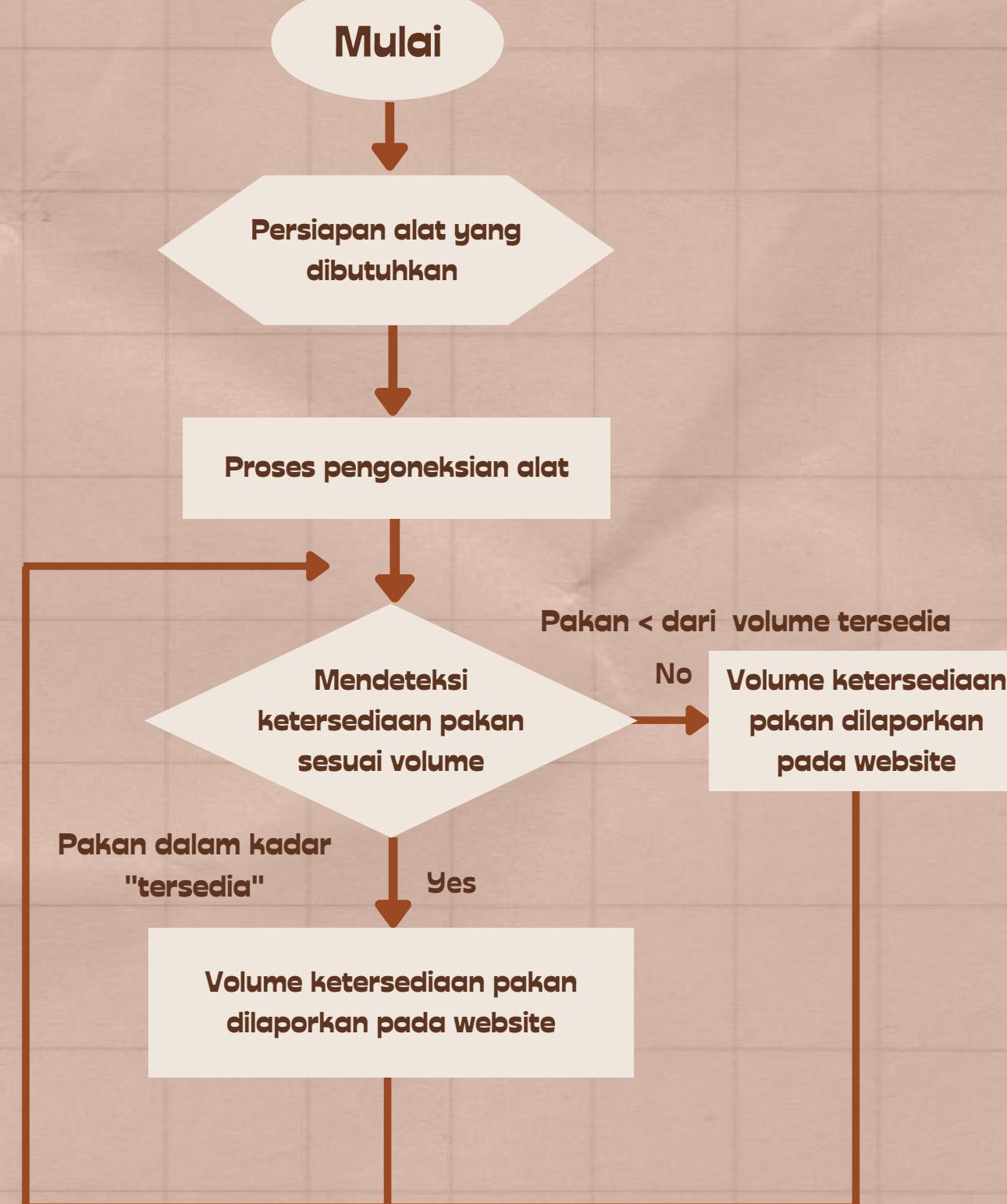
ALAT



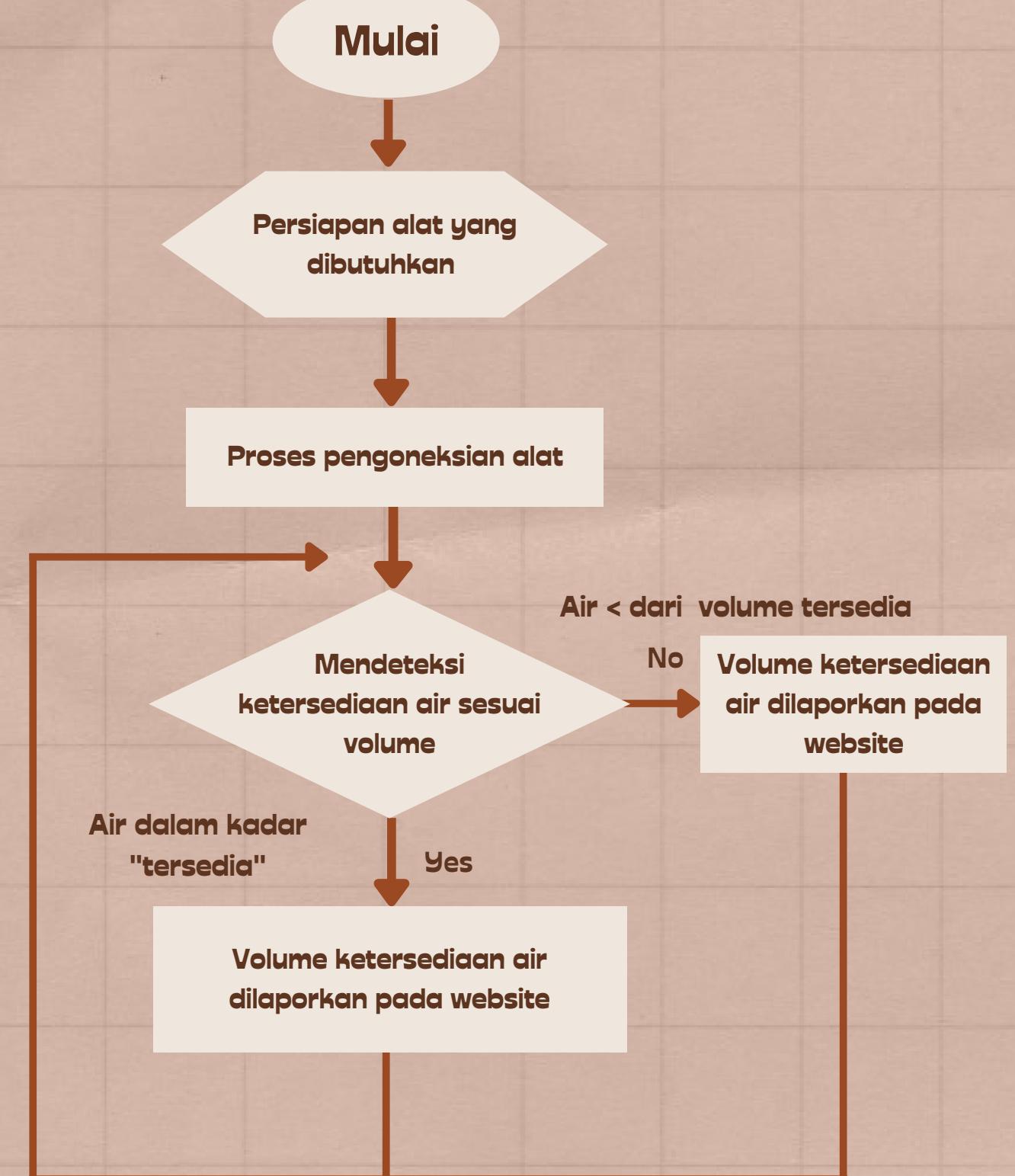
Ketersediaan

Pakan & Air

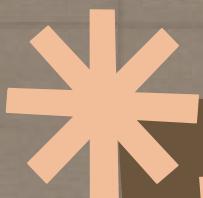
Pakan



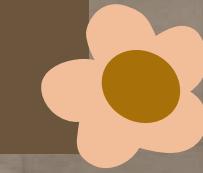
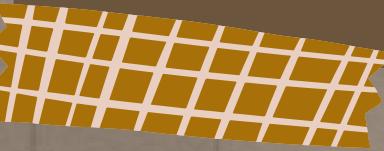
Air



ALAT



Pengecekan Suhu



Mulai

Persiapan alat
yang dibutuhkan

Proses pengoneksian alat

Cek suhu

Pengaturan suhu
input panas (misal,
 $>25^\circ\text{ C}$)

No

Pengaturan suhu
input dingin
(misal, $<20^\circ\text{ C}$)

No

Normal

Kipas menyala

Yes

Data suhu dilampirkan (laporan real
time) pada web

Lampu menyala

Yes

Data suhu dilampirkan (laporan real
time) pada web

Pengecekan
bersifat looping

