Makalah Pembuatan Aplikasi Toko Roti Lagoods

Mata kuliah : Rekayasa Perangkat Lunak

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KATA PENGANTAR

Segala puji dan syukur kita panjatkan kepada Tuhan Allah SWT, atas rahmat dan hidayah nya sehingga kami dapat menyelesaikan tugas makalah ini,tak lupa shalawat serta salam semoga tetap tercurahkan kepada junjungan kita Nabi Muhammad SAW.

Adapun maksud dan tujuan dari penyusunan makalah ini adalah untuk memenuhi salah satu tugas yang diberikan oleh dosen pada mata kuliah Rekayasa Perangkat Lunak dan dalam rangka meningkatkan pengetahuan dalam matakuliah Rekayasa Perangkat Lunak .

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Kami selaku penyusun makalah ini sadar bahwa makalah inimasih banyak kekurangan, karena kami menjumpai banyak hambatan dalam penyusunan makalah ini, maka dari itu kami mengharapkan saran dan kritik yang membangun agar kami dapat memperbaiki kesalahan dengan sebaik-baiknya dan kami juga berharap agar makalah ini dapat memberikan banyak manfaat

MEDAN, JULI 2023

THE RENTOS

DAFTAR ISI

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BAB 1

1.1 Fungsi Anggota Tim

Leader   : Sebagai pemimpin jawab tim

Analisis   : Sebagai penganalisisan bagaimana aplikasi akan dibuat.

Proggrammer : Sebagai pembuat program

Desain   : Sebagai pembuat tampilan interface agar pengguna dapat dengan mudah memakai program.

Tester   : Sebagai penguji coba hasil akhir program.

1.2 Latar Belakang

Pada 10 Mei 2023, kami pergi ke toko roti "Lagoods" yang dimiliki oleh ibu Mutia yang terletak di Binjai Sumatera Utara. Sebelum pergi kesana kami sudah dapat kabar ada toko yang mungkin perlu sebuah pengkomputerisasian data pembelian dan penjualan, tapi masih diragukan akan keperluannya, oleh karna itu mungkin kami perlu observasi apa saja yang diperlukan oleh toko tersebut.

Pada saat kami sampai disana, kami disambut pemilik toko rotinya langsung yakni oleh ibut Mutia tersebut, sebelum masuk ke observasi kami disuguhkan makanan, setelah itu kami mulai berbincang-bincang akan hal-hal apa yang dirasakan toko tersebut.

Disana kami bercerita banyak hal tentang kesulitan kesulitan mereka dalam beberapa hal di dalam toko tersebut yakni :

 a. Kurang terstrukturnya data yang ada (bon jual dan beli).
 b. Kehilangan banyak data (bon jual dan beli)
 c. Kesulitan dalam menghitung keuntungan dan kerugian
 d. Kesulitan dalam melihat sisa stok
 e. Kesulitan dalam mendata catering

BAB 2

2.1. Analisis Kebutuhan Pelanggan

Sebelum masuk kelatar belakang, menggunakan metode waterfall. Metode waterfall adalah salah satu pendekatan yang digunakan dalam pengembangan perangkat lunak. Pendekatan ini mengikuti aliran linear dari satu tahap ke tahap berikutnya, mirip dengan air terjun (waterfall) yang mengalir dari atas ke bawah. Metode waterfall didasarkan pada urutan tahap-tahap yang ditentukan sebelumnya, di mana setiap tahap harus selesai sebelum memulai tahap berikutnya.

Berikut adalah tahapan utama dalam metode waterfall:

 1. Analisis Kebutuhan: Tahap ini melibatkan pengumpulan kebutuhan dan persyaratan pengguna. Tujuannya adalah memahami kebutuhan sistem yang akan dikembangkan.

2. Perancangan: Setelah kebutuhan dikumpulkan, tahap ini melibatkan merancang struktur dan arsitektur sistem secara keseluruhan. Ini mencakup merancang antarmuka pengguna, struktur database, dan desain komponen sistem lainnya.

3. Implementasi: Tahap ini adalah saat di mana kode sebenarnya ditulis dan komponen sistem dikembangkan. Tim pengembang bekerja sesuai dengan rencana yang dibuat pada tahap perancangan.

4. Pengujian: Setelah implementasi selesai, tahap ini melibatkan pengujian sistem secara menyeluruh. Tujuan utamanya adalah memverifikasi bahwa sistem berfungsi seperti yang diharapkan dan memenuhi kebutuhan pengguna.

5. Deployment: Setelah pengujian selesai dan sistem dianggap siap, tahap ini melibatkan pengiriman sistem ke lingkungan produksi atau pengguna akhir.

6. Pemeliharaan: Tahap terakhir adalah pemeliharaan sistem. Ini melibatkan pemantauan sistem yang sudah dideploy, penanganan masalah yang muncul, serta pembaruan dan peningkatan jika diperlukan.

Metode waterfall sering digunakan dalam proyek-proyek yang memiliki kebutuhan yang jelas dan stabil, serta ketika perubahan kebutuhan diharapkan minimal. Namun, metode ini kurang fleksibel terhadap perubahan kebutuhan yang mungkin muncul selama pengembangan.

Setelah berdiskusi dengan client, team kami memutuskan untuk membuat aplikasi sederhana yang dapat memudahkan client dalam :

a. Mengurutkan data yang ada
b. Menyimpan banyak data
c. Memudahkan dalam menghitung keuntungan dan kerugian
d. Memudahkan dalam melihat sisa stok
e. Memudahkan dalam mendata catering

BAB 3
3.1 DESAIN
Dalam konteks desain secara umum, desain merujuk pada proses merencanakan dan membuat solusi atau produk yang memenuhi kebutuhan dan tujuan tertentu. Desain melibatkan pemikiran kreatif, penelitian, analisis, dan penggunaan elemen-elemen desain untuk menciptakan sesuatu yang fungsional, estetis, dan efektif.

