

## DAFTAR ISI

|                                                                                   |       |
|-----------------------------------------------------------------------------------|-------|
| ABSTRAK .....                                                                     | i     |
| ABSTRACT .....                                                                    | ii    |
| LEMBAR PENGESAHAN .....                                                           | iii   |
| LEMBAR PERNYATAAN ORSINALITAS .....                                               | iv    |
| KATA PENGANTAR .....                                                              | v     |
| Daftar Isi.....                                                                   | vi    |
| Daftar Gambar.....                                                                | xi    |
| Daftar Tabel .....                                                                | xvi   |
| Daftar Lampiran .....                                                             | xviii |
| BAB I   Pendahuluan .....                                                         | 21    |
| I.1   Latar Belakang .....                                                        | 21    |
| I.2   Perumusan Masalah.....                                                      | 24    |
| I.3   Tujuan Penelitian.....                                                      | 25    |
| I.4   Batasan Penelitian .....                                                    | 25    |
| I.5   Manfaat Penelitian.....                                                     | 25    |
| BAB II   Tinjauan Pustaka.....                                                    | 26    |
| II.1   Makanan Halal .....                                                        | 26    |
| II.2   Label Halal .....                                                          | 27    |
| II.3   Sistem Informasi.....                                                      | 28    |
| II.4 <i>Software Development Life Cycle (SDLC)</i> .....                          | 29    |
| II.5   Metode SDLC Model Iterative and Incremental .....                          | 31    |
| II.6 <i>Design Thinking</i> .....                                                 | 34    |
| II.7   Integrasi <i>Iterative Incremental</i> dengan <i>Design Thinking</i> ..... | 35    |
| II.8 <i>User Acceptance Testing (UAT)</i> .....                                   | 36    |

|          |                                                    |    |
|----------|----------------------------------------------------|----|
| II.9     | <i>Load Testing</i> .....                          | 38 |
| II.10    | <i>Unified Modeling Language (UML)</i> .....       | 39 |
| II.11    | <i>Entity Relationship Diagram</i> .....           | 41 |
| II.12    | <i>Responsive Website Design</i> .....             | 43 |
| II.13    | Konsep Model <i>View Controller (MVC)</i> .....    | 43 |
| II.14    | Penelitian Terdahulu .....                         | 45 |
| BAB III  | METODOLOGI PENELITIAN .....                        | 47 |
| III.1    | Kerangka Berpikir .....                            | 47 |
| III.2    | Sistematika Penyelesaian Masalah.....              | 49 |
| III.2.1  | Tahap Pengembangan SDLC Iterative Incremental..... | 49 |
| III.3    | Pengumpulan Data .....                             | 53 |
| III.4    | Pengembangan Produk .....                          | 53 |
| III.5    | Metode Evaluasi .....                              | 54 |
| III.6    | Alasan Pemilihan Metode.....                       | 54 |
| BAB IV   | ANALISIS DAN PERANCANGAN .....                     | 60 |
| IV.1     | Analisis .....                                     | 60 |
| IV.1.1   | Analisis Proses Bisnis .....                       | 60 |
| IV.1.1.1 | Proses Bisnis <i>Review</i> Restoran .....         | 60 |
| IV.1.1.2 | Proses Bisnis Pengaduan Restoran .....             | 61 |
| IV.1.1.3 | Proses Bisnis Klaim Restoran.....                  | 62 |
| IV.1.2   | Analisis Kebutuhan Sistem .....                    | 62 |
| IV.1.2.1 | Kebutuhan Fungsional .....                         | 63 |
| IV.1.2.2 | Kebutuhan Non Fungsional .....                     | 67 |
| IV.1.3   | Spesifikasi <i>Role</i> .....                      | 68 |
| IV.1.4   | Aktor .....                                        | 71 |
| IV.1.5   | Use Case Diagram.....                              | 72 |

