

DAFTAR ISI

| | |
|--|------|
| HALAMAN PERNYATAAN KEASLIAN SKRIPSI..... | ii |
| HALAMAN PENGESAHAN | iii |
| KATA PENGANTAR..... | iv |
| HALAMAN PERNYATAAN PERSETUJUAN PUBLIKASI SKRIPSI | v |
| ABSTRAK..... | vi |
| ABSTRACT | vii |
| DAFTAR ISI | viii |
| DAFTAR TABEL | xi |
| DAFTAR GAMBAR..... | xii |
| BAB I PENDAHULUAN | 1 |
| 1.1 Latar Belakang..... | 1 |
| 1.2 Rumusan Masalah..... | 3 |
| 1.3 Tujuan | 3 |
| 1.4 Manfaat | 3 |
| 1.5 Ruang Lingkup | 3 |
| 1.6 Sistematika Penulisan | 4 |
| BAB II LANDASAN TEORI..... | 6 |
| 2.1 Tinjauan Pustaka..... | 6 |
| 2.2 Plat Nomor Kendaraan | 9 |
| 2.3 Aplikasi Mobile | 9 |
| 2.4 ICONIX <i>Process</i> | 10 |
| 2.5 <i>Unified Modeling Language</i> (UML) | 12 |
| 2.5.1 <i>Use Case Diagram</i> | 12 |
| 2.5.2 <i>Robustness Diagram</i> | 13 |
| 2.5.3 <i>Sequence Diagram</i> | 14 |
| 2.5.4 <i>Class Diagram</i> | 14 |
| 2.6 REST API..... | 17 |
| 2.7 Kotlin | 18 |
| 2.8 Android Studio | 19 |
| 2.9 Pengujian Perangkat Lunak | 19 |
| BAB III METODOLOGI PENELITIAN | 21 |

| | | |
|---|---|----|
| 3.1 | Metode Pengembangan Aplikasi | 21 |
| 3.1.1 | Tahap <i>Requirements</i> | 22 |
| 3.1.2 | Tahap Analisis | 22 |
| 3.1.3 | Tahap Perancangan..... | 22 |
| 3.1.4 | Tahap Implementasi dan Pengujian..... | 23 |
| BAB IV HASIL DAN PEMBAHASAN..... | | 24 |
| 4.1 | Tahap <i>Requirements</i> | 24 |
| 4.1.1 | <i>Focus Group Discuss</i> dan Observasi..... | 24 |
| 4.1.2 | Analisis Proses Bisnis..... | 25 |
| 4.1.3 | Kebutuhan Fungsional Aplikasi | 26 |
| 4.1.1 | <i>Domain Modelling</i> | 27 |
| 4.1.2 | Behavioral Requirements | 29 |
| 4.2 | Tahap Analisis | 36 |
| 4.2.1 | <i>Robustness Analysis</i> | 36 |
| 4.2.2 | <i>Updated Domain Model</i> | 41 |
| 4.2.3 | <i>Preliminary Design Review (PDR)</i> | 41 |
| 4.3 | Tahap Perancangan..... | 44 |
| 4.3.1 | <i>Sequence Diagram</i> | 45 |
| 4.3.2 | <i>Class Diagram</i> | 46 |
| 4.3.3 | <i>Critical Design Review</i> | 46 |
| 4.4 | Tahap Implementasi | 52 |
| 4.4.1 | Spesifikasi Perangkat..... | 52 |
| 4.4.2 | Implementasi Kelas | 54 |
| 4.4.3 | Implementasi Antarmuka | 54 |
| 4.4.4 | Implementasi Integrasi REST API | 63 |
| 4.4.5 | Implementasi RoomDatabase | 65 |
| 4.5 | Tahap Pengujian | 66 |
| BAB V KESIMPULAN DAN SARAN | | 67 |
| 5.1 | Kesimpulan..... | 67 |
| 5.2 | Saran | 67 |
| DAFTAR PUSTAKA..... | | 69 |
| LAMPIRAN 1. Dokumen Persetujuan Kebutuhan Fungsional Aplikasi | | 71 |
| LAMPIRAN 2. Rancangan Antarmuka..... | | 73 |
| LAMPIRAN 3. Class Diagram..... | | 81 |

| | |
|--|----|
| LAMPIRAN 4. Rencana Pengujian <i>Black Box</i> | 82 |
| LAMPIRAN 5. Hasil Pengujian <i>Black Box</i> | 85 |