

## **ABSTRACT**

*Along with the development of a company, then there will be more transaction and more data which will be kept by the company. The company has to cautious with this problem if the company still use conventional method to keep transaction datas. Many information system software which sold in the market doesn't meet the customer need. This project is making application which handle datas at Chandra Photo, a company which selling photo printing service and selling photograph equipment. This application will do computerisation in handling datas at Chandra Photo so data will be more secure and searching data will be more easy. This report contain software requirements, software design, user interface design, application testing report, theories and data source that are used in making this application.*

*Keyword : Data handling,Accounting,Report.*

# DAFTAR ISI

LEMBAR PENGESAHAN .....	i
PRAKATA.....	iii
PERNYATAAN PUBLIKASI LAPORAN PENELITIAN .....	v
PERNYATAAN ORISINALITAS KARYA .....	vi
ABSTRACT .....	vii
DAFTAR ISI.....	viii
DAFTAR GAMBAR .....	xi
DAFTAR TABEL .....	xiv
DAFTAR LAMPIRAN .....	xvi
BAB I PENDAHULUAN.....	1
1.1 Latar Belakang.....	1
1.2 Rumusan Masalah .....	2
1.3 Tujuan Pembahasan.....	2
1.4 Ruang Lingkup Kajian.....	3
1.4.1 Batasan Masalah.....	3
1.5 Sumber Data .....	4
1.6 Sistematika Penyajian .....	5
BAB II KAJIAN TEORI .....	6
II.1 Sistem Informasi .....	6
II.2 Basis Data.....	7
II.2.1 <i>Entity Relationship</i> (Relasi Entitas) .....	9
II.2.2 Arsitektur Basis Data .....	11
II.2.3 <i>Query</i> .....	12
II.3 <i>UML</i> .....	14
II.3.1 <i>Class Diagram</i> .....	15
II.3.2 <i>Object Diagram</i> .....	15
II.3.3 <i>Use Case Diagram</i> .....	16
II.3.4 <i>Activity Diagram</i> .....	18
II.4 <i>MySQL</i> .....	20
II.4.1 Tabel <i>MySQL</i> .....	23
II.5 <i>JAVA</i> .....	25
II.5.1 Sejarah <i>Java</i> .....	25
II.5.2 Fitur <i>Java</i> .....	27
II.5.3 Kelebihan <i>Java</i> .....	28
II.5.4 Kekurangan <i>Java</i> .....	29
II.5.5 <i>Platform Java</i> .....	30
II.6 <i>NetBeans</i> .....	31
II.7 <i>Jasper Reports</i> .....	32
II.8 Akuntansi .....	33
II.8.1 Tujuan dan Kegunaan Akuntansi .....	33
II.8.2 Proses Kegiatan Akuntansi .....	34
BAB III ANALISIS DAN RANCANGAN SISTEM .....	38
III.1 Proses Bisnis .....	38
III.2 <i>Entity Relationship Diagram (ERD)</i> .....	41
III.2.1 Keterangan tabel .....	42
III.3 <i>UML</i> .....	45