Dalam desain, terdapat beberapa aspek yang perlu dipertimbangkan, termasuk:

1. Fungsi: Desain harus memenuhi fungsi atau kebutuhan tertentu. Misalnya, desain produk harus mampu melakukan tugas yang dimaksudkan dengan baik.

2. Estetika: Desain harus memiliki tampilan visual yang menarik atau estetis. Ini melibatkan pemilihan warna, bentuk, proporsi, dan elemen-elemen desain lainnya untuk menciptakan kesan yang diinginkan.

3. Ergonomi: Desain harus mempertimbangkan faktor-faktor manusia, seperti kenyamanan, keselamatan, dan efisiensi penggunaan. Ini berarti memikirkan bagaimana produk akan digunakan oleh pengguna dan memastikan bahwa desainnya memungkinkan penggunaan yang mudah dan nyaman.

4. Teknis: Desain harus mempertimbangkan batasan teknis, seperti bahan yang tersedia, metode produksi, dan ketersediaan sumber daya. Desain harus dapat direalisasikan secara fisik atau teknis.

5. Inovasi: Desain sering kali melibatkan elemen inovasi, di mana ide-ide baru dan kreatif diterapkan untuk menciptakan solusi yang unik dan efektif.

Dalam konteks desain grafis, desain merujuk pada proses membuat komunikasi visual menggunakan elemen-elemen desain seperti tipografi, gambar, warna, dan tata letak. Desain grafis digunakan dalam pembuatan logo, poster, brosur, situs web, dan berbagai media visual lainnya.

Secara keseluruhan, desain melibatkan perencanaan dan penciptaan solusi yang baik dalam berbagai bidang, termasuk desain produk, desain grafis, arsitektur, desain interior, dan banyak lagi. Desain yang baik memadukan fungsi, estetika, ergonomi, dan inovasi untuk menciptakan hasil yang memuaskan dan efektif.

3.2 Flowchart

Flowchart adalah representasi visual dari alur atau urutan langkah-langkah dalam suatu proses atau algoritma. Flowchart menggunakan simbol-simbol grafis yang mewakili berbagai tindakan atau keputusan dan menghubungkannya dengan panah yang menunjukkan arah aliran dari satu langkah ke langkah berikutnya.

Flowchart digunakan untuk memvisualisasikan dan memahami proses yang kompleks secara sistematis. Ini membantu dalam mengidentifikasi langkah-langkah yang harus diambil, kondisi yang harus dipertimbangkan, pengulangan atau looping, dan aliran informasi atau data dalam suatu proses.

Flowchart biasanya digunakan dalam pengembangan perangkat lunak, pemrograman komputer, analisis bisnis, perencanaan proyek, dan

 berbagai bidang lainnya yang melibatkan proses atau algoritma. Dengan menggunakan simbol-simbol yang telah ditentukan, flowchart menyederhanakan pemahaman tentang bagaimana suatu proses berjalan dan memungkinkan pengguna untuk mengidentifikasi masalah atau perbaikan yang mungkin diperlukan.

Contoh simbol-simbol yang umum digunakan dalam flowchart telah disebutkan sebelumnya, seperti simbol awal/akhir, simbol tindakan, simbol keputusan, simbol penghubung, simbol input/output, dan simbol pengulangan. Dengan menggabungkan simbol-simbol ini dalam urutan yang tepat, flowchart menggambarkan urutan langkah-langkah yang harus diikuti untuk menyelesaikan suatu tugas atau mencapai hasil yang diinginkan.

Flowchart adalah alat yang efektif untuk komunikasi visual, kolaborasi tim, pemecahan masalah, dan dokumentasi proses. Dalam desain flowchart, penting untuk membuat diagram yang jelas, terstruktur, dan mudah dimengerti oleh orang lain yang melihatnya.

Perancangan

Setelah informasi dan data dikumpulkan, tahap perancangan dimulai. Pada tahap ini dilakukan beberapa rancangan yaitu use case diagram, flowchart, ERD, database dan normalisasi database dan design form.

Pengembangan

Tahap pengembangan melibatkan penerapan rancangan aplikasi Toko yang telah dibuat dalam tahap sebelumnya. Programmers menulis coding, mengabungkan komponen, dan menguji modul perangkat lunak secara terpisah.

Pengujian

Setelah pengembangan, aplikasi penjualan yang dihasilkan diuji secara menyeluruh dengan menginput seluruh dokumen manual yang telah dikumpulkan pada saat observasi ke dalam aplikasi untuk memastikan telah memenuhi persyaratan yang telah ditetapkan sebelumnya. Pengujian dapat mencakup pengujian fungsionalitas, pengujian integrasi, pengujian keamanan, dan pengujian kinerja.
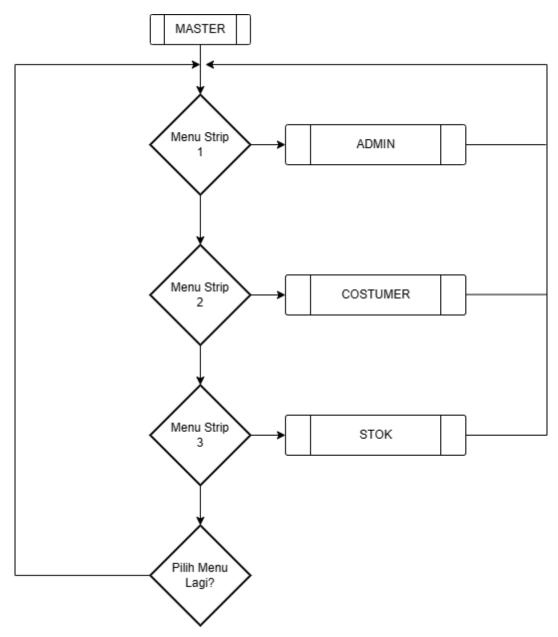
Implementasi

