

DAFTAR ISI

ABSTRAK	i
ABSTRACT	ii
LEMBAR PENGESAHAN	iii
LEMBAR PERNYATAAN ORISINALITAS	iv
KATA PENGANTAR	v
DAFTAR ISI.....	vi
DAFTAR GAMBAR	x
DAFTAR TABEL.....	xii
DAFTAR LAMPIRAN.....	xiv
DAFTAR ISTILAH	xv
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang.....	1
I.2 Perumusan Masalah	5
I.3 Tujuan Penelitian	5
I.4 Batasan Penelitian.....	6
I.5 Manfaat Penelitian	6
I.6 Sistematika Penulisan	7
BAB II TINJAUAN PUSTAKA.....	10
II.1 Assistive Technology	10
II.2 Difabel Netra	11
II.3 <i>Usability</i>	15
II.3.1 <i>Usability Testing</i>	15
II.3.2 System Usability Scale	16
II.3.2 <i>Net Promoter Score (NPS)</i>	19

II.4 Software Development Life Cycle (SDLC).....	21
II.4.1. Metode SDLC <i>Model Iterative and Incremental</i>	22
II.4.2. Metode SDLC <i>Waterfall</i>	23
II.4.3 Metode SDLC <i>Extreme Programming</i>	24
II.5 Unified Modeling Language (UML)	25
II.5.1 <i>Use Case Diagram</i>	26
II.5.2 <i>Activity Diagram</i>	28
II.5.3 <i>Sequence Diagram</i>	28
II.5.4 <i>Class Diagram</i>	30
II.5.5 <i>Deployment Diagram</i>	31
II.6 Blackbox Testing	32
II.7 User Acceptance Testing	33
II.8 Android	33
II.9 Talkback	34
II.10 Software yang Digunakan	34
II.10.1 <i>Visual Studio Code</i>	34
II.10.2 <i>React Native</i>	35
II.10.3 <i>Firebase</i>	35
II.10 Penelitian Terdahulu.....	38
II.11 Alasan Pemilihan Metode.....	45
BAB III METODOLOGI PENELITIAN.....	48
III.1 Model Konseptual	48
III.2 Sistematika Penyelesaian Masalah.....	49
III.2.1 Tahap Identifikasi.....	50
III.2.2 Tahap Pengembangan	51
III.3 Pengumpulan Data	53

III.4 Pengembangan Produk.....	53
III.5 Metode Evaluasi.....	53
BAB IV ANALISIS DAN PERANCANGAN	55
IV.1 Analisis Proses Bisnis	55
IV.1.1 Proses Bisnis <i>Eksisting</i>	55
IV.1.2 Proses Bisnis <i>Targeting</i>	56
IV.2 Analisis Kebutuhan Sistem.....	56
IV.2.1 Analisis Kebutuhan Fungsional	56
IV.2.2 Analisis Kebutuhan Non Fungsional	58
IV.2.3 Spesifikasi Role	59
IV.2.4 Aktor	59
IV.2.5 <i>Use Case Diagram</i>	60
IV.2.5 Use Case Scenario.....	61
IV.2.6 <i>Activity Diagram</i>	69
IV.3 Perancangan <i>Backend</i>	81
IV.3.1 <i>Sequence Diagram</i>	81
IV.3.2 <i>Class Diagram</i>	92
IV.3.3 <i>Deployment Diagram</i>	93
IV.3.4 Perangkat Pengembangan	94
BAB V IMPLEMENTASI DAN PENGUJIAN	96
V.1 <i>Iterative Incremental</i> Fase Pertama.....	96
V.1.1 Tahap <i>Planning & Requirements</i>	96
V.1.2 Tahap <i>Analysis & Design</i>	97
V.1.3 Tahap <i>Implementation</i>	97
V.1.4 Tahap <i>Testing</i>	104
V.1.5 Tahap <i>Evaluation</i>	113

V.2 Iterative Incremental Fase Kedua	113
V.2.1 Tahap <i>Planning & Requirements</i> Fase Kedua	113
V.2.2 Tahap <i>Analysis & Design</i> Fase Kedua	114
V.2.3 Tahap <i>Implementation</i> Fase Kedua	115
V.2.4 Tahap <i>Testing</i> Fase Kedua	118
V.2.5 Tahap <i>Evaluation</i> Fase Kedua.....	125
V.2.6 Tahap <i>Deployment</i>	125
BAB VI KESIMPULAN DAN SARAN	127
VI.1 Kesimpulan	127
VI.2 Saran	128
DAFTAR PUSTAKA	129
LAMPIRAN.....	137