

## DAFTAR GAMBAR

Gambar I.1 Alur Penelitian .....	4
Gambar II.1 Rooftop Universitas Telkom Surabaya.....	16
Gambar II.2 Contoh <i>Wireframe low-fidelity</i> .....	20
Gambar II.3 Contoh <i>Wireframe high-fidelity</i> .....	21
Gambar III.1 SDLC Agile.....	35
Gambar III.2 Design System.....	36
Gambar IV.1 Metode Extreme Programming .....	45
Gambar IV.2 Arsitektur Sistem Iterasi Pertama .....	49
Gambar IV.3 Use Case Authentication .....	50
Gambar IV.4 Use Case Monitoring .....	53
Gambar IV.5 Use Case Classification.....	56
Gambar IV.6 Use Case Settings.....	59
Gambar IV.7 Robustness Diagram Login.....	62
Gambar IV.8 Robustness Diagram Register .....	63
Gambar IV.9 Robustness Diagram Forgot Password .....	64
Gambar IV.10 Robustness Diagram Monitoring .....	65
Gambar IV.11 Robustness Diagram Explore.....	66
Gambar IV.12 Robustness Diagram Log History .....	67
Gambar IV.13 Robustness Diagram Classification .....	68
Gambar IV.14 Robustness Diagram Export Data .....	69
Gambar IV.15 Robustness Diagram Detail Grafik .....	70
Gambar IV.16 Robustness Diagram Change PIN.....	71
Gambar IV.17 Robustness Diagram Logout.....	72
Gambar IV.18 Sequence Diagram Login.....	73
Gambar IV.19 Sequence Diagram Registrasi .....	75
Gambar IV.20 Sequence Diagram Forgot Password .....	76
Gambar IV.21 Sequence Diagram Monitoring .....	77
Gambar IV.22 Sequence Diagram Explore.....	79
Gambar IV.23 Sequence Diagram Log History .....	81
Gambar IV.24 Sequence Diagram Classification .....	83
Gambar IV.25 Sequence Diagram Report .....	85

Gambar IV.26 Sequence Diagram Detail Grafik .....	86
Gambar IV.27 Sequence Diagram Change PIN.....	87
Gambar IV.28 Sequence Diagram Logout.....	89
Gambar IV.29 Wireframe Login.....	90
Gambar IV.30 Wireframe Register .....	91
Gambar IV.31 Wireframe Forgot Password .....	92
Gambar IV.32 Wireframe Monitoring .....	93
Gambar IV.33 Wireframe Explore.....	95
Gambar IV.34 Wireframe Log History .....	96
Gambar IV.35 Wireframe Classification .....	97
Gambar IV.36 Wireframe Detail Grafik .....	98
Gambar IV.37 Wireframe Settings .....	99
Gambar IV.38 Wireframe Change PIN.....	100
Gambar IV.39 Grafik Hasil Iterasi Pertama.....	102
Gambar IV.40 Diagram Benchmark Iterasi Pertama .....	102
Gambar IV.41 Antates Storage Applications.....	103
Gambar IV.42 Application Detail .....	104
Gambar IV.43 API Http Antares.....	105
Gambar IV.44 Pengambilan Data dengan Postman.....	106
Gambar IV.45 Dataset Rata - Rata Kandungan Tanah .....	107
Gambar IV.46 Klasifikasi Data Menggunakan SVM .....	108
Gambar IV.47 Endpoint API.....	110
Gambar IV.48 Header Parameter .....	110
Gambar IV.49 Path Endpoint API .....	110
Gambar IV.50 Query Parameter .....	111
Gambar IV.51 List Query Parameter .....	111
Gambar IV.52 Data PH.....	111
Gambar IV.53 API Klasifikasi.....	112
Gambar IV.54 Access Key API .....	112
Gambar IV.55 Data API Klasifikasi .....	113
Gambar IV.56 Status Berhasil .....	113
Gambar IV.57 Status Gagal .....	114

