

LAMPIRAN

Lampiran 1. Surat Kesediaan Dosen Pembimbing I

SURAT KESEDIAAN MEMBIMBING TA

Yang bertanda tangan di bawah ini:

NAMA : Nurohim, S.ST, M.Kom.
NIDN : 0625067701
NIPY : 09.017.342
Jabatan Struktural : -
Jabatan Fungsional : Lektor

Dengan ini menyatakan bersedia untuk menjadi pembimbing I pada Tugas Akhir mahasiswa berikut:

Nama : Akhmad Sabbit Aqdami
NIM : 23040097
Program Studi : D-3 Teknik Komputer
Judul TA : SISTEM KONTROL DAN NOTIFIKASI PINTU
GERBANG BERBASIS WEBSITE

Demikian pernyataan ini dibuat agar dapat dilaksanakan sebagaimana mestinya.

Tegal, 10 Maret 2026

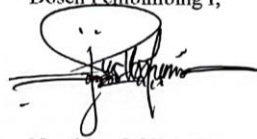
Menyetujui

Ka Prodi DHI Teknik Komputer,

Dosen Pembimbing I,



Arif Rakhman, SE, S.Pd, M.Kom.
NIPY. 05.016.291



Nurohim, S.ST, M.Kom.
NIPY. 09.017.342

Lampiran 2. Surat Kesediaan Dosen Pembimbing II

SURAT KESEDIAAN MEMBIMBING TA

Yang bertanda tangan di bawah ini:

NAMA : Arif Rakhman, SE, S.Pd, M.Kom.
NIDN : 0623118301
NIPY : 05.016.291
Jabatan Struktural : Ka. Prodi DIII Teknik Komputer
Jabatan Fungsional : Lektor

Dengan ini menyatakan bersedia untuk menjadi pembimbing II pada Tugas Akhir mahasiswa berikut:

Nama : Akhmad Sabbit Aqdami
NIM : 23040097
Program Studi : D-3 Teknik Komputer
Judul TA : SISTEM KONTROL DAN NOTIFIKASI PINTU
GERBANG BERBASIS WEBSITE

Demikian pernyataan ini dibuat agar dapat dilaksanakan sebagaimana mestinya.

Tegal, 10 Maret 2026

Menyetujui

Ka Prodi DIII Teknik Komputer,

Dosen Pembimbing II,


Arif Rakhman, SE, S.Pd, M.Kom.
NIPY. 05.016.291


Arif Rakhman, SE, S.Pd, M.Kom.
NIPY. 05.016.291

Lampiran 3. Surat Observasi



Sekolah Vokasi
Program Studi D-3 Teknik Komputer

Nomor : 572.03/KOM-HN/III/2026
Lampiran : -
Perihal : Permohonan Izin Observasi Tugas Akhir (TA)

Kepada Yth.

Kepala Perumahan Puri Rarastiti

Di Tanglong, Dukuhturi, Kec. Dukuhturi, Kab. Tegal, Jawa Tengah

Dengan Hormat,

Sehubungan dengan tugas mata kuliah Tugas Akhir (TA) yang akan diselenggarakan di semester V Program Studi Diploma III Teknik Komputer Universitas Harkat Negeri, Maka dengan ini kami mengajukan izin observasi pengambilan data di Perumahan Puri Rarastiti yang Bapak / Ibu Pimpinan, untuk kepentingan dalam pembuatan produk Tugas Akhir, dengan Mahasiswa sebagai berikut:

No	NIM	NAMA	NO HP
1	23040082	DHANU ANUMERTA HUDIARTO	085830800358
2	23040097	AKHMAD SABBIT AQDAMI	081911669856

Demikian surat permohonan ini kami sampaikan atas izin dan kerjasamanya kami sampaikan terima kasih.