III.3.1	<i>Use Case Diagram</i> .....	45
III.3.2	<i>Class Diagram</i> .....	46
III.3.3	<i>Activity Diagram</i> .....	50
III.4	Perancangan <i>User Interface</i> .....	60
III.4.1	Struktur Menu .....	60
III.4.2	<i>Sketsa User Interface</i> .....	61
BAB IV	HASIL PENELITIAN .....	80
IV.1	<i>Main Menu</i> .....	80
IV.2	<i>Form Customer</i> .....	81
IV.3	<i>Form Supplier</i> .....	82
IV.4	<i>Form</i> Barang, Perlengkapan dan Peralatan .....	83
IV.5	<i>Form</i> Pengambilan .....	84
IV.6	<i>Form</i> Retur .....	86
IV.7	<i>Form</i> Jasa .....	87
IV.8	<i>Form</i> Penjualan .....	88
IV.9	<i>Form</i> Pembelian .....	90
IV.10	<i>Form</i> Hutang .....	92
IV.11	<i>Form</i> Piutang .....	93
IV.12	<i>Form</i> Pendapatan Lain .....	94
IV.13	<i>Form</i> Pengeluaran Lain .....	95
IV.14	<i>Form</i> Daftar akun .....	96
IV.15	<i>Form</i> Jurnal Umum .....	97
IV.16	<i>Form</i> Buku Besar .....	98
IV.17	<i>Form</i> Neraca .....	99
IV.18	<i>Form</i> Laporan Laba Rugi .....	100
IV.19	<i>Form</i> Tambah Kas .....	100
IV.20	<i>Form</i> Kartu Stok .....	101
IV.21	<i>Form</i> Lihat Rekor .....	101
IV.22	<i>Form</i> Log .....	102
IV.23	<i>Form</i> Bantuan .....	103
IV.24	<i>Form</i> User .....	103
BAB V	PEMBAHASAN DAN UJI COBA HASIL PENELITIAN .....	105
V.1	<i>Test Case</i> .....	105
V.2	Hasil Uji Fungsionalitas <i>Class</i> .....	107
V.2.1	Pengujian <i>class login</i> .....	107
V.2.2	Pengujian <i>class data_customer</i> .....	107
V.2.3	Pengujian <i>class data_customer_form</i> .....	108
V.2.4	Pengujian <i>class data_supplier</i> .....	108
V.2.5	Pengujian <i>class data_supplier_form</i> .....	109
V.2.6	Pengujian <i>class data_barang</i> .....	109
V.2.7	Pengujian <i>class data_barang_form</i> .....	110
V.2.8	Pengujian <i>class data_retur_form</i> .....	110
V.2.9	Pengujian <i>class data_penjualan_form</i> .....	111
V.2.10	Pengujian <i>class data_pembelian_form</i> .....	111
V.2.11	Pengujian <i>class pendapatan_lain_form</i> .....	112
V.2.12	Pengujian <i>class pengeluaran_lain_form</i> .....	112
V.2.13	Pengujian <i>class data_jasa</i> .....	113
V.2.14	Pengujian <i>class data_jasa_form</i> .....	113
V.2.15	Pengujian <i>class data_user</i> .....	114
V.2.16	Pengujian <i>class log</i> .....	115
V.2.17	Pengujian <i>class jurnal_umum</i> .....	115

V.2.18 Pengujian <i>class</i> lihat_rekor.....	115
V.3 Kuesioner .....	116
BAB VI SIMPULAN DAN SARAN .....	118
VI.1 Simpulan .....	118
VI.2 Saran.....	118
DAFTAR PUSTAKA.....	119

## DAFTAR GAMBAR

Gambar 1. Jenjang Data .....	8
Gambar 2. ERD.....	10
Gambar 3. One to One.....	11
Gambar 4. One to Many.....	11
Gambar 5. Many to Many.....	11
Gambar 6. n-Tier.....	12
Gambar 7. Class .....	15
Gambar 8. Object.....	16
Gambar 9. Relasi use case.....	18
Gambar 10. Arsitektur JAVA .....	27
Gambar 11. Gambar laporan laba rugi.....	36
Gambar 12. Gambar neraca .....	37
Gambar 13. Flowchart Proses Bisnis-1 .....	39
Gambar 14. Flowchart Proses Bisnis-2.....	40
Gambar 15. Entity Relationship Diagram .....	41
Gambar 16. Use case diagram .....	45
Gambar 17. Relasi Class diagram .....	46
Gambar 18. Gambar class diagram – 1 .....	47
Gambar 19. Gambar class diagram – 2 .....	48
Gambar 20. Gambar class diagram – 3 .....	49
Gambar 21. Activity diagram barang.....	50
Gambar 22. Activity diagram perlengkapan .....	51
Gambar 23. Activity diagram pengambilan.....	52
Gambar 24. Activity diagram customer .....	52
Gambar 25. Activity diagram supplier .....	52
Gambar 26. Activity diagram pembelian.....	53
Gambar 27. Activity diagram tambah pembelian.....	53
Gambar 28. Activity diagram penjualan.....	54
Gambar 29. Activity diagram tambah penjualan.....	54
Gambar 30. Activity diagram retur.....	55
Gambar 31. Activity diagram pendapatan .....	55
Gambar 32. Activity diagram piutang .....	56
Gambar 33. Activity diagram pengeluaran .....	56
Gambar 34. Activity diagram hutang .....	57
Gambar 35. Activity diagram kartu stok.....	57
Gambar 36. Activity diagram log .....	58
Gambar 37. Activity diagram user.....	58
Gambar 38. Activity Diagram Laporan keuangan.....	59
Gambar 39. Struktur menu utama aplikasi .....	60
Gambar 40. Form login .....	61
Gambar 41. Form utama aplikasi .....	61
Gambar 42. Form customer .....	62
Gambar 43. Form add / edit customer .....	62
Gambar 44. Form supplier .....	63
Gambar 45. Form add / edit supplier.....	63
Gambar 46. Form penjualan .....	64
Gambar 47. Form tambah penjualan .....	64
Gambar 48. Form pembelian .....	65
Gambar 49. Form tambah pembelian .....	66
Gambar 50. Form barang.....	66
Gambar 51. Form perlengkapan .....	67
Gambar 52. Form peralatan .....	67

