

## DAFTAR ISI

HALAMAN PERNYATAAN KEASLIAN SKRIPSI.....	ii
HALAMAN PENGESAHAN .....	iii
KATA PENGANTAR.....	iv
HALAMAN PERNYATAAN PERSETUJUAN PUBLIKASI SKRIPSI UNTUK KEPENTINGAN AKADEMIS .....	v
ABSTRAK .....	vi
ABSTRACT .....	vii
DAFTAR ISI .....	viii
DAFTAR TABEL .....	xi
DAFTAR GAMBAR.....	xii
BAB I PENDAHULUAN .....	1
1.1. Latar Belakang Masalah.....	1
1.2. Rumusan Masalah .....	2
1.3. Tujuan dan Manfaat .....	2
1.4. Ruang Lingkup.....	2
1.5. Sistematika Penulisan.....	3
BAB II LANDASAN TEORI.....	5
2.1. Studi Literatur .....	5
2.2. <i>World Wide Web</i> .....	6
2.3. <i>Graphical User Interface</i> (GUI) .....	6
2.4. <i>Application Programming Interface</i> (API) .....	6
2.5. <i>Javascript Object Notation</i> (JSON) .....	7
2.6. <i>NextJs Framework</i> .....	7
2.7. <i>Virtual Machine</i> (VM) .....	7
2.8. <i>Container</i> .....	8
2.9. <i>Docker</i> .....	9
2.10. <i>ICONIX Process</i> .....	11
2.10.1. <i>Requirements</i> .....	12
2.10.2. <i>Analysis/Preliminary Design</i> .....	12
2.10.3. <i>Milestone 2: Preliminary Design Review</i> (PDR) .....	13
2.10.4. <i>Detailed Design</i> .....	13

2.10.5. <i>Milestone 3: Critical Design Review (CDR)</i> .....	14
2.10.6. <i>Implementation</i> .....	14
2.11. <i>Unified Modeling Language (UML)</i> .....	14
2.11.1. <i>Domain Model</i> .....	15
2.11.2. <i>Use Case Diagram</i> .....	16
2.11.3. <i>Robustness Diagram</i> .....	17
2.11.4. <i>Sequence Diagram</i> .....	19
2.11.5. <i>Class Diagram</i> .....	20
<b>BAB III METODOLOGI PENELITIAN</b> .....	22
3.1. <i>Studi Literatur</i> .....	23
3.2. <i>Requirements</i> .....	23
3.3. <i>Analysis/Preliminary Design</i> .....	23
3.4. <i>Milestone 2: Preliminary Design Review (PDR)</i> .....	23
3.5. <i>Detailed Design</i> .....	23
3.6. <i>Milestone 3: Critical Design Review (CDR)</i> .....	24
3.7. <i>Implementation</i> .....	24
3.8. <i>Testing</i> .....	24
<b>BAB IV HASIL DAN PEMBAHASAN</b> .....	25
4.1. <i>Requirements</i> .....	25
4.1.1. <i>Functional Requirements</i> .....	25
4.1.2. <i>Non-Functional Requirements</i> .....	26
4.1.3. <i>Domain Modeling</i> .....	27
4.1.4. <i>GUI Storyboarding</i> .....	27
4.1.5. <i>Use Case Modeling</i> .....	36
4.1.6. <i>Milestone 1: Requirement Review</i> .....	46
4.2. <i>Analysis/Preliminary Design</i> .....	46
4.2.1. <i>Robustness Analysis</i> .....	46
4.2.2. <i>Update Domain Model</i> .....	53
4.3. <i>Milestone 2: Preliminary Design Review (PDR)</i> .....	53
4.4. <i>Detailed Design</i> .....	53
4.4.1. <i>Sequence Diagram</i> .....	53
4.4.2. <i>Class Diagram</i> .....	59
4.5. <i>Milestone 3: Critical Design Review (CDR)</i> .....	59

4.6. Implementasi Aplikasi .....	60
4.6.1. Perangkat Implementasi .....	60
4.6.2. Implementasi <i>Class</i> .....	60
4.6.3. Implementasi <i>User Interface</i> .....	61
4.7. <i>Testing</i> .....	69
BAB V PENUTUP .....	71
5.1. Kesimpulan .....	71
5.2. Saran .....	71
DAFTAR PUSTAKA.....	72
Lampiran - Lampiran.....	73
Lampiran 1. Update Domain Model.....	74
Lampiran 2. Class Diagram .....	75
Lampiran 3. Tabel Rencana Pengujian Aplikasi Manajemen <i>Docker</i> .....	76
Lampiran 4. Tabel Hasil Pengujian <i>Black-Box Testing</i> .....	82