Setelah perangkat lunak melewati pengujian dan dinyatakan siap untuk digunakan, tahap penerapan dimulai. Aplikasi penjualan diterapkan di Toko Roti Lagoods dan digunakan oleh pengguna sesuai dengan kebutuhan yang diinginkan oleh pemilik Toko.
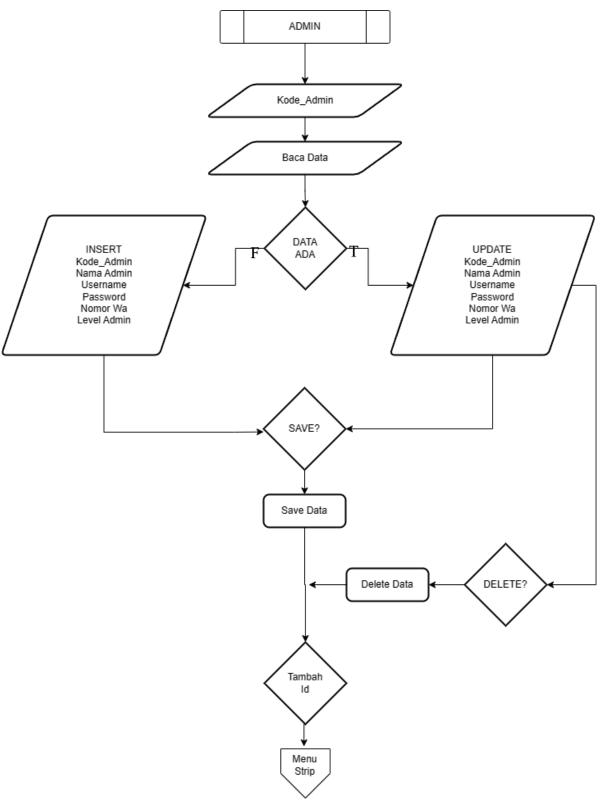
Pemeliharaan

Tahap pemeliharaan melibatkan perawatan aplikasi penjualan setelah penggunaan. Kelompok pengelola proyek akan mengelola perbaikan bug, memperbarui fitur, dan memberikan dukungan teknis yang diperlukan.
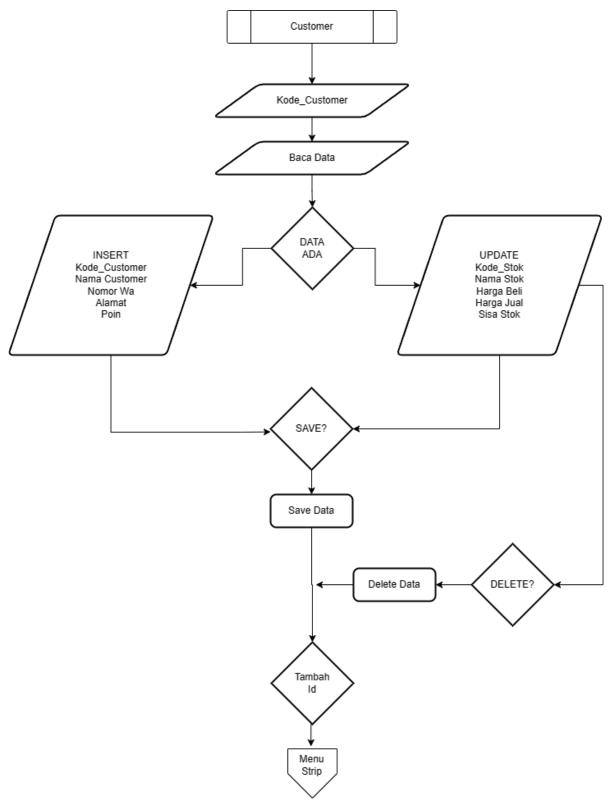
3.3 Stok Admin Master