Gambar IV.58 Hirearki Project Firebase .....	114
Gambar IV.59 Firebase Project.....	115
Gambar IV.60 Moon Apps Firebase .....	116
Gambar IV.61 Arsitektur Sistem Deteksi Penyakit .....	120
Gambar IV.62 Use Case Deteksi Penyakit .....	122
Gambar IV.63 Robustness Detection .....	126
Gambar IV.64 Robstuness Detection List.....	127
Gambar IV.65 Robustness Detecetion Detail .....	128
Gambar IV.66 Robustness Delete Data .....	129
Gambar IV.67 Robustness Search Data .....	130
Gambar IV.68 Robustness Filter Data .....	131
Gambar IV.69 Sequence Diagram Deteksi Penyakit .....	132
Gambar IV.70 Sequence Diagram History List .....	134
Gambar IV.71 Sequence Diagram Detection Detail .....	136
Gambar IV.72 Sequence Diagram Delete Data .....	138
Gambar IV.73 Sequence Diagram Search Data.....	139
Gambar IV.74 Sequence Diagram Filter Data .....	140
Gambar IV.75 Wireframe Detection.....	141
Gambar IV.76 Wireframe Result .....	142
Gambar IV.77 Wireframe List .....	143
Gambar IV.78 Wireframe Detail.....	144
Gambar IV.79 Wireframe Search Data.....	145
Gambar IV.80 Wireframe Filter List .....	146
Gambar IV.81 Wireframe Delete Data .....	147
Gambar IV.82 Grafik UEQ Iterasi Kedua.....	149
Gambar IV.83 Diagram Benchmark Iterasi Kedua.....	149
Gambar IV.84 Dataset Melon Sehat .....	150
Gambar IV.85 Dataset Melon Sakit.....	150
Gambar IV.86 Library Tensorflow .....	151
Gambar IV.87 Kode Baris Import Dataset.....	151
Gambar IV.88 Kode Baris Labelling Data.....	151
Gambar IV.89 Proses Plotting.....	152

Gambar IV.90 Proses Training Data.....	152
Gambar IV.91 Accuracy dan Loss Data Training.....	153
Gambar IV.92 Proses Prediksi Data.....	153
Gambar IV.93 Pembuatan dan Penyimpanan Model Data .....	154
Gambar IV.94 Endpoint API.....	155
Gambar IV.95 Pengiriman Data Via API .....	155
Gambar IV.96 Response API.....	155
Gambar IV.97 Simpan Data ke Realtime Database .....	156
Gambar IV.98 Realtime Database.....	157
Gambar IV.99 Kode Program Firestore Storage.....	157
Gambar IV.100 Firebase Storage.....	158
Gambar IV.101 Arsitektur Sistem Notification .....	160
Gambar IV.102 Use Case Diagram Notification .....	161
Gambar IV.103 Robustness Diagram Notification Push .....	162
Gambar IV.104 Robustness Diagram Notification List.....	163
Gambar IV.105 Robustness Diagram Notification Filter .....	164
Gambar IV.106 Robustness Diagram Notification Delete.....	165
Gambar IV.107 Sequence Diagram Notification Push .....	166
Gambar IV.108 Sequence Diagram Notification List.....	168
Gambar IV.109 Sequence Diagram Notification Filter .....	169
Gambar IV.110 Sequence Diagram Notification Delete.....	171
Gambar IV.111 Wireframe Notification List.....	173
Gambar IV.112 Wireframe Notification List.....	174
Gambar IV.113 Wireframe Notification Delete.....	175
Gambar IV.114 Grafik Hasil Pengukuran Iterasi Ketiga.....	177
Gambar IV.115 Diagram Benchmark Iterasi Ketiga.....	177
Gambar IV.116 Apps Native Notify .....	178
Gambar IV.117 AppId dan AppToken.....	178
Gambar IV.118 Native Notify API .....	179
Gambar IV.119 Pengujian API Notifikasi .....	179
Gambar V.1 Login Screen.....	184
Gambar V.2 Register Screen.....	186

Gambar V.3 Forgot PIN Screen .....	187
Gambar V.4 Web Page Reset PIN .....	188
Gambar V.5 Monitoring Screen .....	189
Gambar V.6 Explore Screen .....	190
Gambar V.7 Log History Screen.....	191
Gambar V.8 Classification Screen .....	193
Gambar V.9 Detail Grafik Screen .....	194
Gambar V.10 Change PIN Screen .....	196
Gambar V.11 Settings Screen .....	197
Gambar V.12 Desease Detection .....	222
Gambar V.13 Result.....	223
Gambar V.14 Detection List .....	224
Gambar V.15 Detection Detail.....	225
Gambar V.16 Search .....	226
Gambar V.17 Filter Data.....	227
Gambar V.18 Delete Data .....	228
Gambar V.19 List Notifikasi.....	239
Gambar V.20 Filter Notifikasi .....	240
Gambar V.21 Delete Notifikasi.....	241