Tegal, 10 Maret 2026
Ka. Prodi DIII Teknik Komputer
Universitas Harkat Negeri



Arif Rakhman SE, S.Pd, M.Kom
NIPY. 05.016.291

Lampiran 4. Surat Balasan Observasi

PERUMAHAN PURI RARASTITI

Alamat: 4424+75J, Tanglog, Dukuhturi, Kec. Dukuhturi, Kabupaten Tegal, Jawa Tengah

Nomor : 572.03/KOM-HN/III/2026

Lampiran : -

Perihal : Surat Keterangan Observasi

Dengan Hormat,

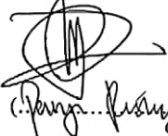
Menindak lanjuti surat permohonan ijin observasi Tugas Akhir (TA) dengan Nomor: 572.03/KOM-HN/III/2026. Yang bertanda tangan dibawah ini pemilik/penghuni rumah di Perumahan Puri Rarastiti menerangkan dengan sesungguhnya bahwa:

No	Nama	Nim	Program Studi
1.	Dhanu Anumerta Hudiarto	23040082	DIII TEKNIK KOOMPUTER
2.	Akhmad Sabbit Aqdami	23040097	DIII TEKNIK KOOMPUTER

Yang bersangkutan telah melaksanakan observasi di Perumahan Puri Rarastiti sejak 5 Desember 2025.

Demikian surat keterangan ini dibuat dengan sebenarnya untuk dapat dipergunakan sebagaimana mestinya.

Tegal, Maret 2026



(Pang...Rarastiti)

Lampiran 5. Dokumentasi Observasi



Lampiran 6. Bimbingan Proposal dan Laporan Pembimbing I

Lampiran 22
Bimbingan Proposal TA

IK P2M PHB d.5.1.e.1

NAMA MAHASISWA :

PEMBIMBING I: Nurohm, S.ST, M.Kom. BIMBINGAN PROPOSAL TA

No	HARI/ TANGGAL	URAIAN	TANDA TANGAN
1.	Kamis, 25 Desember 2025	- Penempatan gambar - Penulisan bahasa asing - Sesuaikan dengan buku TA	
2.	Jumat, 20 Februari 2026	- Perumusan ^{masalah} disesuaikan Judul - bahasa asing - Flow tidak pakai Flow chart atau flowchartnya dihapus saja - penulisan rata kanan kiri - Daftar Isi 1.5	
3.	Rabu, 25 Februari	<i>Lampiran Bimbingan TA</i>	
4.	Senin, 9 Maret	- Abstrac ditambahkan detail websitenya - metode waterfal ditambahkan deployment	

No	HARI/ TANGGAL	URAIAN	TANDA TANGAN
	Rabu, 1 April 2026	~ Rumusan masalah point 1 bryant dgn judul - bahasa asing - Terlalu banyak hardware - Alamat observasi - Margin atas 4 cm	
	Rabu, 15 April 2026	- Margin - kata asing atau italic	
	Rabu 22/04 2026	Acc BAB I. II. X III Lanjut bimbingan ke Rimbimbong 2	

Lampiran 7. Bimbingan Laporan Pembimbing II

Lampiran 23
Bimbingan Laporan Pembimbing I TA

IK P2M PHB d.5.1.e.1

PEMBIMBING II: Arif Rahman, SE, S.Pd. M.^{kom} BIMBINGAN LAPORAN TA

No	HARI/ TANGGAL	URAIAN	TANDA TANGAN
1.	8 Mei 2026	- kata asing pada gambar - nama gelar - fitur ditambahkan RFID	
2.	25 Mei 2026	bab 5 - kata asing - penomoran	
3	9 Juni 2026	bab 6 - Testing proyek Ada diagram fideling	