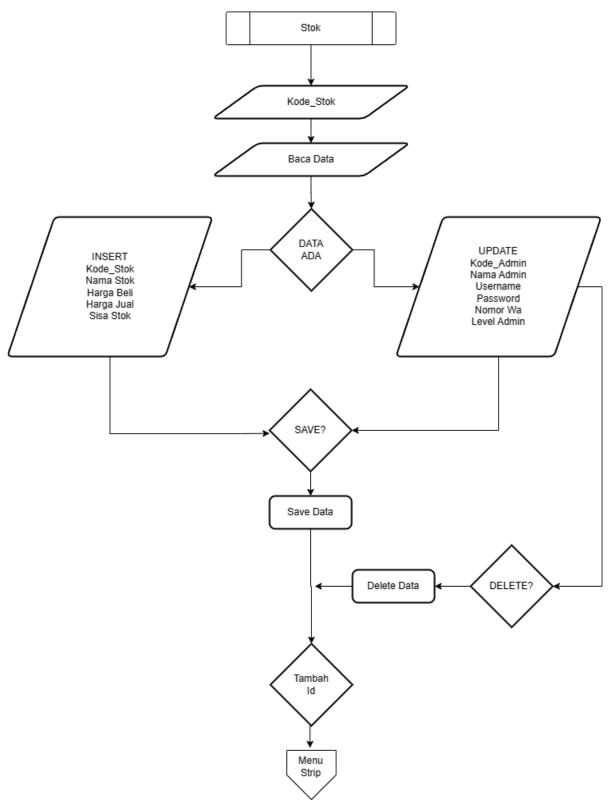*Gambar 3. 1 Flowchart Master*

3.4 Menu Admin

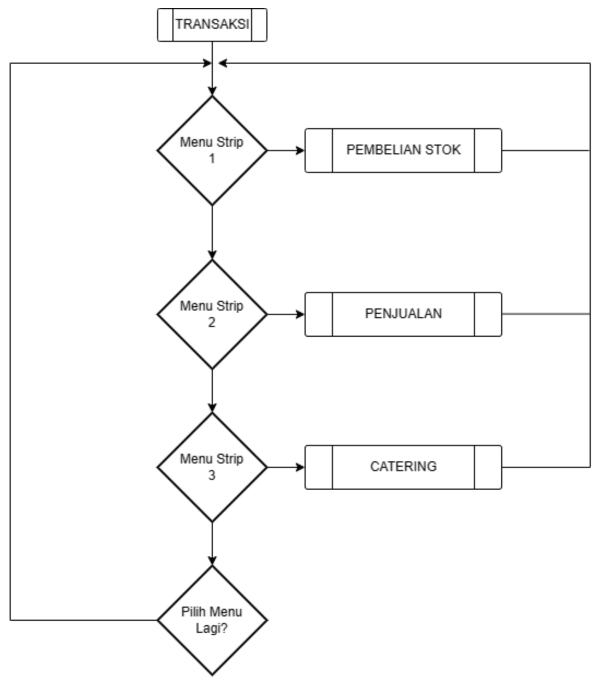*Gambar 3. 2 Flowchart Menu Customer*

3.5 Menu customer

Gambar 3. 3 Flowchart Menu Customer
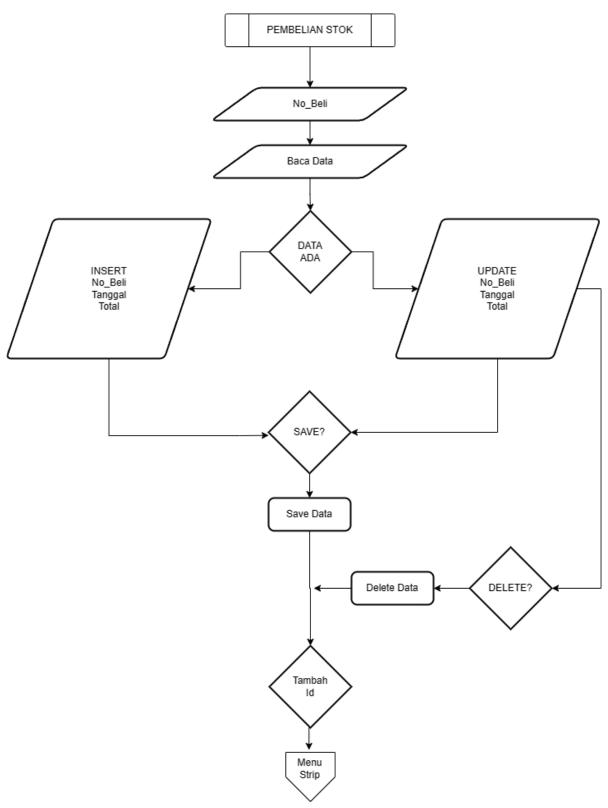
6

3.6 Menu stok

Gambar 3. 4 Flowchart Menu Stok
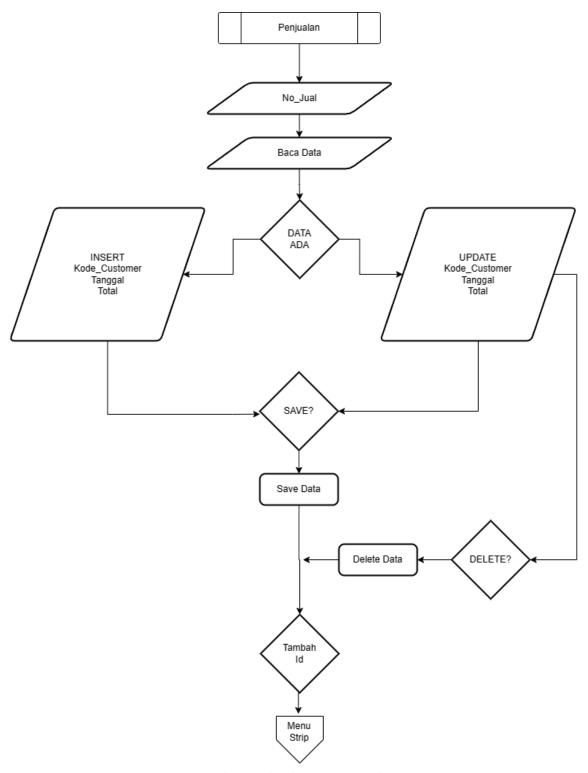
7

3.7 Menu Transaksi

Gambar 3. 5 Flowchart Menu Transaksi
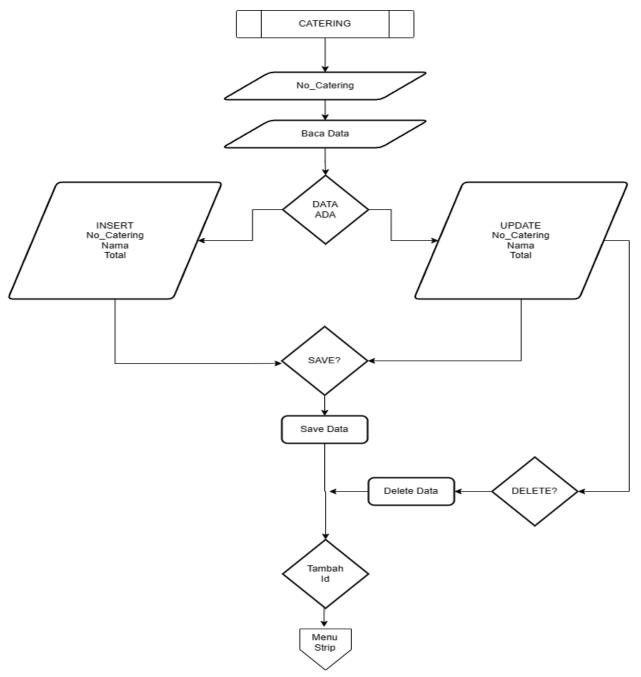
3.8 Menu Pembelian stok

