

ABSTRAK

Toko Setia Usaha adalah sebuah toko imitasi yang bertempat di Bandung. Mereka membutuhkan sebuah aplikasi yang dapat membantu proses dalam pencatatan setiap transaksi *inventory* dan penjualan. Aplikasi ini bertujuan untuk dapat membantu pengguna dalam mengolah data-data yang ada di dalam *database* dan juga agar pengguna dapat melihat laporan barang-barang yang datang dan laporan penjualan suatu barang. Teknologi yang dipakai dalam pembuatan aplikasi ini adalah .NET FrameWork yang merupakan salah satu teknologi untuk menciptakan aplikasi *desktop* dengan menggunakan bahasa pemrograman C# yang merupakan bahasa pemrograman berjenis OOP (*Object Oriented Programming*). *Database* yang digunakan dalam pembuatan aplikasi ini adalah SQL Server 2005.

Keywords: inventory, penjualan, .NET FrameWork, C#, SQL Sever 2005

ABSTRACT

Setia Usaha is an imitation shop that is located in Bandung. They need an application that can record any transaction including inventory and sales. This application aims to help users to process the data in database and the users can view the report items and sales report. The technology used in the making of this application is .NET Framework which is one of the technology to create a desktop application using the programming language C#. The database which is used to build this application is SQL Server 2005.

Keywords: inventory, sales, NET FramekWork, C#, SQL Server 2005

DAFTAR ISI

PRAKATA.....	i
ABSTRAK.....	vi
ABSTRACT.....	vii
DAFTAR ISI.....	viii
DAFTAR GAMBAR.....	xi
DAFTAR TABEL.....	xv
BAB I PENDAHULUAN.....	1
1.1. Latar Belakang Masalah.....	1
1.2. Rumusan Masalah	2
1.3. Tujuan	2
1.4. Batasan Masalah.....	2
1.5. Ruang Lingkup Kajian	3
1.6. Sumber Data	3
1.7. Sistematika Penulisan	4
BAB II KAJIAN TEORI.....	5
2.1 Konsep.....	5
2.1.1 Sistem	5
2.1.2 Informasi.....	7
2.1.3 Sistem Informasi.....	7
2.2 Tools Analisis	9
2.2.1 <i>Flowchart</i>	9
2.3 Tools Pemodelan	12
2.3.1 ERD (<i>Entity Relationship Diagram</i>)	12
2.3.2 Kardinalitas Relasi.....	15

2.3.3	UML (<i>Unified Modelling Language</i>)	17
2.4	Tools Perancangan	24
2.4.1	Microsoft SQL Server 2005.....	24
2.5	<i>Black Box Testing</i>	30
BAB III ANALISIS DAN PERANCANGAN SISTEM.....		32
3.1	Proses Bisnis	32
3.1.1.	Proses Pembelian.....	32
3.1.2.	Proses Pergudangan.....	32
3.1.3.	Proses Penjualan.....	33
3.2	ERD (<i>Entity Relationship Diagram</i>).....	36
3.3	ER to Relation	38
3.4	UML (<i>Unified Modelling Language</i>)	41
3.4.1.	<i>Use Case Diagram</i>	41
3.4.2.	<i>Activity Diagram</i>	44
3.4.3.	<i>Class Diagram</i>	61
3.5	Rancangan Tampilan Aplikasi	62
BAB IV HASIL PENELITIAN.....		74
4.1.	Tampilan Antarmuka dengan Pengguna.....	74
BAB V PEMBAHASAN DAN UJI COBA HASIL PENELITIAN.....		92
5.1.	Evaluasi Rumusan Masalah	92
5.2	Evaluasi Fungsi	92
5.3	Evaluasi <i>Error Handling</i>	94
5.3.1.	<i>Error Handling</i> Ketika Login.....	94
5.3.2.	<i>Error Handling</i> Ketika Textbox Kosong.....	94
5.3.3.	<i>Error Handling</i> Ketika Gagal Dalam Menambah Data.....	95
5.3.4.	<i>Error Handling</i> Ketika Insert Gagal Pada Good Receipt Dan Sales Order.....	95
5.3.5.	<i>Error Handling</i> Karena Anomali Data	96

