

DAFTAR ISI

	Halaman
HALAMAN PERNYATAAN KEASLIAN	i
HALAMAN PENGESAHAN TUGAS AKHIR.....	ii
HALAMAN PERSETUJUAN PUBLIKASI KARYA ILMIAH UNTUK KEPENTINGAN AKADEMIS	iii
KATA PENGANTAR	iv
ABSTRAK	vi
DAFTAR ISI.....	viii
DAFTAR TABEL.....	xii
DAFTAR GAMBAR	xiii
BAB I PENDAHULUAN.....	1
1.1 Latar Belakang.....	1
1.2 Identifikasi Masalah	3
1.3 Tujuan Penelitian.....	3
1.4 Manfaat Tugas Akhir.....	4
1.5 Lingkup Tugas Akhir.....	4
1.6 Sistematika Penulisan Tugas Akhir.....	4
BAB II LANDASAN TEORI.....	6
2.1 Rancang Bangun.....	6
2.2 Sistem	6
2.3 <i>Website</i>	7
2.4 <i>Bootstrap</i>	7
2.5 <i>HTML</i>	8
2.6 <i>CSS</i>	8
2.7 <i>Javascript</i>	8
2.8 <i>Laravel</i>	9
2.9 <i>PHP</i>	9
2.10 <i>MySql</i>	10
2.11 <i>Blackbox</i>	10
2.12 <i>Unifed Modelling Language (UML)</i>	10

2.12.1	<i>Use Case Diagram</i>	11
2.12.2	<i>Activity Diagram</i>	12
2.12.3	<i>Class Diagram</i>	13
2.12.4	<i>Deployment Diagram</i>	15
2.13	Metode <i>Waterfall</i>	15
2.13.1	<i>Requirement</i>	16
2.13.2	<i>Design</i>	16
2.13.3	<i>Implementation</i>	16
2.13.4	<i>Verification</i>	16
2.13.5	<i>Maintanance</i>	17
2.14	Analisis <i>PIECES</i>	17
2.14.1	Kehandalan (<i>Performance</i>)	17
2.14.2	Informasi (<i>Information</i>)	17
2.14.3	Nilai Ekonomis (<i>Economics</i>)	17
2.14.4	Pengendalian (<i>Control</i>)	17
2.14.5	Efisiensi (<i>Efficiency</i>)	18
2.14.6	Pelayanan (<i>Service</i>)	18
2.15	Studi Literatur	18
BAB III METODE PENELITIAN		25
3.1	Jenis Penelitian	25
3.2	Objek, Lokasi, dan Waktu Penelitian	25
3.2.1	Objek Penelitian	25
3.2.2	Lokasi Penelitian	25
3.2.3	Waktu Penelitian	25
3.3	Teknik Pengumpulan Data	25
3.3.1	Observasi	26
3.3.2	Wawancara	27
3.3.3	Studi Literatur	27
3.4	Jenis Sumber Data	27
3.4.1	Sumber Data Primer	27
3.5	Metode Analisis <i>PIECES</i>	28
3.6	Proses Bisnis Yang Sedang Berjalan	28

