

DAFTAR ISI

| | |
|---|------|
| COVER | i |
| HALAMAN PENGESAHAN PEMBIMBING | ii |
| HALAMAN PENGESAHAN PENGUJI..... | iii |
| SURAT PERNYATAAN KARYA ASLI TUGAS AKHIR..... | iv |
| PERNYATAAN BEBAS PLAGIAT | v |
| HALAMAN PERSEMBAHAN..... | vi |
| ABSTRAK | vii |
| KATA PENGANTAR | viii |
| DAFTAR ISI..... | x |
| DAFTAR TABEL | xii |
| DAFTAR GAMBAR | xiii |
| DAFTAR MODUL PROGRAM | xiv |
| BAB I PENDAHULUAN | 1 |
| 1.1 Latar Belakang..... | 1 |
| 1.2 Rumusan Masalah..... | 4 |
| 1.3 Batasan Masalah | 4 |
| 1.4 Tujuan Penelitian | 4 |
| 1.5 Manfaat Penelitian | 5 |
| 1.6 Metodologi Penelitian | 5 |
| 1.6.1 Metodologi Pengumpulan Data..... | 5 |
| 1.6.2 Metodologi Pengembangan Sistem..... | 6 |
| 1.7 Sistematika Penulisan | 8 |
| BAB II TINJAUAN PUSTAKA..... | 10 |
| 2.1 Market Basket Analysis (MBA) | 10 |
| 2.2 Algoritma Fuzzy C-Means (FCM)..... | 11 |
| 2.3 Algoritma <i>FP-Growth</i> | 17 |
| 2.4 <i>Association Rule</i> | 25 |
| 2.4.1 <i>Support</i> | 25 |
| 2.4.2 <i>Confidence</i> | 26 |
| 2.4.3 <i>Lift Ratio</i> | 26 |
| 2.5 Kivy Framework | 27 |
| 2.6 Studi Pustaka..... | 28 |
| BAB III METODOLOGI PENELITIAN DAN PENGEMBANGAN SISTEM | 29 |
| 3.1 Metode Penelitian | 29 |
| 3.1.1 Pengumpulan Data | 30 |

| | | |
|--|--|----|
| 3.1.2 | <i>Data Preprocessing</i> | 30 |
| 3.1.3 | <i>Fp-Growth</i> | 32 |
| 3.1.4 | <i>Generated Association Rule</i> | 33 |
| 3.1.5 | <i>Fuzzy Association Rule</i> | 34 |
| 3.2 | Metodologi Pengembangan Sistem..... | 37 |
| 3.2.1 | Pengumpulan Data | 38 |
| 3.2.2 | Analisis Kebutuhan Sistem | 39 |
| 3.2.3 | Membangun <i>Prototyping</i> | 41 |
| 3.2.4 | Rancangan Antarmuka Sistem (<i>User Interface</i>) | 48 |
| 3.3 | Perancangan Pengujian Sistem | 53 |
| BAB IV HASIL, PENGUJIAN, DAN PEMBAHASAN..... | | 56 |
| 4.1 | Hasil..... | 56 |
| 4.1.1 | Antarmuka Login | 56 |
| 4.1.2 | Antarmuka Manage Users..... | 57 |
| 4.1.3 | Antarmuka Manage Products..... | 58 |
| 4.1.4 | Antarmuka <i>Guide</i> | 58 |
| 4.1.5 | Antarmuka Import Dataset..... | 59 |
| 4.1.6 | Antarmuka Aturan Asosiasi | 64 |
| 4.1.7 | Antarmuka Analisis Asosiasi | 66 |
| 4.1.8 | Data Tabel | 68 |
| 4.1.9 | Data Loader..... | 69 |
| 4.2 | <i>Data Mining</i> | 69 |
| 4.2.1 | <i>Association</i> | 69 |
| 4.2.2 | <i>Clustering</i> | 72 |
| 4.3 | Pengujian Aplikasi | 77 |
| 4.3.1 | Pengujian <i>Black box Testing</i> | 77 |
| 4.3.2 | Pengujian terhadap <i>association rule</i> | 79 |
| 4.3.3 | Pengujian <i>Silhouette Coefficient</i> | 80 |
| BAB V PENUTUP..... | | 82 |
| 5.1 | Kesimpulan | 82 |
| 5.2 | Saran | 82 |
| DAFTAR PUSTAKA | | 84 |
| LAMPIRAN..... | | 86 |