Lampiran 8. Source Code Program

```
<x-app-layout>

  <style>

    /* Custom Scrollbar untuk Terminal */

    .terminal-scroll::-webkit-scrollbar { width: 4px; }

    .terminal-scroll::-webkit-scrollbar-track { background:
transparent; }

    .terminal-scroll::-webkit-scrollbar-thumb { background:
#6366f1; border-radius: 4px; }

  </style>

  <div class="bg-slate-100 text-slate-800 font-sans antialiased
min-h-[calc(100vh-4rem)] relative overflow-hidden flex flex-col
py-10 px-4 sm:px-6 lg:px-8">

    <div class="relative w-full max-w-5xl mx-auto z-10">

      @if (session('status'))

        <div id="flash-message" class="mb-6">

          <div class="bg-gradient-to-r from-emerald-100
to-teal-100 backdrop-blur-sm border border-emerald-300 text-
emerald-800 p-4 rounded-2xl shadow-sm flex items-center">

            <svg class="w-6 h-6 mr-3 text-emerald-600"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path
stroke-linecap="round" stroke-linejoin="round" stroke-width="2"
d="M9 12l2 4 4m6 2a9 9 0 11-18 0 9 9 0 0118 0z"></path></svg>

            <span class="font-bold">{{
session('status') }}</span>

          </div>

        </div>

      </div>

      <script>setTimeout(() =>
document.getElementById('flash-message')?.remove(),
3000);</script>

    @endif

    <div class="mb-8 p-6 bg-white/80 backdrop-blur-md
border border-white/80 rounded-3xl shadow-xl flex flex-col
md:flex-row justify-between items-start md:items-center gap-4">

      <div>

        <h1 class="text-3xl font-black text-
transparent bg-clip-text bg-gradient-to-r from-indigo-700 via-
purple-600 to-pink-600 tracking-tight">Monitor Akses Gerbang</h1>


```

```

        <p class="text-sm text-slate-600 mt-1 font-
medium">Sistem Kendali Jarak Jauh Berbasis Internet of Things
(IoT)</p>

    </div>

    <div class="flex items-center gap-2 bg-gradient-
to-r from-indigo-100 to-blue-100 px-5 py-2.5 rounded-full border
border-indigo-200 shadow-inner">

        <span class="relative flex h-3 w-3">

            <span class="animate-ping absolute inline-
flex h-full w-full rounded-full bg-blue-400 opacity-75"></span>

            <span class="relative inline-flex rounded-
full h-3 w-3 bg-blue-500"></span>

        </span>

        <span class="text-xs font-black text-indigo-
800 uppercase tracking-wider">Sistem Online</span>

    </div>

</div>

<div id="alarm-container" class="hidden mb-8 animate-
pulse">

    <form action="{{ route('gate.action') }}"
method="POST">

        @csrf

        <input type="hidden" name="command"
value="reset">

        <button type="submit" class="w-full bg-
gradient-to-r from-red-600 via-rose-600 to-red-600 hover:from-red-
700 hover:to-rose-800 text-white p-6 rounded-3xl shadow-2xl flex
items-center justify-center gap-4 border-2 border-red-300
transition-transform active:scale-95">

            <svg class="w-10 h-10 animate-bounce"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M12
9v2m0 4h.01m-6.938 4h13.856c1.54 0 2.502-1.667 1.732-3L13.732 4c-
.77-1.333-2.694-1.333-3.464 0L3.34 16c-.77 1.333.192 3 1.732 3z"
stroke-width="2"></path></svg>

            <span class="text-2xl font-black uppercase
tracking-widest text-red-50">Peringatan! Matikan Alarm</span>

        </button>

    </form>

</div>

<div class="space-y-8">