3.7	Proses Bisnis Diusulkan	30
BAB IV HASIL DAN PEMBAHASAN		31
4.1	Definisi Analisis Kebutuhan Sistem (<i>Requirement Definition</i>)	31
4.1.1	Analisis Kebutuhan Sistem.....	31
4.1.2	Hasil Analisis sistem menggunakan Metode PIECES	33
4.1.2.1	Hasil Pengujian Sistem	38
4.2	Desain Sistem dan Perangkat Lunak (<i>System Design and Software Design</i>)	40
4.2.1	<i>Use Case Diagram</i>	40
4.2.2	<i>Activity Diagram</i>	41
4.2.2.1	<i>Activity Diagram Login Admin Sparepart</i>	41
4.2.2.2	<i>Activity Diagram Login Admin Purchasing</i>	41
4.2.2.3	<i>Activity Diagram Login Supervisor</i>	42
4.2.2.4	<i>Activity diagram Input, Edit, dan Mengirim Data Permintaan ke Purchasing</i>	43
4.2.2.5	<i>Activity diagram Proses Admin Purchasing Order Barang ke Vendor</i>	43
4.2.2.6	<i>Activity diagram Proses Admin sparepart Generate Surat Jalan dan Invoice</i>	44
4.2.2.7	<i>Activity diagram Penerbitan Surat Jalan</i>	45
4.2.2.8	<i>Activity diagram Penerbitan Invoice</i>	46
4.2.2.9	<i>Activity diagram Proses Report Data</i>	46
4.2.2.10	<i>Activity diagram Proses Supervisor Menambahkan User Admin</i>	47
4.2.3	<i>Sequence Diagram</i>	47
4.2.3.1	<i>Sequence Diagram Admin sparepart</i>	47
4.2.3.2	<i>Sequence Diagram Admin purchasing</i>	48
4.2.3.3	<i>Sequence Diagram Supervisor</i>	48
4.2.3.4	<i>Sequence Menu Purchase order</i>	49
4.2.3.5	<i>Sequence Menu Proses Order</i>	50
4.2.3.6	<i>Sequence Menu Terima Barang</i>	51
4.2.3.7	<i>Sequence Menu Generate Surat Jalan dan Invoice</i>	52

4.2.3.8	<i>Sequence Menu Cetak Surat Jalan</i>	53
4.2.3.9	<i>Sequence Menu Cetak Invoice</i>	54
4.2.3.10	<i>Sequence Menu Report</i>	55
4.2.3.11	<i>Sequence Supervisor Tambah Users</i>	56
4.2.4	<i>Class Diagram</i>	57
4.2.5	<i>Deployment Diagram</i>	58
4.3	Implementasi dan Percobaan Unit (<i>Implementation and Unit Testing</i>)	58
4.3.1	Halaman <i>Admin sparepart</i>	58
4.3.2	Halaman <i>Admin purchasing</i>	63
4.3.3	Halaman <i>Supervisor</i>	66
4.4	Integrasi dan Percobaan Sistem (<i>Integration and System Testing</i>)	67
4.4.1	Pengujian <i>Blackbox</i>	67
BAB V KESIMPULAN DAN SARAN.....		74
5.1	KESIMPULAN	74
5.2	SARAN.....	74
DAFTAR REFERENSI		75
Lampiran 1 Hasil Wawancara.....		79
Lampiran 2 Surat Permohonan Penelitian.....		81
Lampiran 3 Surat Penerimaan Permohonan Penelitian.....		82
Lampiran 4 Surat Keterangan Selesai Penelitian		83

DAFTAR TABEL

	Halaman
Tabel 2.1 Daftar Simbol <i>Use Case Diagram</i>	11
Tabel 2.2 Daftar Simbol <i>Activity Diagram</i>	12
Tabel 2.3 Daftar Simbol <i>Class Diagram</i>	13
Tabel 2.4 Daftar Simbol <i>Deployment Diagram</i>	15
Tabel 2.5 Studi Literatur	18
Tabel 3.1 Observasi	26
Tabel 4.1 Kebutuhan Fungsional	31
Tabel 4.2 Daftar Pertanyaan Metode PIECES	33
Tabel 4.3 Metode <i>Likert</i>	34
Tabel 4.4 Tabel <i>Performance</i>	34
Tabel 4.5 Tabel <i>Information</i>	35
Tabel 4.6 Tabel <i>Economics</i>	35
Tabel 4.7 Tabel <i>Control</i>	36
Tabel 4.8 Tabel <i>Efficiency</i>	37
Tabel 4.9 Tabel <i>Service</i>	37
Tabel 4.10 Hasil Pengujian Sistem	38
Tabel 4.11 Pengujian <i>Blackbox</i>	68