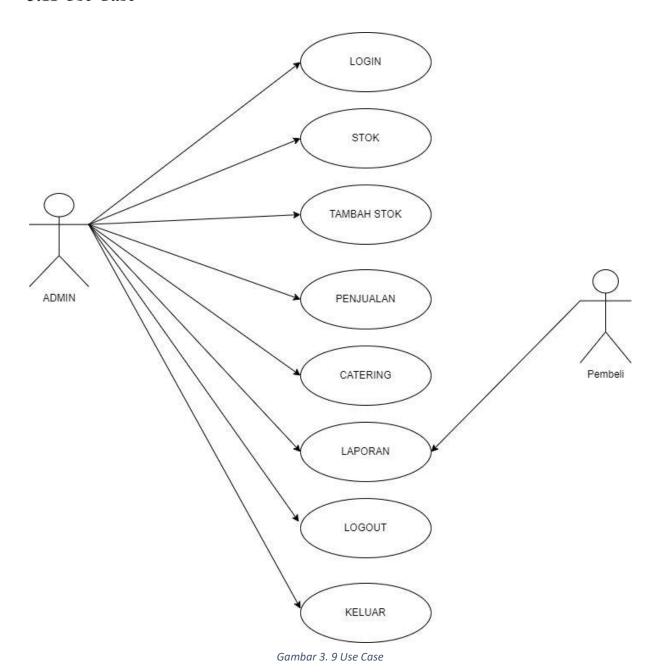*Gambar 3. 6 Flowchart Menu Pembelian Stok*

3.9 Menu Penjualan

Gambar 3. 7 Flowchart Menu Penjualan

3.10 Menu Catering

Gambar 3. 8 Flowchart Menu Catering

3.11 Use Case

Gambar 3. 9 Use Case

BAB 4 IMPLEMENTASI DAN CODE

4.1 ERD

ERD (Entity-Relationship Diagram) adalah suatu diagram yang digunakan untuk menggambarkan struktur data dan hubungan antara entitas dalam suatu sistem basis data. ERD merupakan alat yang berguna dalam analisis dan perancangan basis data, serta membantu dalam memodelkan hubungan antar entitas dalam suatu sistem.
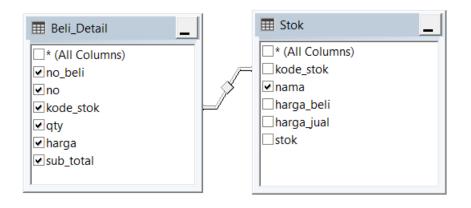
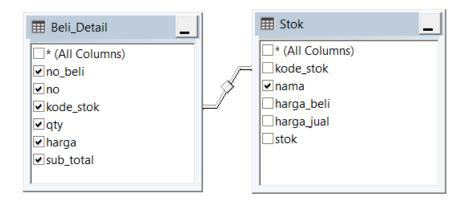ERD terdiri dari tiga komponen utama: entitas, atribut, dan hubungan.

1. Entitas: Entitas merupakan objek atau konsep yang ada dalam sistem yang sedang dianalisis. Entitas dapat berupa objek fisik (seperti pengguna, produk) atau konsep logis (seperti transaksi, pesanan). Dalam ERD, entitas digambarkan sebagai persegi panjang dengan nama entitas di dalamnya.

2. Atribut: Atribut adalah properti atau karakteristik yang terkait dengan entitas. Atribut menjelaskan informasi yang harus disimpan tentang entitas tersebut. Contoh atribut untuk entitas "pengguna" bisa termasuk nama, alamat, nomor telepon. Atribut digambarkan sebagai elips di dalam persegi panjang entitas.

3. Hubungan: Hubungan menggambarkan keterkaitan antara dua entitas atau lebih dalam basis data. Hubungan dapat berupa hubungan satu-ke-satu, satu-ke-banyak, atau banyak-ke-banyak. Hubungan digambarkan sebagai garis yang menghubungkan antara entitas dengan tanda panah yang menunjukkan arah hubungan tersebut.

ERD membantu dalam memodelkan struktur data dengan jelas dan menggambarkan bagaimana entitas berhubungan satu sama lain. Hal ini membantu dalam pemahaman yang lebih baik tentang hubungan dan ketergantungan antara entitas dalam sistem basis data. ERD juga dapat digunakan sebagai dasar untuk merancang skema basis data yang efisien dan mengatur integritas data.

Ada berbagai notasi yang dapat digunakan dalam ERD, termasuk notasi Chen, notasi Crow's Foot, dan notasi UML. Notasi Crow's Foot adalah yang paling umum digunakan, di mana tanda panah digunakan untuk menunjukkan arah hubungan dan simbol "crow's foot" (tanda V) digunakan untuk menunjukkan kardinalitas (misalnya, satu-ke-satu, satu-ke-banyak).

Dalam merancang ERD, penting untuk memperhatikan kebutuhan sistem dan memastikan bahwa ERD yang dibuat mencerminkan dengan akurat struktur dan hubungan data yang diinginkan.

4.2 NORMALISASI DATA

1. First Normal Form (1NF);

- Tabel "Roti"
    - kode_roti (Pk)
    - nama_roti
    - harga_beli
    - harga_jual
    - stok
- Tabel "Customer"
    - kode_customer (PK)
    - nama_customer
    - nomor wa
    - alamat
    - poin
- Tabel "Admin"
    - kode_admin (PK)
    - nama_admin
    - username
    - password
    - nomor_wa
    - level_admin

- Tabel "Pembelian Stok"
  - no_beli (PK)
  - tanggal
  - total
- Tabel "Pembelian Stok_Detail"
  - no_beli (PK)
  - no
  - kode_stok (FK)
  - qty
  - harga
  - sub_total
- Tabel "Jual"
  - no_jual (PK)
  - kode_customer (FK)
  - tanggal
  - total
- Tabel "Jual_Detail"
  - no_jual (PK)
  - no
  - kode_stok (FK)
  - qty
  - harga
  - sub_total

2. Second Normal Form (2NF)

- Tabel "Roti"
  - kode_roti (PK)
  - nama_roti
  - harga_beli
  - harga_jual
- Tabel "Customer"
  - kode_customer (PK)
  - nama_customer
  - nomor wa
  - alamat
  - poin
- Tabel "Admin"
  - kode_admin (PK)
  - nama_admin
  - username
  - password
  - nomor_wa