5.4.	Pengujian <i>Black Box</i>	96
BAB VI	SIMPULAN DAN SARAN.....	98
6.1.	Simpulan	98
6.2.	Saran	98
DAFTAR PUSTAKA.....		99

DAFTAR GAMBAR

Gambar 1 Contoh Relasi 1-1 (Hartini, 2006)	15
Gambar 2 Contoh Relasi N-1 (Hartini, 2006)	15
Gambar 3 Contoh Relasi 1-N (Hartini, 2006)	16
Gambar 4 Contoh Relasi N-N (Hartini, 2006)	16
Gambar 5 Contoh ERD (Hartini, 2006)	16
Gambar 6 Contoh <i>Use Case Diagram</i> (Dharwiyanti Sri, 2004)	19
Gambar 7 Contoh <i>Include Relationship</i> (Dharwiyanti Sri, 2004)	20
Gambar 8 Contoh <i>Extend Relationship</i> (Dharwiyanti Sri, 2004)	20
Gambar 9 Contoh <i>Activity Diagram</i> (Dharwiyanti Sri, 2004)	22
Gambar 10 Contoh <i>Class Diagram</i> (Dharwiyanti Sri, 2004)	23
Gambar 11 Relasi <i>Class Diagram</i> (Dharwiyanti Sri, 2004)	23
Gambar 12 Relasi <i>Class Diagram 2</i> (Dharwiyanti Sri, 2004)	24
Gambar 13 Relasi <i>Class Diagram 3</i> (Dharwiyanti Sri, 2004)	24
Gambar 14 <i>Flowchart</i> Pergudangan	34
Gambar 15 <i>Flowchart</i> Penjualan	35
Gambar 16 ERD	37
Gambar 17 Tabel Relasi	40
Gambar 18 <i>Use Case Diagram</i> dengan Aktor Owner	41
Gambar 19 <i>Use Case</i> dengan Aktor Admin	42
Gambar 20 <i>Activity Diagram item</i>	44
Gambar 21 <i>Swimlane item</i>	45
Gambar 22 <i>Activity Diagram Vendor</i>	46
Gambar 23 <i>Swimlane Vendor</i>	47
Gambar 24 <i>Activity Diagram UoM</i>	49
Gambar 25 <i>Swimlane UoM</i>	49

Gambar 26 <i>Activity Diagram Good Receipt</i>	50
Gambar 27 <i>Swimlane Good Receipt</i>	51
Gambar 28 <i>Activity Diagram Stock</i>	52
Gambar 29 <i>Swimlane Stock</i>	53
Gambar 30 <i>Activity Diagram Customer</i>	54
Gambar 31 <i>Swimlane Customer</i>	54
Gambar 32 <i>Activity Diagram Sales</i>	55
Gambar 33 <i>Swimlane Sales</i>	56
Gambar 34 <i>Activity Diagram Package</i>	57
Gambar 35 <i>Swimlane Package</i>	58
Gambar 36 <i>Activity Diagram Payment</i>	59
Gambar 37 <i>Swimlane Payment</i>	59
Gambar 38 <i>Activity Diagram Report</i>	60
Gambar 39 <i>Class Diagram</i>	61
Gambar 40 Tampilan <i>Login</i>	63
Gambar 41 Tampilan <i>Home</i>	63
Gambar 42 Daftar Fitur	64
Gambar 43 <i>Form New Item</i>	64
Gambar 44 <i>Form Edit Item</i>	65
Gambar 45 <i>Form Search</i>	65
Gambar 46 <i>Add Customer Form</i>	66
Gambar 47 <i>Edit Customer Form</i>	66
Gambar 48 <i>View Customer Form</i>	67
Gambar 49 <i>Add Package Form</i>	67
Gambar 50 <i>View Package Form</i>	68
Gambar 51 <i>Add UoM Form</i>	68
Gambar 52 <i>View UoM Form</i>	69
Gambar 53 <i>Add Vendor Form</i>	69