```

```

5">
    <div class="grid grid-cols-1 sm:grid-cols-3 gap-
    <div id="card-status" class="bg-gradient-to-br
from-white/90 to-cyan-50/50 backdrop-blur-sm p-5 rounded-3xl
shadow-md border border-white/80 border-l-4 border-l-cyan-500 flex
items-center space-x-4 transition-all duration-500">
        <div id="icon-bg" class="p-3 rounded-2xl
bg-cyan-100 border border-cyan-200 text-cyan-600">
            <div id="main-icon">
                <svg class="w-7 h-7 animate-spin
text-cyan-500" fill="none" viewBox="0 0 24 24"><circle
class="opacity-25" cx="12" cy="12" r="10" stroke="currentColor"
stroke-width="4"></circle><path class="opacity-75"
fill="currentColor" d="M4 12a8 8 0 018-8V0C5.373 0 0 5.373 0
12h4zm2 5.291A7.962 7.962 0 014 12H0c0 3.042 1.135 5.824 3
7.93813-2.647z"></path></svg>
            </div>
        </div>
        <div>
            <p class="text-[10px] text-cyan-700
uppercase font-black tracking-widest">Kondisi Gerbang</p>
            <h4 id="text-status" class="text-lg
font-black uppercase text-slate-700 mt-0.5">Cek...</h4>
        </div>
    </div>
    <div class="bg-gradient-to-br from-white/90
to-indigo-50/50 backdrop-blur-sm p-5 rounded-3xl shadow-md border
border-white/80 border-l-4 border-l-indigo-500 flex items-center
space-x-4">
        <div class="p-3 bg-indigo-100 border
border-indigo-200 text-indigo-600 rounded-2xl shadow-inner">
            <svg class="w-7 h-7" fill="none"
stroke="currentColor" viewBox="0 0 24 24"><path d="M12 8v4l3 3m6-
3a9 9 0 11-18 0 9 9 0 0118 0z" stroke-width="2"></path></svg>
        </div>
        <div>
            <p class="text-[10px] text-indigo-700
uppercase font-black tracking-widest">Sistem Jam</p>
            <h4 class="text-lg font-black text-
slate-800 mt-0.5" id="clock">--:--:--</h4>
        </div>
    </div>

```

```

        <div class="bg-gradient-to-br from-white/90
to-fuchsia-50/50 backdrop-blur-sm p-5 rounded-3xl shadow-md border
border-white/80 border-l-4 border-l-fuchsia-500 flex items-center
space-x-4">

            <div class="p-3 bg-fuchsia-100 border
border-fuchsia-200 text-fuchsia-600 rounded-2xl shadow-inner">

                <svg class="w-7 h-7" fill="none"
stroke="currentColor" viewBox="0 0 24 24"><path d="M16 7a4 4 0 11-
8 0 4 4 0 018 0zM12 14a7 7 0 00-7 7h14a7 7 0 00-7-7z" stroke-
width="2"></path></svg>

            </div>

            <div class="overflow-hidden">

                <p class="text-[10px] text-fuchsia-700
uppercase font-black tracking-widest">Pengguna</p>

                <h4 class="text-lg font-black text-
slate-800 mt-0.5 truncate">{{ Auth::user()->name }}</h4>

            </div>

        </div>

</div>

<div class="bg-gradient-to-br from-indigo-50/90
to-white/90 backdrop-blur-md shadow-xl rounded-[2.5rem] border
border-indigo-100 overflow-hidden relative">

    <div class="absolute top-0 right-0 w-32 h-32
bg-blue-400 rounded-bl-full opacity-10"></div>

    <div class="p-8 md:p-14 text-center relative
z-10">

        <h3 class="text-2xl font-black text-
indigo-900 mb-10 uppercase tracking-widest border-b-2 border-
indigo-200/50 pb-4 inline-block">Kontrol Gerbang</h3>

        <div class="flex flex-col sm:flex-row
justify-center items-center gap-6">

            <form action="{{ route('gate.action')
}}" method="POST" id="form-buka" class="w-full sm:w-auto">

                @csrf

                <input type="hidden"

name="command" value="buka">

                <button type="submit" id="btn-
buka" class="group relative w-full sm:w-72 flex items-center
justify-between p-6 bg-white/90 backdrop-blur-sm border-2 border-

