

## LAMPIRAN

### 1. Sketch Program Arduino

```
const int nozzle = 3;
const int sikat = 4;
const int air = 5;
const int relay4 = 6;

int relayON = LOW; //relay nyala
int relayOFF = HIGH; //relay mati

void setup() {
    pinMode(nozzle, OUTPUT);
    pinMode(sikat, OUTPUT);
    pinMode(air, OUTPUT);
    pinMode(relay4, OUTPUT);

    digitalWrite(nozzle, relayOFF);
    digitalWrite(sikat, relayOFF);
    digitalWrite(air, relayOFF);
    digitalWrite(relay4, relayOFF);

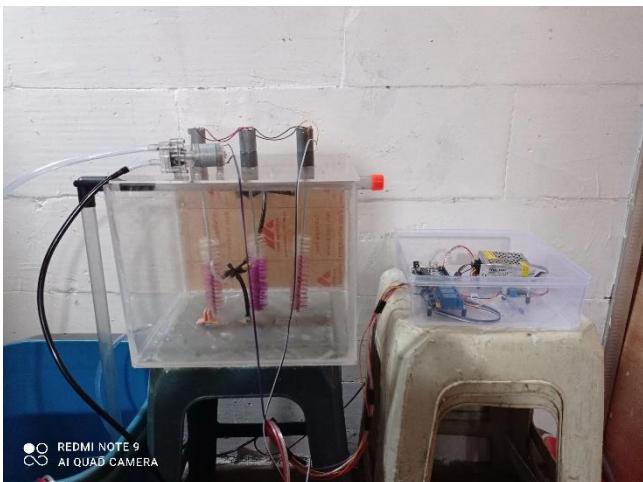
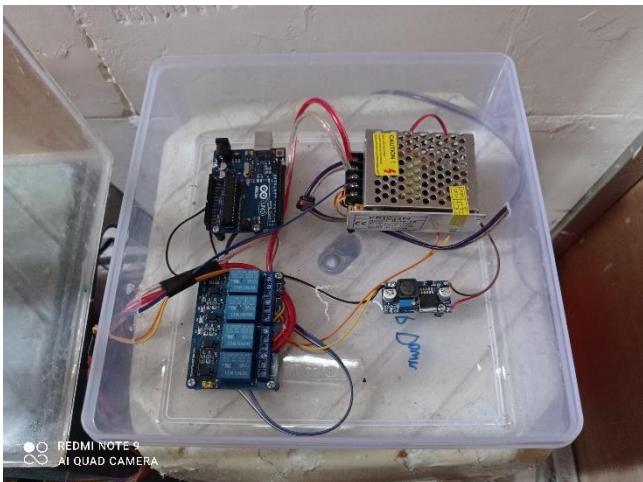
    digitalWrite(nozzle, relayON);
    delay(5000);
    digitalWrite(nozzle, relayOFF);
    delay(500);

    digitalWrite(sikat, relayON);
    delay(5000);
    digitalWrite(sikat, relayOFF);
    delay(500);

    digitalWrite(air, relayON);
    delay(5000);
    digitalWrite(air, relayOFF);
    delay(500);
}

nozzle sabun 5 detik
sikat 5 detik
air bersih (bilas) 5 detik
```

### 2. Foto Alat





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**ENDORSEMENT LETTER**  
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This letter is to certify that the abstract of the thesis below

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has been endorsed by Pusat Bahasa *UMSurabaya* for further approval by the examining committee of the faculty.

Surabaya, 1 February 2021  
Chair

  
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## **BIODATA**



Rakes Andika Purnama, lahir pada 23 Juni 1998 di kota Surabaya, Jawa Timur. Peneliti menyelesaikan pendidikan sekolah dasar di SDN Kremlangan Selatan X Surabaya. Kemudian melanjutkan pendidikan Sekolah Menengah Pertama di SMP Kawung 1 Surabaya, dan kemudian melanjutkan Sekolah Menengah Kejuruan di SMK Barunawati Surabaya. Penulis diterima di program studi D3 Teknik Komputer Universitas Muhammadiyah Surabaya pada tahun 2016 dan terdaftar dengan NIM 20160335022.