

DAFTAR ISI

HALAMAN PERNYATAAN KEASLIAN.....	i
HALAMAN PERSETUJUAN PUBLIKASI KARYA ILMIAH UNTUK.....	iii
KATA PENGANTAR.....	iv
ABSTRAK.....	v
ABSTRACT.....	vi
DAFTAR ISI.....	vii
DAFTAR TABEL.....	xi
DAFTAR GAMBAR.....	xii
BAB 1 PENDAHULUAN.....	1
1.1 Latar Belakang.....	1
1.2 Identifikasi Masalah.....	3
1.3 Rumusan Masalah.....	3
1.4 Tujuan Penelitian.....	3
1.5 Manfaat Penelitian.....	4
1.6 Ruang Lingkup.....	4
1.7 Kerangka Berpikir.....	4
1.7.1 Pengumpulan Data.....	6
1.7.2 Metode Knowledge Management LifeCycle.....	6
1.7.3 Metode Pengembangan Perangkat Lunak.....	6
1.8 Sistematika Penulisan.....	7
BAB 2 TINJAUAN PUSTAKA.....	8
2.1 Studi Literatur.....	8
2.2 Landasan Teori.....	12
2.2.1 Rancang Bangun.....	12
2.2.2 Knowledge.....	12
2.2.3 Knowledge Sharing.....	14

2.2.4 Knowledge Management.....	14
2.2.5 Knowledge Management System.....	16
2.2.6 Knowledge Management Lifecycle From an Individual’s Perspective.....	16
2.2.7 Kegiatan Praktikum.....	18
2.2.8 UML.....	18
2.2.9 Use Case Diagram.....	19
2.2.10 Activity Diagram.....	20
2.2.11 Class Diagram.....	21
2.2.12 Component Diagram.....	22
2.2.13 Deployment Diagram.....	23
2.2.14 Extreme Programming (XP).....	24
2.2.15 Database.....	26
2.2.16 NoSQL.....	26
2.2.17 Firebase.....	27
2.2.18 Application Programming Interface(API).....	28
2.2.19 Aplikasi Mobile.....	29
2.2.20 Flutter.....	29
2.2.21 Dart.....	30
2.2.22 Kebutuhan Fungsional.....	31
2.2.23 Kebutuhan Non Fungsional.....	32
2.2.24 System Usability Scale (SUS).....	32
2.2.25 User Acceptance Test (UAT).....	35
2.2.26 Fishbone Analysis.....	35
BAB 3 METODOLOGI PENELITIAN.....	37
3.1 Tempat Penelitian.....	37
3.2 Profil Perusahaan.....	37
3.2.1 Universitas Esa Unggul (UEU).....	37
3.2.2 Logo Perusahaan.....	37
3.2.3 Visi dan Misi Universitas Esa Unggul.....	38

3.3 Rencana Penelitian.....	38
3.4 Teknik Pengumpulan Data.....	39
3.4.1 Wawancara.....	39
3.4.2 Studi Pustaka.....	39
3.4.3 Observasi.....	40
3.5 Metode Knowledge Management.....	40
3.6 Metode Pengembangan Perangkat Lunak.....	42
BAB 4 HASIL DAN PEMBAHASAN.....	44
4.1 Planning.....	44
4.1.1 Identifikasi Knowledge Sharing Saat Ini.....	44
4.1.2 Knowledge Reused.....	45
4.1.2 Analisa Fishbone.....	45
4.1.3 Analisa Proses Bisnis Berjalan.....	48
4.1.4 Functional Requirement.....	49
4.1.5 Non-Functional Requirement.....	50
4.2 Design.....	51
4.2.1 Knowledge Created.....	51
4.2.2 Use Case Diagram.....	52
4.2.3 Activity Diagram.....	53
4.2.4 Class Diagram.....	58
4.2.5 Desain Antarmuka Pengguna (User Interface).....	59
4.3 Coding.....	62
4.3.1 Knowledge Captured.....	62
4.3.2 Fitur Knowledge Capture Pada Aplikasi KMS.....	63
4.3.3 Struktur Folder.....	64
4.3.4 Flutter Package.....	65
4.3.5 Database Firebase Firestore.....	66
4.3.6 Firebase Storage.....	68
4.4 Pengujian (Test).....	69