```

```

white rounded-[2rem] transition-all duration-300 shadow-md
hover:shadow-xl hover:border-emerald-200">

        <div class="flex items-center
gap-4">

            <div id="sub-icon-buka"
class="w-14 h-14 rounded-2xl flex items-center justify-center bg-
slate-100 text-slate-400">

                <svg class="w-7 h-7"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M8
11V7a4 4 0 118 0m4 8v2m-6 4h12a2 2 0 002-2v-6a2 2 0 00-2-2H6a2 2 0
00-2 2v6a2 2 0 002 2z" stroke-width="2"></path></svg>

            </div>

            <div class="text-left">

                <span class="block
text-xs font-bold text-slate-400 uppercase tracking-widest">Aksi
Motor</span>

                <span class="block
text-2xl font-black text-slate-800 uppercase">Buka</span>

            </div>

        </div>

        <div id="dot-buka" class="w-4
h-4 rounded-full bg-slate-200"></div>

    </button>

</form>

    <form action="{{ route('gate.action')
}}" method="POST" id="form-tutup" class="w-full sm:w-auto">

        @csrf

        <input type="hidden"
name="command" value="tutup">

        <button type="submit" id="btn-
tutup" class="group relative w-full sm:w-72 flex items-center
justify-between p-6 bg-white/90 backdrop-blur-sm border-2 border-
white rounded-[2rem] transition-all duration-300 shadow-md
hover:shadow-xl hover:border-rose-200">

            <div class="flex items-center
gap-4">

                <div id="sub-icon-tutup"
class="w-14 h-14 rounded-2xl flex items-center justify-center bg-
slate-100 text-slate-400">

                    <svg class="w-7 h-7"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M12
15v2m-6 4h12a2 2 0 002-2v-6a2 2 0 00-2-2H6a2 2 0 00-2 2v6a2 2 0
002 2zm10-10V7a4 4 0 008 0v4h8z" stroke-width="2"></path></svg>

```



```

    ];
    setInterval(() => {
        const randomLog = logs[Math.floor(Math.random() *
logs.length)];
        const time = new Date().toLocaleTimeString('id-
ID', {hour: '2-digit', minute:'2-digit', second:'2-digit'});
        const newLine = document.createElement('div');
        newLine.className = "text-cyan-400 font-mono text-
[10px] opacity-90";
        newLine.innerText = `[${time}] > ${randomLog}`;
        terminal.appendChild(newLine);
        if(terminal.childElementCount > 4)
terminal.removeChild(terminal.firstChild);
    }, 3000);
}
// 3. UI UPDATE LOGIC (POLLING)
function updateUI() {
    fetch('/api/gate/status')
        .then(res => res.json())
        .then(data => {
            const status = data.command;
            const alarmContainer =
document.getElementById('alarm-container');
            const textStatus =
document.getElementById('text-status');
            const iconBg = document.getElementById('icon-
bg');
            const mainIcon =
document.getElementById('main-icon');

            const btnBuka = document.getElementById('btn-
buka');
            const btnTutup = document.getElementById('btn-
tutup');
            const subIconBuka =
document.getElementById('sub-icon-buka');
            const subIconTutup =
document.getElementById('sub-icon-tutup');

