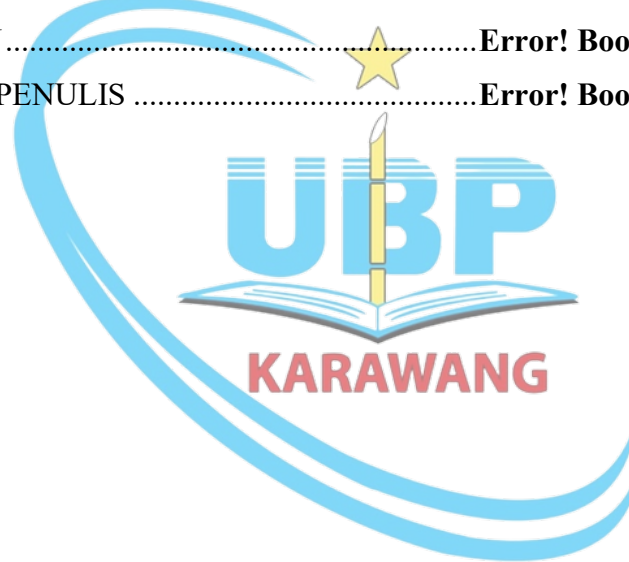


DAFTAR ISI

LEMBAR PERSETUJUAN.....	Error! Bookmark not defined.
LEMBAR PENGESAHAN	Error! Bookmark not defined.
LEMBAR PERNYATAAN	Error! Bookmark not defined.
KATA PENGANTAR	Error! Bookmark not defined.
ABSTRAK.....	Error! Bookmark not defined.
ABSTRACT.....	Error! Bookmark not defined.
DAFTAR ISI.....	vii
DAFTAR TABEL	ix
DAFTAR GAMBAR	ix
DAFTAR LAMPIRAN.....	xi
BAB I PENDAHULUAN.....	1
1.1. Latar Belakang	1
1.2. Rumusan Masalah.....	Error! Bookmark not defined.
1.3. Tujuan Penelitian	Error! Bookmark not defined.
1.4. Manfaat	Error! Bookmark not defined.
BAB II TINJAUAN PUSTAKA.....	Error! Bookmark not defined.
2.1. <i>Liquefied Petroleum Gas (LPG)</i>	Error! Bookmark not defined.
2.2. <i>Internet Of Things</i>	Error! Bookmark not defined.
2.3. NodeMCU.....	Error! Bookmark not defined.
2.4. Sensor MQ-6.....	Error! Bookmark not defined.
2.5. <i>Relay</i>	Error! Bookmark not defined.
2.6. <i>Buzzer</i>	Error! Bookmark not defined.
2.7. <i>Kipas Exhaust</i>	Error! Bookmark not defined.
2.8. <i>Light Emitting Diode (LED)</i>	Error! Bookmark not defined.
2.9. <i>Liquid Crystal Display (LCD)</i>	Error! Bookmark not defined.
2.10. Telegram	Error! Bookmark not defined.
2.11. <i>Fuzzy Logic</i>	Error! Bookmark not defined.
2.12. Penelitian Terkait	Error! Bookmark not defined.
BAB III METODE PENELITIAN.....	Error! Bookmark not defined.
3.1. Bahan Penelitian	Error! Bookmark not defined.
3.2. Peralatan Penelitian.....	Error! Bookmark not defined.
3.3. Lokasi Penelitian dan Waktu Penelitian ..	Error! Bookmark not defined.

3.4. Prosedur Percobaan.....	Error! Bookmark not defined.
3.5. Analisis Data.....	Error! Bookmark not defined.
BAB IV HASIL DAN PEMBAHASAN	Error! Bookmark not defined.
4.1. Hasil Analisis Data	Error! Bookmark not defined.
4.2. Hasil Perancangan <i>Fuzzy Logic</i>	Error! Bookmark not defined.
4.3. Hasil Perancangan Alat.....	Error! Bookmark not defined.
4.4. Implementasi.....	Error! Bookmark not defined.
4.5. Pengujian.....	Error! Bookmark not defined.
BAB V KESIMPULAN DAN SARAN.....	Error! Bookmark not defined.
5.1. Kesimpulan	Error! Bookmark not defined.
5.2. Saran	Error! Bookmark not defined.
DAFTAR PUSTAKA	Error! Bookmark not defined.
LAMPIRAN.....	Error! Bookmark not defined.
RIWAYAT PENULIS	Error! Bookmark not defined.



