

DAFTAR ISI

LEMBAR PENGESAHAN	i
SURAT PERNYATAAN.....	ii
KATA PENGANTAR	iii
ABSTRAK	v
ABSTRACT.....	vi
DAFTAR ISI.....	vii
DAFTAR GAMBAR	xii
DAFTAR TABEL	xvi
BAB I PENDAHULUAN	1
1.1 Latar Belakang.....	1
1.2 Identifikasi Masalah.....	2
1.3 Rumusan Masalah.....	2
1.4 Tujuan dan Manfaat.....	3
1.4.1 Tujuan.....	3
1.4.2 Manfaat	3
1.5 Batasan Masalah	3
1.6 Sistematika Penulisan	4
BAB II LANDASAN TEORI	5
2.1 Pertanian	5
2.1.1 Lahan	5
2.1.2 Lahan Pertanian	5
2.1.3 Pangan	6
2.1.4 Ketahanan Pangan	6
2.1.5 Penyelenggaraan Pangan	6
2.2 Peta	7
2.2.1 Peta Tematik.....	7
2.3 Sistem	8
2.4 Informasi.....	8
2.5 Sistem Informasi.....	9
2.6 Sistem Informasi Geografis	9
2.7 Quantum GIS	10
2.7.1 QGIS Server.....	10

2.8 WEB GIS	11
2.9 <i>Unified Process</i>	11
2.9.1 <i>Rational Unified Process</i>	12
2.10 <i>Unified Modeling Language (UML)</i>	14
2.10.1 <i>Use Case Diagram</i>	15
2.10.2 <i>Class Diagram</i>	17
2.10.3 <i>Activity Diagram</i>	18
2.10.4 <i>Sequence Diagram</i>	18
2.10.5 <i>Deployment Diagram</i>	20
2.11 PostgreSQL.....	20
2.11.1 PostGIS.....	22
2.12 HTML	23
2.13 JavaScript.....	23
2.14 PHP	24
2.15 Laravel	25
2.15.1 <i>Web server</i>	26
2.15.2 <i>Composer</i>	26
2.15.3 <i>Routing</i>	27
2.15.4 <i>Model</i>	27
2.15.5 <i>View</i>	27
2.15.6 <i>Controller</i>	28
2.15.7 <i>Migration</i>	28
2.15.8 <i>Seeder</i>	28
2.15.9 <i>Eloquent Model</i>	29
2.16 <i>Black Box Testing</i>	29
BAB III METODE PENELITIAN.....	30
3.1 <i>Formulating The Research Problem</i>	31
3.2 <i>Extensive Literature Survey</i>	31
3.3 <i>Development Of Working Hypotheses</i>	31
3.4 <i>Preparing The Research Design</i>	32
3.5 <i>Determining Sample Design</i>	32
3.6 <i>Collecting The Data</i>	33
3.6.1 <i>Observasi</i>	34
3.6.2 <i>Wawancara</i>	34

3.7 Execution Of The Project.....	35
3.8 Analysis Of Data.....	36
3.9 Hypothesis-Testing	36
3.10 Generalisations And Interpretation	37
3.11 Preparation Of The Report Or The Thesis	37
BAB IV ANALISIS SISTEM.....	38
4.1 Objek Penelitian.....	38
4.2 Kabupaten Bandung.....	38
4.2.1 Lambang Dan Arti	38
4.2.2 Visi Dan Misi	39
4.2.3 Potensi Bisnis Kabupaten Bandung.....	40
4.3 Dinas Pertanian Kabupaten Bandung	41
4.3.1 Visi Dan Misi Dinas Pertanian Kabupaten Bandung	41
4.3.2 Tugas Pokok Dan Fungsi.....	42
4.3.3 Struktur Organisasi	46
BAB V PERANCANGAN SISTEM INFORMASI	47
5.1 Rational Unified Process (RUP).....	47
5.1.1 Business Modeling	47
5.1.2 Requirements	47
5.1.3 Analysis and Design	48
5.1.4 Implementation	49
5.1.5 Testing	49
5.1.6 Deployment	49
5.2 Use Case Diagram.....	50
5.2.1 Definisi Aktor	50
5.2.2 Definisi Use Case	51
5.2.3 Skenario Use Case	52
5.3 Activity Diagram.....	63
5.3.1 Activity Diagram Masuk Panel Admin	63
5.3.2 Activity Diagram Tambah Data Admin	63
5.3.3 Activity Diagram Ubah Data Admin	64
5.3.4 Activity Diagram Hapus Data Admin	64
5.3.5 Activity Diagram Tambah Data Berita	65
5.3.6 Activity Diagram Ubah Data Berita	65