```

```

const dotBuka = document.getElementById('dot-
buka');

const dotTutup = document.getElementById('dot-
tutup');

if (status === 'alarm' || status ===
'buka_paksa') {

    alarmContainer.classList.remove('hidden');

    textStatus.innerText = "DIBUKA PAKSA!";

    textStatus.className = "text-lg font-black
uppercase text-rose-600 animate-bounce mt-0.5";

    iconBg.className = "p-3 bg-gradient-to-br
from-rose-100 to-red-200 border border-rose-300 text-rose-700
rounded-2xl shadow-inner ring-4 ring-rose-300/50";

    mainIcon.innerHTML = `<svg class="w-7 h-7"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M12
9v2m0 4h.01m-6.938 4h13.856c1.54 0 2.502-1.667 1.732-3L13.732 4c-
.77-1.333-2.694-1.333-3.464 0L3.34 16c-.77 1.333.192 3 1.732 3z"
stroke-width="2"></path></svg>`;

    [btnBuka, btnTutup].forEach(btn => {

        btn.disabled = true;

        btn.className = "group relative w-full
sm:w-72 flex items-center justify-between p-6 bg-white/40 border-2
border-white/50 rounded-[2rem] opacity-50 grayscale cursor-not-
allowed pointer-events-none";

    });

}

else if (status === 'buka') {

    alarmContainer.classList.add('hidden');

    textStatus.innerText = "Terbuka";

    textStatus.className = "text-lg font-black
uppercase text-emerald-600 mt-0.5";

    iconBg.className = "p-3 bg-gradient-to-br
from-emerald-100 to-teal-200 border border-emerald-300 text-
emerald-700 rounded-2xl shadow-inner";

    mainIcon.innerHTML = `<svg class="w-7 h-7"
fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M8
11V7a4 4 0 118 0m4 8v2m-6 4h12a2 2 0 002-2v-6a2 2 0 00-2-2H6a2 2 0
00-2 2v6a2 2 0 002 2z" stroke-width="2"></path></svg>`;

    setButtonStyle(btnBuka, subIconBuka,
dotBuka, false, 'emerald');

    setButtonStyle(btnTutup, subIconTutup,
dotTutup, true, 'rose');

```

```

    }
    else {
        alarmContainer.classList.add('hidden');
        textStatus.innerText = "Tertutup";
        textStatus.className = "text-lg font-black uppercase text-rose-600 mt-0.5";
        iconBg.className = "p-3 bg-gradient-to-br from-rose-100 to-pink-200 border border-rose-300 text-rose-700 rounded-2xl shadow-inner";
        mainIcon.innerHTML = `<svg class="w-7 h-7" fill="none" stroke="currentColor" viewBox="0 0 24 24"><path d="M12 15v2m-6 4h12a2 2 0 02-2v-6a2 2 0 00-2-2h6a2 2 0 00-2 2v6a2 2 0 002 2zm10-10V7a4 4 0 00-8 0v4h8z" stroke-width="2"></path></svg>`;
        setButtonStyle(btnTutup, subIconTutup, dotTutup, false, 'rose');
        setButtonStyle(btnBuka, subIconBuka, dotBuka, true, 'emerald');
    }
})

.catch(err => console.error("Polling Error:", err));
}

// OPTIMASI JS: Turunkan blur di tombol aktif agar lebih ringan

function setButtonStyle(btn, icon, dot, isActive, color) {
    if (isActive) {
        btn.disabled = false;

        btn.className = `group relative w-full sm:w-72 flex items-center justify-between p-6 bg-gradient-to-br from-${color}-50 to-white backdrop-blur-sm border-2 border-${color}-300 shadow-lg rounded-[2rem] opacity-100 transition-all duration-500 hover:scale-105 hover:border-${color}-500 active:scale-95`;

        icon.className = `w-14 h-14 rounded-2xl bg-gradient-to-br from-${color}-400 to-${color}-600 text-white shadow-md flex items-center justify-center`;

        dot.className = `w-4 h-4 rounded-full bg-${color}-500 animate-pulse shadow-[0_0_10px_rgba(0,0,0,0.5)]`;
    } else {
        btn.disabled = true;

        btn.className = "group relative w-full sm:w-72 flex items-center justify-between p-6 bg-white/50 border-2 border-

```

```

white/60 rounded-[2rem] opacity-60 grayscale cursor-not-allowed
pointer-events-none";

        icon.className = "w-14 h-14 rounded-2xl bg-slate-
200 text-slate-400 flex items-center justify-center shadow-inner";
        dot.className = "w-4 h-4 rounded-full bg-slate-
300";

    }

}

setInterval(updateUI, 2000);

updateUI();

</script>
</x-app-layout>

```