- level_admin
- Tabel "Pembelian Stok"
  - no_beli (PK)
  - tanggal
  - total
- Tabel "Pembelian Stok_Detail"
  - no_beli (PK)
  - no
  - qty
  - harga
  - sub_total
- Tabel "Jual"
  - no_jual (PK)
  - kode_customer (FK)
  - tanggal
  - total
- Tabel "Jual_Detail"
  - no_jual (PK)
  - no
  - qty
  - harga
  - sub_total
- Tabel "Stok"
  - kode_stok (PK,FK)
  - sisa_stok

Dalam normalisasi di atas, kita memisahkan informasi stok roti ke dalam tabel terpisah "Roti" untuk menghindari ketergantungan transitif dalam tabel "Stok". Hal inimemastikan bahwa setiap tabel hanya berisi informasi yang relevan dan memiliki ketergantungan yang jelas pada kunci utama penting untuk dicatat bahwa normalisasi dapat bervariasi tergantung pada kebutuhan dan kompleksitas sistem yang diinginkan. Normalisasi yang lebih tinggi mungkin diperlukan dalam skenario yang lebih kompleks. Pastikan untuk memahami persyaratan dan hubungan antara entitas dalam sistem penjualan apotek Anda saat melakukan normalisasi database.

4.3 DataBase

Database adalah kumpulan terstruktur dari data yang diorganisasi dan disimpan dalam suatu sistem komputer. Database menyediakan cara untuk menyimpan, mengelola, dan mengakses informasi secara efisien. Database digunakan secara luas dalam berbagai bidang, termasuk bisnis, ilmu pengetahuan, pendidikan, dan aplikasi teknologi lainnya.

Tujuan utama dari database adalah menyediakan metode penyimpanan data yang terorganisir dan efisien. Database menggunakan struktur data yang konsisten dan didefinisikan sebelumnya, yang memungkinkan data dapat diakses dan dimanipulasi dengan mudah. Dalam database, data diatur dalam tabel, dengan setiap tabel terdiri dari baris dan kolom yang mewakili entitas dan atributnya.

Manfaat utama dari menggunakan database adalah sebagai berikut:

1. Pencatatan Data: Database menyediakan cara yang efisien untuk menyimpan dan mencatat data. Dengan database, informasi dapat diorganisasi dengan struktur yang konsisten dan terstruktur, sehingga memudahkan pencarian, pembaruan, dan penghapusan data.

2. Integrasi Data: Database memungkinkan data dari berbagai sumber yang berbeda dapat diintegrasikan ke dalam satu tempat. Ini memungkinkan data yang terkait dapat dihubungkan dan diakses dengan mudah, menghindari duplikasi data yang tidak perlu.

3. Keamanan Data: Database menyediakan mekanisme keamanan untuk melindungi data dari akses yang tidak sah atau modifikasi yang tidak diizinkan. Izin akses dapat diberikan pada pengguna tertentu untuk membatasi akses ke data yang sensitif.

4. Pengelolaan Konsistensi Data: Database memungkinkan untuk menerapkan aturan dan batasan pada data yang disimpan, sehingga memastikan konsistensi dan integritas data. Hal ini memungkinkan menjaga kualitas data dan mencegah kesalahan atau inkonsistensi.

5. Kinerja dan Skalabilitas: Database dirancang untuk mendukung kinerja yang tinggi dan dapat dikembangkan sesuai kebutuhan. Sistem database yang baik dapat mengelola jumlah data yang besar dan memberikan waktu akses yang cepat.

Beberapa contoh jenis database yang umum digunakan termasuk database relasional, database berbasis objek, database berbasis dokumen, dan database grafik. Setiap jenis database memiliki model dan metode penyimpanan data yang berbeda.

Penting untuk merancang dan mengelola database dengan baik untuk memastikan keberhasilan penyimpanan dan penggunaan data. Ini melibatkan pemilihan struktur database yang tepat, desain skema yang baik, pemeliharaan rutin, dan backup data yang teratur.

4.3.1 .DataBase Admin

Column Name	Data Type	Allow Nulls
▶ kode_admin	nvarchar(50)	☑
nama	nvarchar(100)	☑
username	nvarchar(50)	☑
password	nvarchar(50)	☑
nomor_wa	nvarchar(15)	☑
level_wa	nvarchar(10)	☑
		☐

Gambar 4. 1 Database Admin

4.3.2 DataBase Customer

Column Name	Data Type	Allow Nulls
▶ kode_customer	nvarchar(50)	☑
nama	nvarchar(100)	☑
nomor_wa	nvarchar(15)	☑
alamat	nvarchar(200)	☑
poin	money	☑
		☐

Gambar 4. 2 Database Customer

4.3.3 DataBase Stok

Column Name	Data Type	Allow Nulls
▶ kode_stok	nvarchar(50)	☑
nama	nvarchar(100)	☑
harga_beli	money	☑
harga_jual	money	☑
stok	money	☑
		☐

Gambar 4. 3 Database Stok

4.3.4 DataBase Beli

Column Name	Data Type	Allow Nulls
▶ no_beli	nvarchar(50)	☑
tanggal	date	☑
total	money	☑
		☐

Gambar 4. 4 Database Beli

4.3.5 DataBase Jual

Column Name	Data Type	Allow Nulls
▶ no_jual	nvarchar(50)	☑
kode_customer	nvarchar(50)	☑
tanggal	date	☑
total	money	☑
		☐

Gambar 4. 5 Database Jual

4.3.6 DataBase Catering

Column Name	Data Type	Allow Nulls
▶ kode_catering	nvarchar(50)	☑
nama	nvarchar(50)	☑
Total	money	☑
		☐

Gambar 4. 6 Database Catering

4.3.7 DataBase Beli_Detail

Column Name	Data Type	Allow Nulls
▶ no_beli	nvarchar(50)	☑
no	int	☑
kode_stok	nvarchar(50)	☑
qty	money	☑
harga	money	☑
sub_total	money	☑
		☐

Gambar 4. 7 Database Beli_Detail

4.3.8 DataBase Jual_Detail

Column Name	Data Type	Allow Nulls
▶ no_jual	nvarchar(50)	☑
no	int	☑
kode_stok	nvarchar(50)	☑
qty	money	☑
harga	money	☑
sub_total	money	☑
		☐