5.3.7 Activity Diagram Hapus Data Berita	66
5.3.8 Activity Diagram Tambah Data Galeri	66
5.3.9 Activity Diagram Ubah Data Galeri	67
5.3.10 Activity Diagram Hapus Data Galeri.....	67
5.3.11 Activity Diagram Balas Kontak.....	68
5.3.12 Activity Diagram Kontak Admin.....	68
5.4 Sequence Diagram.....	69
5.4.1Sequence Diagram Masuk Panel Admin	69
5.4.2 Sequence Diagram Tambah Data Admin	69
5.4.3 Sequence Diagram Ubah Data Admin	70
5.4.4 Sequence Diagram Hapus Data Admin	70
5.4.5 Sequence Diagram Tambah Data Berita	71
5.4.6 Sequence Diagram Ubah Data Berita.....	71
5.4.7 Sequence Diagram Hapus Data Berita	72
5.4.8 Sequence Diagram Tambah Data Galeri	72
5.4.9 Sequence Diagram Ubah Data Galeri	73
5.4.10 Sequence Diagram Hapus Data Galeri.....	73
5.4.11 Sequence Diagram Balas Kontak.....	74
5.4.12 Sequence Diagram Kontak Admin.....	74
5.5 Class Diagram.....	75
5.6 Deployment Diagram.....	75
5.7 Perancangan Basis Data.....	76
5.7.1 Tabel Admin.....	76
5.7.2 Tabel Data Pangan.....	77
5.7.3 Tabel Data Pangan Buah	78
5.7.4 Tabel Data Ternak	78
5.7.5 Tabel Kategori	79
5.7.6 Tabel Berita	80
5.7.7 Tabel Kontak	80
5.7.8 Tabel Galeri	81
5.8 Perancangan Antarmuka.....	81
5.8.1 Antarmuka Beranda.....	83
5.8.2 Antarmuka Profil	85
5.8.3 Antarmuka Berita	86

5.8.4 Antarmuka Galeri	87
5.8.5 Antarmuka Peta	87
5.8.6 Antarmuka Kontak	88
5.8.7 Antarmuka <i>Login Admin</i>	89
5.8.8 Antarmuka Mengelola Data Pertanian	89
5.8.9 Antarmuka Mengelola Data Berita	90
5.8.10 Antarmuka Mengelola Data Komentar	92
5.8.11 Antarmuka Mengelola Data Kontak	93
5.8.12 Antarmuka Mengelola Data Galeri	94
5.8.13 Antarmuka Mengelola Data <i>Admin</i>	95
BAB VI PENERAPAN SISTEM INFORMASI	97
6.1 Implementasi Sistem	97
6.1.1 Kebutuhan Perangkat Keras	97
6.1.2 Kebutuhan Perangkat Lunak	98
6.1.3 Implementasi Antarmuka	98
6.2 Pengujian Sistem	115
6.2.1 Ruang Lingkup Pengujian	115
6.2.2 Hasil Pengujian Sistem	115
BAB VII KESIMPULAN DAN SARAN	127
7.1 Kesimpulan	127
7.2 Saran	127
DAFTAR PUSTAKA	129
LAMPIRAN	132
Lampiran 1 Surat Pengantar	132
Lampiran 2 Surat Rekomendasi Penelitian	133
Lampiran 3 Foto Penelitian	134
Lampiran 4 Hasil Analisa	135
Lampiran 5 Kartu Bimbingan Tugas Akhir	150
Lampiran 6 Revisi Laporan Tugas Akhir	151