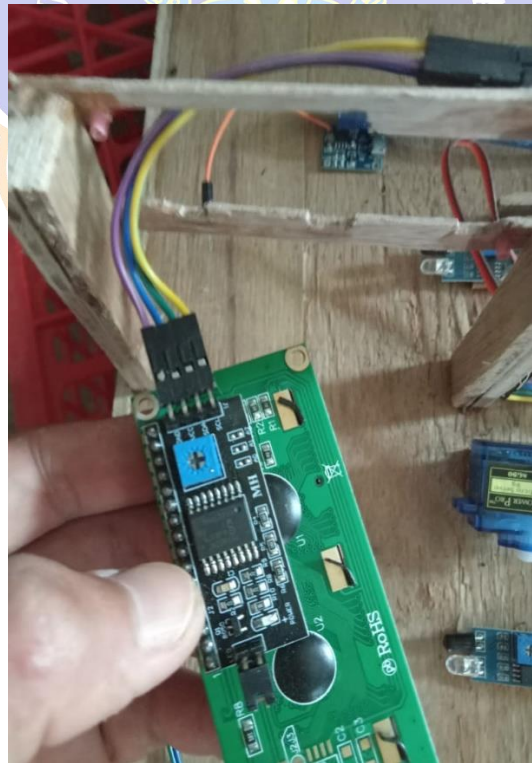
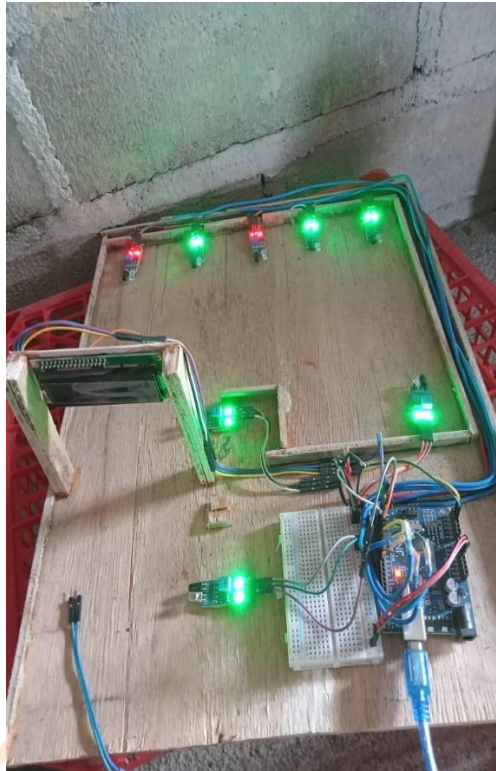


DAFTAR LAMPIRAN

1.Foto Dokumentasi





2. Coding Rangkaian

```
1. #include <Servo.h>
2. #include <Wire.h>
3. #include <LiquidCrystal_I2C.h>
4.
5. // Adjust the parameters for a 16x2 LCD
6. LiquidCrystal_I2C lcd(0x27, 16, 2);
7.
8. Servo myservo;
9.
10. #define ir_enter 2
11. #define ir_back 4
12.
13. #define ir_car1 5
14. #define ir_car2 6
15. #define ir_car3 7
16. #define ir_car4 8
17.
18. int S1 = 0, S2 = 0, S3 = 0, S4 = 0;
19. int flag1 = 0, flag2 = 0;
```

```

20.int slot = 4;
21.
22.void setup() {
23.  Serial.begin(9600);
24.
25.  pinMode(ir_car1, INPUT);
26.  pinMode(ir_car2, INPUT);
27.  pinMode(ir_car3, INPUT);
28.  pinMode(ir_car4, INPUT);
29.
30.  pinMode(ir_enter, INPUT);
31.  pinMode(ir_back, INPUT);
32.
33.  myservo.attach(3);
34.  myservo.write(90);
35.
36.  // Initialize the LCD for a 16x2 display
37.  lcd.begin(16, 2);
38.  lcd.init();
39.  lcd.setCursor(0, 0);
40.  lcd.print(" Selamat Datang ");
41.  lcd.setCursor(0, 1);
42.  lcd.print(" Parkir otomatis ");
43.  delay(5000);
44.
45.  Read_Sensor();
46.
47.  int total = S1 + S2 + S3 + S4;
48.  slot = slot - total;
49.}
50.
51.void loop() {
52.  Read_Sensor();
53.
54.  lcd.clear(); // Clear the LCD screen
55.
56.  lcd.setCursor(0, 0);
57.  lcd.print(" parkir: ");
58.  lcd.print(slot);
59.  lcd.print("   ");
60.
61.  lcd.setCursor(0, 1);
62.  lcd.print("S1: ");
63.  lcd.print((S1 == 1) ? "terisi" : "kosong");
64.
65.  lcd.setCursor(11, 1);
66.  lcd.print("S2: ");

```

```

67. lcd.print((S2 == 1) ? "terisi" : "kosong");
68.
69. lcd.setCursor(0, 2);
70. lcd.print("S3: ");
71. lcd.print((S3 == 1) ? "terisi" : "kosong");
72.
73. lcd.setCursor(11, 2);
74. lcd.print("S4: ");
75. lcd.print((S4 == 1) ? "terisi" : "kosong");
76.
77. if (digitalRead(ir_enter) == LOW && flag1 == 0) {
78.     if (slot > 0) {
79.         flag1 = 1;
80.         if (flag2 == 0) {
81.             myservo.write(180);
82.             slot = slot - 1;
83.         }
84.     } else {
85.         lcd.clear();
86.         lcd.setCursor(0, 0);
87.         lcd.print(" Sorry Parking Full ");
88.         delay(1500);
89.     }
90. }
91.
92. if (digitalRead(ir_back) == LOW && flag2 == 0) {
93.     flag2 = 1;
94.     if (flag1 == 0) {
95.         myservo.write(180);
96.         slot = slot + 1;
97.     }
98. }
99.
100.     if (flag1 == 1 && flag2 == 1) {
101.         delay(1000);
102.         myservo.write(90);
103.         flag1 = 0, flag2 = 0;
104.     }
105.
106.     delay(100);
107. }
108.
109. void Read_Sensor() {
110.     S1 = digitalRead(ir_car1);
111.     S2 = digitalRead(ir_car2);
112.     S3 = digitalRead(ir_car3);
113.     S4 = digitalRead(ir_car4);

```

114. }