Gambar 4. 8 Database Jual_Detail

4.3.9 DataBase Catering_Detail

Column Name	Data Type	Allow Nulls
▶ kode_catering	nvarchar(50)	☑
no	int	☑
kode_stok	nvarchar(50)	☑
nama	nvarchar(50)	☑
qty	money	☑
		☐

Gambar 4. 9 Database Catering_Detail

4.4 Form

4.4.1 Form Customer

Gambar 4. 10 Form Customer

4.4.2 Form Admin

Gambar 4. 11 Form Admin

4.4.3 Form Stok

Gambar 4. 12 Form Stok

4.4.4 Form Pembelian Stok

Gambar 4. 13 Form Pembelian Stok

4.4.5 Form Penjualan

Gambar 4. 14 Form Penjualan

4.4.6 Form Catering

Gambar 4. 15 Form Catering

4.4.7 Form ListStok

Gambar 4. 16 Form ListStok

4.4.8 Form ListCustomer

Gambar 4. 17 Form ListCustomer

4.4.9 Form ListAdmin

Gambar 4. 18 Form ListAdmin

4.4.10 Form ListPembelian

Gambar 4. 19 Form ListPembelian

4.4.11 Form ListPenjualan

Gambar 4. 20 Form ListPenjualan

4.4.12 Form ListCatering

Gambar 4. 21 Form ListCatering

4.5 PENGKODEAN

Pengkodean adalah, sebuah cara membuat sebuah aplikasi, atau form dapat memiliki pikiran dan dapat di interaksikan dengan manusia (user). Di sini kami menggunakan pengkodean pada setiap form, textbox, button, dan semua itu terhubung dengan sqlserver (database), dimana kita dapat menyimpan dan memanipulasi data.

4.5.1 SOURCE CODE MASTER

STOK	ADMIN

<pre>Imports System.Data
Imports System.Data.SqlClient
 	
Public Class Stok
    Dim query As String
    Dim conn As New SqlConnection
 	
    Public Sub connect()
        conn.ConnectionString = "Data Source
= localhost\SQLEXPRESS; Initial Catalog =
lagoods_ep; Integrated Security = True"
    End Sub
 	
    Sub Clear()
        txtNama.Text = ""
        txtBeli.Text = 0
        txtJual.Text = 0
        txtStok.Text = 0
    End Sub
 	
    Private Sub Stok_Load(sender As Object, e
As EventArgs) Handles MyBase.Load
        connect()
        txtID.Text = ""
        Clear()
    End Sub
 	
    Private Sub btnSimpan_Click(sender As
Object, e As EventArgs) Handles
btnSimpan.Click
        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open
Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn</pre>
	<pre>Imports System.Data
	Imports System.Data.SqlClient
	
	Public Class Admin
	
	    Dim query As String
	    Dim conn As New SqlConnection
	
	    Public Sub connect()
	        conn.ConnectionString = "Data Source
	= localhost\SQLEXPRESS; Initial Catalog =
	lagoods_ep; Integrated Security = True"
	    End Sub
	
	    Sub Clear()
	        txtNama.Text = ""
	        txtUsername.Text = ""
	        txtPassword.Text = ""
	        txtNomor.Text = ""
	        rbAdmin.Checked = False
	        rbManager.Checked = False
	    End Sub
	
	    Private Sub Customer_Load(sender As
	Object, e As EventArgs) Handles MyBase.Load
	        connect()
	        txtKode.Text = ""
	        Clear()
	    End Sub
	
	    Private Sub btnSimpan_Click(sender As
	Object, e As EventArgs) Handles
	btnSimpan.Click
	        Dim cmdOpen As New SqlCommand
	        If conn.State = ConnectionState.Open
	Then conn.Close()</pre>

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```vbnet
        query = "Select * From Stok Where
kode_stok ='" & Trim(txtID.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            query = "update Stok set " &
                    "nama = '" &
Trim(txtNama.Text) & "'," &
                    "harga_beli = " &
CDec(Trim(txtBeli.Text)) & "," &
                    "harga_jual = " &
CDec(Trim(txtJual.Text)) & "," &
                    "stok = " &
CInt(Trim(txtStok.Text)) &
                    " where kode_stok = '" &
Trim(txtID.Text) & "'"
        Else
            query = "Insert into Stok Values
('" & Trim(txtID.Text) & "','" &
Trim(txtNama.Text) & "'," &
                CDec(Trim(txtBeli.Text)) &
"," &
                CDec(Trim(txtJual.Text)) &
"," &
                CInt(Trim(txtStok.Text)) &
")"
        End If
        drOpen.Close()
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        conn.Close()

        MessageBox.Show("Data Telah
Disimpan")
        Clear()
        txtID.Select()
    End Sub


    Public Sub txtID_LostFocus(sender As
Object, e As EventArgs) Handles
txtID.LostFocus
        If Trim(txtID.Text) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Stok where
kode_stok='" & Trim(txtID.Text) & "'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    txtID.Text =
drOpen("kode_stok").ToString
                    txtNama.Text =
drOpen("nama").ToString
                    txtJual.Text =
Format(drOpen("harga_jual"),
"##,##0.00").ToString
                    txtBeli.Text =
Format(drOpen("harga_beli"),
"##,##0.00").ToString
                    txtStok.Text =
Format(drOpen("stok"), "##,##0").ToString
                End While
            Else
```

```vbnet
        conn.Open()
        cmdOpen.Connection = conn
        query = "Select * From Admin Where
kode_admin ='" & Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            If drOpen.HasRows Then
                Dim levelAdmin As String = ""

                ' Determine the selected
level_admin based on the RadioButton
selection
                If rbAdmin.Checked Then
                    levelAdmin = "Admin"
                ElseIf rbManager.Checked Then
                    levelAdmin = "Manager"
                End If