DAFTAR GAMBAR

	Halaman
Gambar 2.1 <i>Bootstrap</i>	8
Gambar 2.2 <i>HTML</i>	8
Gambar 2.3 <i>CSS</i>	8
Gambar 2.4 <i>Javascript</i>	9
Gambar 2.5 <i>Laravel</i>	9
Gambar 2.6 <i>PHP</i>	10
Gambar 2.7 <i>MySql</i>	10
Gambar 2.8 <i>Unified Modelling Language (UML)</i>	11
Gambar 2.9 <i>Metode Waterfall</i>	16
Gambar 3.1 <i>Proses Bisnis Yang Sedang Berjalan</i>	29
Gambar 3.2 <i>Proses Bisnis Diusulkan</i>	30
Gambar 4.1 <i>Use Case Diagram</i>	40
Gambar 4.2 <i>Activity Diagram Login Admin Sparepart</i>	41
Gambar 4.3 <i>Activity Diagram Login Admin Purchasing</i>	42
Gambar 4.4 <i>Activity Diagram Login Supervisor</i>	42
Gambar 4.5 <i>Activity diagram Input, Edit, dan Mengirim Data Permintaan ke Purchasing</i>	43
Gambar 4.6 <i>Activity diagram Proses Admin Purchasing Order Barang ke Vendor</i>	44
Gambar 4.7 <i>Activity diagram Proses Admin sparepart Generate Surat Jalan dan Invoice</i>	45
Gambar 4.8 <i>Activity diagram Penerbitan Surat Jalan</i>	45
Gambar 4.9 <i>Activity diagram Penerbitan Invoice</i>	46
Gambar 4.10 <i>Activity diagram Proses Report Data</i>	46
Gambar 4.11 <i>Activity diagram Proses Supervisor Menambahkan User Admin</i>	47
Gambar 4.12 <i>Sequence Diagram Admin sparepart</i>	47
Gambar 4.13 <i>Sequence Diagram Admin purchasing</i>	48
Gambar 4.14 <i>Sequence Diagram Supervisor</i>	48

Gambar 4.15	<i>Sequence Menu Purchase order</i>	49
Gambar 4.16	<i>Sequence Menu Proses Order</i>	50
Gambar 4.17	<i>Sequence Menu Terima Barang</i>	51
Gambar 4.18	<i>Sequence Menu Generate Surat Jalan dan Invoice</i>	52
Gambar 4.19	<i>Sequence Menu Cetak Surat Jalan</i>	53
Gambar 4.20	<i>Sequence Menu Cetak Invoice</i>	54
Gambar 4.21	<i>Sequence Menu Report</i>	55
Gambar 4.22	<i>Sequence Supervisor Tambah Users</i>	56
Gambar 4.23	<i>Class Diagram</i>	57
Gambar 4.24	<i>Deployment Diagram</i>	58
Gambar 4.25	Tampilan <i>Login</i>	59
Gambar 4.26	Tampilan <i>Dashboard Admin sparepart</i>	59
Gambar 4.27	Tampilan Menu <i>Purchase order</i>	60
Gambar 4.28	Tampilan Menu <i>Generate Surat Jalan dan Invoice (1)</i>	60
Gambar 4.29	Tampilan Menu <i>Generate Surat Jalan dan Invoice (2)</i>	60
Gambar 4.30	Tampilan Menu <i>Surat Jalan</i>	61
Gambar 4.31	Tampilan <i>Print Preview Surat Jalan</i>	61
Gambar 4.32	Tampilan Menu <i>Invoice</i>	62
Gambar 4.33	Tampilan <i>Print Preview Invoice</i>	62
Gambar 4.34	Tampilan Menu <i>Inventory</i>	63
Gambar 4.35	Tampilan Menu <i>Report Purchase order</i>	63
Gambar 4.36	Tampilan <i>Dashboard Admin purchasing</i>	64
Gambar 4.37	Tampilan Menu <i>Proses Order</i>	64
Gambar 4.38	Tampilan <i>Detail Menu Proses Order (1)</i>	65
Gambar 4.39	Tampilan <i>Detail Menu Proses Order (2)</i>	65
Gambar 4.40	Tampilan <i>Order (1)</i>	65
Gambar 4.41	Tampilan <i>Order (2)</i>	66
Gambar 4.42	Tampilan <i>Report Purchase order Vendor</i>	66
Gambar 4.43	Tampilan <i>Dashboard Supervisor</i>	67
Gambar 4.44	Tampilan Menu <i>Users</i>	67