|           |                                                 |     |
|-----------|-------------------------------------------------|-----|
| IV.1.6    | Activity Diagram.....                           | 117 |
| IV.1.7    | <i>Sequence Diagram</i> .....                   | 160 |
| IV.1.7.1  | <i>Contributor</i> .....                        | 160 |
| IV.1.7.2  | <i>Reviewer</i> .....                           | 161 |
| IV.1.7.3  | <i>Review</i> .....                             | 163 |
| IV.1.7.4  | <i>Manage Restaurant Review</i> .....           | 165 |
| IV.1.7.5  | <i>Evaluate Restaurant Review</i> .....         | 168 |
| IV.1.7.6  | <i>Restaurant Reporting</i> .....               | 169 |
| IV.1.7.7  | <i>Manage Restaurant Report</i> .....           | 171 |
| IV.1.7.8  | <i>Evaluate Restaurant Report</i> .....         | 175 |
| IV.1.7.9  | <i>Restaurant Claiming</i> .....                | 176 |
| IV.1.7.10 | <i>Manage Restaurant Claim</i> .....            | 178 |
| IV.1.7.11 | <i>Evaluate Restaurant Claim</i> .....          | 182 |
| IV.1.7.12 | <i>Notification</i> .....                       | 183 |
| IV.2      | Perancangan Backend.....                        | 184 |
| IV.2.1    | <i>Entity Relationship Diagram</i> .....        | 184 |
| IV.2.2    | <i>Deployment Diagram</i> .....                 | 185 |
| IV.2.3    | Arsitektur Aplikasi .....                       | 186 |
| IV.2.4    | Perangkat Pengembangan .....                    | 187 |
| BAB V     | IMPLEMENTASI DAN PENGUJIAN .....                | 189 |
| V.1       | Initial Planning .....                          | 189 |
| V.2       | <i>Iterative Incremental Fase Pertama</i> ..... | 189 |
| V.2.1     | Tahap Planning.....                             | 189 |
| V.2.2     | Tahap Analysis & Design .....                   | 190 |
| V.2.3     | Tahap Implementation .....                      | 191 |
| V.2.3.1   | <i>Manage Restaurant Review</i> .....           | 191 |

|         |                                                |     |
|---------|------------------------------------------------|-----|
| V.2.3.2 | <i>Reviewer</i> .....                          | 194 |
| V.2.3.3 | <i>Review</i> .....                            | 195 |
| V.2.3.4 | <i>Restaurant Reporting</i> .....              | 199 |
| V.2.3.5 | <i>Manage Restaurant Report</i> .....          | 199 |
| V.2.3.6 | <i>Restaurant Claiming</i> .....               | 202 |
| V.2.3.7 | <i>Manage Restaurant Claim</i> .....           | 202 |
| V.2.4   | <i>Tahap Testing</i> .....                     | 204 |
| V.2.4.1 | <i>User Acceptance Testing</i> .....           | 204 |
| V.2.5   | <i>Evaluasi</i> .....                          | 209 |
| V.3     | <i>Iterative Incremental Fase Kedua</i> .....  | 210 |
| V.3.1   | <i>Tahap Planning</i> .....                    | 210 |
| V.3.2   | <i>Tahap Analysis &amp; Design</i> .....       | 211 |
| V.3.3   | <i>Tahap Implementation</i> .....              | 211 |
| V.3.3.1 | <i>Manage Restaurant Review</i> .....          | 212 |
| V.3.3.2 | <i>Restaurant Reporting</i> .....              | 213 |
| V.3.3.3 | <i>Restaurant Claiming</i> .....               | 214 |
| V.3.3.4 | <i>Evaluate Restaurant Review</i> .....        | 215 |
| V.3.3.5 | <i>Evaluate Restaurant Report</i> .....        | 216 |
| V.3.3.6 | <i>Evaluate Restaurant Claim</i> .....         | 217 |
| V.3.3.7 | <i>Manage Restaurant Report</i> .....          | 218 |
| V.3.4   | <i>Tahap Testing</i> .....                     | 219 |
| V.3.4.1 | <i>User Acceptance Testing</i> .....           | 220 |
| V.3.5   | <i>Evaluasi</i> .....                          | 225 |
| V.4     | <i>Iterative Incremental Fase Ketiga</i> ..... | 225 |
| V.4.1   | <i>Tahap Planning</i> .....                    | 225 |
| V.4.2   | <i>Tahap Analysis Design</i> .....             | 226 |

|                |                                         |      |
|----------------|-----------------------------------------|------|
| V.4.3          | Tahap Implementation .....              | 226  |
| V.4.3.1        | <i>Contributor</i> .....                | 227  |
| V.4.3.2        | <i>Manage Restaurant Reviewer</i> ..... | 228  |
| V.4.3.3        | <i>Manage Restaurant Review</i> .....   | 229  |
| V.4.3.4        | <i>Manage Restaurant Report</i> .....   | 230  |
| V.4.3.5        | <i>Manage Restaurant Claim</i> .....    | 231  |
| V.4.3.6        | <i>Notification</i> .....               | 232  |
| V.4.4          | Tahap <i>Testing</i> .....              | 233  |
| V.4.4.1        | <i>User Acceptance Testing</i> .....    | 234  |
| V.4.4.2        | <i>Load Testing</i> .....               | 237  |
| V.4.5          | Evaluation .....                        | 241  |
| V.5            | <i>Deployment</i> .....                 | 241  |
| BAB VI         | KESIMPULAN DAN SARAN .....              | 242  |
| VI.1           | Kesimpulan .....                        | 242  |
| VI.2           | Saran .....                             | 243  |
| DAFTAR PUSTAKA | .....                                   | 244  |
| LAMPIRAN       | .....                                   | ccli |