4.4.1 Technology Platform.....	69
4.4.2 System Usability Scale (SUS).....	69
4.4.3 User Acceptance Test (UAT).....	73
4.5 Implementasi Aplikasi Mobile.....	79
BAB 5 KESIMPULAN DAN SARAN.....	83
5.1 Kesimpulan.....	83
5.2 Saran.....	83
DAFTAR PUSTAKA.....	84
LAMPIRAN 1 Surat Permohonan Izin Penelitian.....	91
LAMPIRAN 2 Surat Keterangan Selesai Penelitian.....	92
LAMPIRAN 3 Hasil Wawancara Kepada Mahasiswa Angkatan 2021.....	93
LAMPIRAN 4 Hasil Wawancara Kepada Mahasiswa Angkatan 2022.....	95
LAMPIRAN 5 Hasil Wawancara Kepada Mahasiswa Angkatan 2023.....	97
LAMPIRAN 6 Hasil Quesioner.....	99
LAMPIRAN 7 Hasil Quesioner System Usability Scale (SUS).....	107
LAMPIRAN 8 Hasil Wawancara User Acceptance Test (UAT).....	113

DAFTAR TABEL

Tabel 2.1 Studi Literatur.....	8
Tabel 2.2 Pernyataan System Usability Scale.....	32
Tabel 3.1 Rencana Penelitian.....	38
Tabel 4.1 Identifikasi Knowledge Sharing Saat Ini.....	44
Tabel 4.2 Fishbone Analysis.....	46
Tabel 4.3 Functional Requirement.....	49
Tabel 4.4 Non-Functional Requirement.....	50
Tabel 4.5 Knowledge Created.....	51
Tabel 4.6 Knowledge Captured.....	62
Tabel 4.7 Technology Platform.....	69
Tabel 4.8 Pertanyaan SUS.....	70
Tabel 4.9 Hasil SUS.....	71
Tabel 4.10 UAT Mahasiswa A.....	73
Tabel 4.11 UAT Mahasiswa B.....	74
Tabel 4.12 UAT Mahasiswa C.....	76
Tabel 4.13 UAT Mahasiswa D.....	77
Tabel 4.14 UAT Mahasiswa E.....	78

DAFTAR GAMBAR

Gambar 1.1 Kerangka Berpikir.....	5
Gambar 2.1 KM Life Cycle From an Individual’s Perspective.....	17
Gambar 2.2 Use Case Diagram.....	20
Gambar 2.3 Activity Diagram.....	21
Gambar 2.4 Class Diagram.....	22
Gambar 2.5 Component Diagram.....	23
Gambar 2.6 Deployment Diagram.....	24
Gambar 2.7 Extreme Programming.....	25
Gambar 2.8 System Usability Scale Adjective Ratings.....	34
Gambar 2.9 Skala Penilaian System Usability Scale.....	34
Gambar 2.10 Fishbone Analysis.....	36
Gambar 3.1 Logo Universitas Esa Unggul.....	37
Gambar 3.2 Knowledge Management Lifecycle from an Individual’s Perspective.....	40
Gambar 3.3 Extreme Programming.....	42
Gambar 4.1 Fishbone Analysis.....	46
Gambar 4.2 Proses Bisnis Berjalan.....	48
Gambar 4.3 Use Case Diagram.....	53
Gambar 4.4 Activity Diagram Create and Publish Knowledge.....	55
Gambar 4.5 Activity Diagram Search, Read, Send Feedback, and Edit Knowledge.....	56
Gambar 4.6 Activity Diagram Validasi Knowledge.....	58
Gambar 4.7 Class Diagram.....	58
Gambar 4.8 Login & Register.....	59
Gambar 4.9 Home & Create Knowledge.....	60
Gambar 4.10 Search & Detail Knowledge.....	60
Gambar 4.11 My Knowledge & Profile.....	61
Gambar 4.12 list knowledge under review & detail review knowledge.....	61

Gambar 4.13 Struktur Folder.....	64
Gambar 4.14 Flutter Package.....	65
Gambar 4.15 Struktur Collection Knowledge.....	67
Gambar 4.16 Struktur Collection Comment.....	68
Gambar 4.17 Struktur Collection User.....	68
Gambar 4.18 Firebase Storage.....	69
Gambar 4.19 Hasil SUS.....	72
Gambar 4.20 Login & Register.....	80
Gambar 4.21 Home & Create Knowledge.....	81
Gambar 4.22 Search & Detail Knowledge.....	81
Gambar 4.23 My Knowledge & Profile.....	82