Gambar 53. <i>Form add/edit</i> barang, perlengkapan, peralatan.....	68
Gambar 54. <i>Form</i> peralatan .....	69
Gambar 55. <i>Form add/edit</i> jasa.....	69
Gambar 56. <i>Form</i> pengambilan .....	70
Gambar 57. <i>Form add / edit</i> pengambilan.....	70
Gambar 58. <i>Form</i> retur.....	71
Gambar 59. <i>Form add</i> retur.....	71
Gambar 60. <i>Form</i> hutang .....	72
Gambar 61. <i>Form</i> piutang .....	72
Gambar 62. <i>Form</i> bayar hutang .....	73
Gambar 63. <i>Form</i> user.....	73
Gambar 64. <i>Form add/edit</i> user .....	73
Gambar 65. <i>Form</i> pendapatan lain .....	74
Gambar 66. <i>Form</i> pengeluaran lain .....	74
Gambar 67. <i>Form add</i> pendapatan lain .....	74
Gambar 68. <i>Form add</i> pengeluaran lain.....	74
Gambar 69. <i>Form</i> jurnal umum .....	75
Gambar 70. <i>Form</i> buku besar .....	75
Gambar 71. <i>Form neraca</i> .....	76
Gambar 72. <i>Form</i> laporan laba rugi .....	76
Gambar 73. <i>Form</i> pajak penghasilan .....	77
Gambar 74. <i>Form</i> daftar akun .....	77
Gambar 75. <i>Form</i> tambah kas .....	77
Gambar 76. <i>Form</i> kartu stok .....	78
Gambar 77. <i>Form</i> lihat rekor .....	78
Gambar 78. Jendela <i>log</i> .....	79
Gambar 79. <i>Form</i> bantuan .....	79
Gambar 80. Tampilan <i>Form</i> utama aplikasi .....	80
Gambar 81. Tampilan <i>form customer</i> .....	81
Gambar 82. Tampilan <i>form add/edit customer</i> .....	81
Gambar 83. Tampilan <i>form supplier</i> .....	82
Gambar 84. Tampilan <i>form add/edit supplier</i> .....	82
Gambar 85. Tampilan <i>form</i> barang, perlengkapan dan peralatan.....	83
Gambar 86. Tampilan <i>form add/edit</i> barang, perlengkapan dan peralatan .....	84
Gambar 87. Tampilan <i>form</i> pengambilan .....	84
Gambar 88. Tampilan <i>form add</i> pengambilan .....	85
Gambar 89. Tampilan <i>form</i> retur .....	86
Gambar 90. Tampilan <i>form add</i> retur .....	86
Gambar 91. Tampilan <i>form</i> jasa.....	87
Gambar 92. Tampilan <i>form add</i> jasa.....	88
Gambar 93. Tampilan <i>form</i> penjualan.....	88
Gambar 94. Tampilan <i>form add</i> penjualan .....	89
Gambar 95. Tampilan <i>form</i> pembelian.....	90
Gambar 96. Tampilan <i>form add</i> pembelian .....	91
Gambar 97. Tampilan <i>form</i> hutang .....	92
Gambar 98. <i>Form</i> pembayaran hutang .....	92
Gambar 99. Tampilan <i>form</i> piutang.....	93
Gambar 100. <i>Form</i> pembayaran piutang .....	93
Gambar 101. Tampilan <i>form</i> pendapatan lain .....	94
Gambar 102. Tampilan <i>form add</i> pendapatan lain .....	94
Gambar 103. Tampilan <i>form</i> pengeluaran lain .....	95
Gambar 104. Tampilan <i>form add</i> pengeluaran lain .....	96
Gambar 105. Tampilan <i>form</i> daftar akun.....	96
Gambar 106. Tampilan <i>form</i> jurnal umum.....	97
Gambar 107. Tampilan <i>form</i> buku besar.....	98
Gambar 108. Tampilan <i>form</i> neraca .....	99
Gambar 109. Tampilan <i>form</i> laporan laba rugi.....	100

