

## DAFTAR ISI

ABSTRAK .....	ii
ABSTRACT .....	iii
LEMBAR PENGESAHAN .....	iv
LEMBAR PERNYATAAN ORISINALITAS .....	v
Kata Pengantar .....	vi
Daftar Isi.....	viii
Daftar Gambar.....	xi
Daftar Tabel .....	xiii
Daftar Lampiran.....	xiv
Daftar Simbol.....	xv
Daftar Istilah.....	xvi
Bab I PENDAHULUAN .....	1
I.1 Latar Belakang.....	1
I.2 Perumusan Masalah.....	5
I.3 Tujuan Penelitian.....	6
I.4 Batasan Penelitian .....	6
I.5 Manfaat Penelitian.....	7
I.6 Sistematika Penulisan.....	7
Bab II TINJAUAN PUSTAKA .....	9
II.1 <i>Software Engineering</i> .....	9
II.1.1 <i>Software Specification</i> .....	9
II.1.2 <i>Software Development</i> .....	24
II.1.3 <i>Software Validation</i> .....	29
II.1.4 <i>Software Evolution</i> .....	39
II.2 <i>State of the Art</i> .....	39

Bab III	Metodologi Penelitian.....	42
III.1	Alasan Pemilihan Metode.....	42
III.2	<i>Design Science Research</i> .....	42
III.3	Sistematika Penyelesaian Masalah .....	44
III.4	Pengumpulan Data.....	46
III.5	Metode Evaluasi .....	47
Bab IV	Analisis dan Perancangan .....	48
IV.1	<i>Specify Context of Use</i> .....	48
IV.1.1	Identifikasi Pengguna dan Proses Bisnis.....	48
IV.1.2	Sampel Responden.....	50
IV.1.3	Kuesioner <i>System Usability Scale Legacy System</i> .....	51
IV.1.4	Analisis <i>System Usability Scale Legacy System</i> .....	52
IV.1.5	Membuat <i>User Flow</i> .....	55
IV.1.6	Membuat <i>Task Scenario</i> .....	61
IV.1.7	Analisis <i>In-Depth Interview</i> .....	62
IV.2	<i>Specify User Requirements</i> .....	63
IV.2.1	<i>Usability Testing Legacy System</i> .....	63
IV.2.2	<i>User Persona</i> .....	67
IV.2.3	<i>Brainstorming</i> .....	69
IV.2.4	<i>Use Case Diagram</i> .....	73
IV.2.5	<i>Use Case Scenario</i> .....	73
IV.2.6	<i>Sequence Diagram</i> .....	82
IV.3	<i>Produce Design Solution</i> .....	85
IV.3.1	<i>Wireframe</i> .....	86
Bab V	Implementasi dan Pengujian.....	100
V.1	Hasil Implementasi Perangkat Lunak.....	100

V.2	Hasil Pengujian Perangkat Lunak .....	109
V.2.1	<i>Evaluate Design Against User Requirement</i> .....	109
Bab VI	Kesimpulan dan Saran .....	113
VI.1	Kesimpulan .....	113
VI.2	Saran .....	114
Bab VII	Daftar Pustaka.....	115
	LAMPIRAN .....	122
	LAMPIRAN A – Pertanyaan Kuesioner SUS.....	122
	LAMPIRAN B – Data Kuesioner SUS <i>Legacy System</i> .....	123
	LAMPIRAN C – <i>User Interview</i> .....	124
	LAMPIRAN D – <i>User Observation</i> .....	125
	LAMPIRAN E – <i>Interview Notes</i> .....	126
	LAMPIRAN F – <i>Ticketing SOFI</i> .....	128
	LAMPIRAN G – <i>Usability Test Plan</i> .....	129
	LAMPIRAN H – Analisis Perubahan .....	134
	LAMPIRAN I – Data Responden Kuesioner SUS <i>Redesign</i> .....	135
	LAMPIRAN J – <i>Automated Testing</i> .....	136