DAFTAR TABEL

Tabel 2.1 Tabel Penelitian Terkait	10
Tabel 3.1 Tabel Kebutuhan Perangkat Keras	12
Tabel 3.2 Tabel Kebutuhan Perangkat Lunak	13
Tabel 3.3 Tabel Perincian Pelaksanaan Penelitian	13
Tabel 4.1 Tabel Konsentrasi Kebocoran Gas <i>LPG</i>	21
Tabel 4.2 Tabel Hasil <i>Fuzzy Logic</i>	23
Tabel 4.3 Tabel Pin Sensor MQ-6	24
Tabel 4.4 Tabel Pengujian Sensor	36
Tabel 4.5 Tabel Pengujian Alat	37

DAFTAR GAMBAR

Gambar 2.1 <i>Internet of Things</i>	3
Gambar 2.2 NodeMCU	4
Gambar 2.3 NodeMCU Pin OUT	4
Gambar 2.4 Sensor MQ-6	5
Gambar 2.5 <i>Relay</i>	5
Gambar 2.6 <i>Buzzer</i>	6
Gambar 2.7 Kipas DC	6
Gambar 2.8 <i>LED</i>	7
Gambar 2.9 <i>Liquid Crystal Display</i>	7
Gambar 2.10 Representasi Linear Naik	8
Gambar 2.11 Representasi Linear Turun	9
Gambar 2.12 Representasi Kurva Segitiga	10
Gambar 3.1 <i>Flowchart</i> Prosedur Penelitian	13
Gambar 3.2 Skema Perancangan Alat	14
Gambar 3.3 <i>Flowchart</i> Perancangan Sistem	15
Gambar 3.4 <i>Activity Diagram</i> Pengaturan Telegram Bot	18
Gambar 3.5 Tampilan <i>Form</i> Kode Alat	18
Gambar 3.6 Tampilan Data Telegram Bot	19
Gambar 4.1 Keanggotaan Variabel Sensor	21

Gambar 4.2 Skema Rangkaian Alat	23
Gambar 4.3 Skema Blok Masukkan	24
Gambar 4.4 Skema Rangkaian <i>LCD</i>	25
Gambar 4.5 Skema Rangkaian <i>Buzzer</i>	26
Gambar 4.6 Skema Rangkaian <i>LED</i>	26
Gambar 4.7 Skema Rangkaian <i>Relay</i>	27
Gambar 4.8 Skema Rangkaian Kipas	27
Gambar 4.9 Pembuatan Telegram Bot	28
Gambar 4.10 Id Telegram Bot	29
Gambar 4.11 Kode Program <i>Include Library</i>	30
Gambar 4.12 Kode Program Deklarasi Variabel	30
Gambar 4.13 Kode Program Fuzzifikasi	31
Gambar 4.14 Kode Program Rule Base	31
Gambar 4.15 Kode Program Defuzzifikasi	32
Gambar 4.16 Kode Program Setup	32
Gambar 4.17 Kode Program Membaca Sensor	33
Gambar 4.18 Kode Program Perintah	33
Gambar 4.19 Kode Program Function Telegram Bot	34
Gambar 4.20 Tampilan Website <i>Form</i> Kode Alat	35
Gambar 4.21 Tampilan Website Data Telegram Bot	35

DAFTAR LAMPIRAN

Lampiran 1 Lembar Bimbingan Tugas Akhir	43
Lampiran 2 Lembar Bimbingan Proposal Tugas Akhir	44
Lampiran 3 Lembar Perbaikan Ketua Sidang Sidang Tugas Akhir	45
Lampiran 4 Lembar Perbaikan Ketua Sidang Seminar Proposal Tugas Akhir	46
Lampiran 5 Lembar Perbaikan Penguji I Sidang Tugas Akhir	47
Lampiran 6 Lembar Perbaikan Penguji II Sidang Tugas Akhir	48
Lampiran 7 Lembar Perbaikan Penguji Seminar Proposal Tugas Akhir	49
Lampiran 8 Data Tabel Pengujian Sensor	50
Lampiran 9 Data Tabel Pengujian Alat	53
Lampiran 10 Kode Program	58
Lampiran 11 Riwayat Penulis	69