Gambar 110. Tampilan <i>form</i> tambah kas .....	100
Gambar 111. Tampilan <i>form</i> kartu stok .....	101
Gambar 112. Tampilan <i>form</i> lihat rekor .....	101
Gambar 113. Tampilan <i>form log</i> .....	102
Gambar 114. Tampilan <i>form</i> bantuan .....	103
Gambar 115. Tampilan <i>form</i> Verifikasi <i>user</i> .....	103
Gambar 116. Tampilan <i>form user</i> .....	104

## DAFTAR TABEL

Tabel I. Notasi <i>Use Case</i> .....	17
Tabel II. Notasi <i>activity diagram</i> .....	19
Tabel III. Notasi <i>flowchart diagram</i> .....	20
Tabel IV. Tabel <i>customer</i> .....	42
Tabel V. Tabel <i>supplier</i> .....	42
Tabel VI. Barang .....	42
Tabel VII. Tabel Pengambilan .....	42
Tabel VIII. Tabel Penjualan .....	43
Tabel IX. Tabel detail penjualan.....	43
Tabel X. Tabel pembelian .....	43
Tabel XI. Tabel detail pembelian.....	43
Tabel XII. Tabel retur .....	43
Tabel XIII. Tabel detail retur .....	43
Tabel XIV. Tabel pendapatan lain .....	44
Tabel XV. Tabel pengeluaran lain .....	44
Tabel XVI. Tabel <i>log</i> .....	44
Tabel XVII. Tabel <i>user</i> .....	44
Tabel XVIII. Tabel daftar akun.....	44
Tabel XIX. Tabel jurnal umum.....	44
Tabel XX. Tabel kartu stok .....	44
Tabel XXI. Hasil pengujian <i>class login</i> .....	107
Tabel XXII. Hasil pengujian <i>class data_customer</i> .....	107
Tabel XXIII. Hasil pengujian <i>class data_customer_form</i> .....	108
Tabel XXIV. Hasil pengujian <i>class data_supplier</i> .....	108
Tabel XXV. Hasil pengujian <i>class data_supplier_form</i> .....	109
Tabel XXVI. Hasil pengujian <i>class data_barang</i> .....	109
Tabel XXVII. Hasil pengujian <i>class data_barang_form</i> .....	110
Tabel XXVIII. Hasil pengujian <i>class data_retur_form</i> .....	110
Tabel XXIX. Hasil pengujian <i>class data_penjualan_form</i> .....	111
Tabel XXX. Hasil pengujian <i>class data_pembelian_form</i> .....	111
Tabel XXXI. Hasil pengujian <i>class pendapatan_lain_form</i> .....	112
Tabel XXXII. Hasil pengujian <i>class pengeluaran_lain_form</i> .....	112
Tabel XXXIII. Hasil pengujian <i>class data_jasa</i> .....	113
Tabel XXXIV. Hasil pengujian <i>class data_jasa_form</i> .....	113



Tabel XXXV. Hasil pengujian <i>class data_user</i> .....	114
Tabel XXXVI. Hasil pengujian <i>class log</i> .....	115
Tabel XXXVII. Hasil pengujian <i>class jurnal_umum</i> .....	115
Tabel XXXVIII. Hasil pengujian <i>class lihat_rekor</i> .....	115

## DAFTAR LAMPIRAN

LAMPIRAN A KUESIONER .....	A
LAMPIRAN B HASIL CETAK .....	B