Gambar 54 <i>Edit Vendor Form</i>	70
Gambar 55 <i>View Vendor Form</i>	70
Gambar 56 <i>Add Good Receipt Header</i>	71
Gambar 57 <i>Add Good Receipt Detail</i>	71
Gambar 58 <i>Add Good Receipt Payment</i>	72
Gambar 59 <i>View Good Receipt</i>	72
Gambar 60 <i>Add Sales Order Detail</i>	73
Gambar 61 <i>Add Sales Order Payment</i>	73
Gambar 62 <i>View Sales Order</i>	74
Gambar 63 Tampilan Halaman <i>Login</i>	74
Gambar 64 Tampilan Halaman <i>Home</i>	75
Gambar 65 <i>Add Customer Form</i>	75
Gambar 66 <i>Edit Customer Form</i>	76
Gambar 67 <i>View Customer Form</i>	76
Gambar 68 <i>Add Item Form</i>	77
Gambar 69 <i>Edit Item Form</i>	77
Gambar 70 <i>View Item Form</i>	78
Gambar 71 <i>Add Package Form</i>	78
Gambar 72 <i>View Pakcage Form</i>	79
Gambar 73 <i>Good Receipt Payment</i>	79
Gambar 74 <i>View Sales Payment</i>	80
Gambar 75 <i>Add Price Form</i>	80
Gambar 76 <i>View & Edit Price</i>	81
Gambar 77 <i>Add Vendor Form</i>	81
Gambar 78 <i>Edit Vendor Form</i>	82
Gambar 79 <i>View Vendor Form</i>	82
Gambar 80 <i>Good receipt header</i>	83
Gambar 81 <i>Good receipt detail</i>	83

Gambar 82 <i>Good receipt payment</i>	84
Gambar 83 <i>View Good Receipt</i>	84
Gambar 84 <i>View Good Receipt Detail</i>	85
Gambar 85 <i>Sales Header</i>	85
Gambar 86 <i>Sales Detail</i>	86
Gambar 87 <i>Sales Payment</i>	86
Gambar 88 <i>Sales Package</i>	87
Gambar 89 <i>View Sales</i>	87
Gambar 90 <i>View Sales Detail</i>	87
Gambar 91 <i>View Stock</i>	88
Gambar 92 <i>View Warehouse</i>	88
Gambar 93 <i>Item Stock</i>	89
Gambar 94 <i>good receipt in month</i>	89
Gambar 95 <i>Sales in Month</i>	90
Gambar 96 <i>Sales day</i>	90
Gambar 97 <i>Customer Shop</i>	91
Gambar 98 <i>Item Sales</i>	91
Gambar 99 <i>Sales Payment</i>	92
Gambar 100 <i>Error Handling Ketika Login</i>	94
Gambar 101 <i>Error Handling Ketika Textbox Kosong</i>	94
Gambar 102 Gagal <i>Error Handling Ketika Gagal Menambah Data Baru</i>	95
Gambar 103 <i>Error Handling Ketika Insert Gagal Pada Good Receipt Dan Sales Order</i>	95
Gambar 104 <i>Error Handling Karena Anomali Data</i>	96

DAFTAR TABEL

Tabel I Simbol Flowchart dan definisinya (Dharwiyanti Sri, 2004).....	11
Tabel II Notasi ERD (Hartini, 2006)	14
Tabel III Notasi <i>Use Case Diagram</i> (Dharwiyanti Sri, 2004)	18
Tabel IV Komponen <i>Activity Diagram</i> (Dharwiyanti Sri, 2004).....	21
Tabel V Tipe data Microsoft SQL Server – Integer(SQL, Wikipedia)	25
Tabel VI Tipe data Microsoft SQL Server – String (SQL, Wikipedia)	26
Tabel VII Tipe data Microsoft SQL Server - Unicode String (SQL, Wikipedia).....	26
Tabel VIII Tipe data Microsoft SQL Server - Binary String (SQL, Wikipedia)	26
Tabel IX ER <i>to Relation</i>	38