                ' Build the update query with
the level_admin field
                query = "UPDATE Admin SET " &
                    "nama = '" &
Trim(txtNama.Text) & "', " &
                    "username = '" &
Trim(txtUsername.Text) & "', " &
                    "password = '" &
Trim(txtPassword.Text) & "', " &
                    "nomor_wa = '" &
Trim(txtNomor.Text) & "', " &
                    "level_wa = '" &
levelAdmin & "'" &
                    "where kode_admin = '" &
Trim(txtKode.Text) & "'"
            End If
        Else
            Dim levelAdmin As String = ""

            ' Determine the selected
level_admin based on the RadioButton
selection
            If rbAdmin.Checked Then
                levelAdmin = "Admin"
            ElseIf rbManager.Checked Then
                levelAdmin = "Manager"
            End If
            query = "Insert into Admin values
('" & Trim(txtKode.Text) & "','" &
Trim(txtNama.Text) & "','" &
                Trim(txtUsername.Text) &
"','" &
                Trim(txtPassword.Text) &
"','" &
                Trim(txtNomor.Text) & "','" &
                levelAdmin & "')"
        End If
        drOpen.Close()
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        conn.Close()

        MessageBox.Show("Data Berhasil
Disimpan")
        Clear()
        txtKode.Select()
    End Sub

    Public Sub txtKode_LostFocus(sender As
Object, e As EventArgs) Handles
txtKode.LostFocus
```

```vbnet
                Clear()
                txtNama.Select()
            End If
            drOpen.Close()
        End If
    End Sub

    Private Sub btnBatal_Click(sender As
Object, e As EventArgs) Handles
btnBatal.Click
        Clear()
    End Sub

    Private Sub btnHapus_Click(sender As
Object, e As EventArgs) Handles
btnHapus.Click
        If MessageBox.Show("Yakin mau
dihapus?", "Konfirmasi ",
MessageBoxButtons.OKCancel) = vbOK Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Delete From Stok Where
kode_stok ='" & Trim(txtID.Text) & "'"
            cmdOpen.CommandText = query
            cmdOpen.ExecuteNonQuery()
            conn.Close()

            MessageBox.Show("Data Berhasil
Dihapus")
            Clear()
            txtID.Select()
        End If
    End Sub


    Private Sub txtJual_LostFocus(sender As
Object, e As EventArgs) Handles
txtJual.LostFocus
        If Not IsNumeric(Trim(txtJual.Text))
Then txtJual.Text = 0
        txtJual.Text =
Format(CDec(txtJual.Text), "##,##0.00")
    End Sub


    Private Sub txtBeli_LostFocus(sender As
Object, e As EventArgs) Handles
txtBeli.LostFocus
        If Not IsNumeric(Trim(txtBeli.Text))
Then txtBeli.Text = 0
        txtBeli.Text =
Format(CDec(txtBeli.Text), "##,##0.00")
    End Sub

    Private Sub txtStok_LostFocus(sender As
Object, e As EventArgs) Handles
txtStok.LostFocus
        If Not IsNumeric(Trim(txtStok.Text))
Then txtStok.Text = 0
        txtStok.Text =
Format(CDec(txtStok.Text), "##,##0")
    End Sub

    Private Sub Stok_Closed(sender As Object,
e As EventArgs) Handles Me.Closed
        txtNama.Select()
        If conn.State = ConnectionState.Open
Then conn.Close()
        conn = Nothing
    End Sub

        If Trim(txtKode.Text) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Admin
where kode_admin='" & Trim(txtKode.Text) &
"'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    txtKode.Text =
drOpen("kode_admin").ToString
                    txtNama.Text =
drOpen("nama").ToString
                    txtUsername.Text =
drOpen("username").ToString
                    txtPassword.Text =
drOpen("password").ToString
                    txtNomor.Text =
drOpen("nomor_wa")
                    Dim levelAdmin As String
= drOpen("level_wa").ToString()
                    If levelAdmin = "Admin"
Then
                        rbAdmin.Checked =
True
                    ElseIf levelAdmin =
"Manager" Then
                        rbManager.Checked =
True
                    End If
                End While
            Else
                Clear()
                txtNama.Select()
            End If
            drOpen.Close()
        End If
    End Sub

    Private Sub btnBatal_Click(sender As
Object, e As EventArgs) Handles
btnBatal.Click
        Clear()
    End Sub

    Private Sub btnHapus_Click(sender As
Object, e As EventArgs) Handles
btnHapus.Click
        If MessageBox.Show("Yakin mau
dihapus?", "Konfirmasi ",
MessageBoxButtons.OKCancel) = vbOK Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Delete From Admin Where
kode_admin ='" & Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query
            cmdOpen.ExecuteNonQuery()
            conn.Close()

            MessageBox.Show("Data Berhasil
Dihapus")
            Clear()
            txtKode.Select()
        End If
    End Sub
```

```vb
    Private Sub txtJual_KeyPress(sender As
Object, e As KeyPressEventArgs) Handles
txtJual.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack) Then
            If Asc(e.KeyChar) < Asc(0) Or
Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub


    Private Sub txtBeli_KeyPress(sender As
Object, e As KeyPressEventArgs) Handles
txtBeli.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack) Then
            If Asc(e.KeyChar) < Asc(0) Or
Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub


    Private Sub txtStok_KeyPress(sender As
Object, e As KeyPressEventArgs) Handles
txtStok.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack) Then
            If Asc(e.KeyChar) < Asc(0) Or
Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub Stok_Deactivate(sender As
Object, e As EventArgs) Handles Me.Deactivate
        txtNama.Select()
    End Sub

    Private Sub btnCari_Click(sender As
Object, e As EventArgs) Handles btnCari.Click
        vStok = "Stok"
        FrmListStok.Close()
        FrmListStok.MdiParent = mdiMenu
        FrmListStok.Show()
    End Sub
End Class
```

```vb
    Private Sub Admin_Closed(sender As
Object, e As EventArgs) Handles Me.Closed
        txtNama.Select()
        If conn.State = ConnectionState.Open
Then conn.Close()
        conn = Nothing
    End Sub

    Private Sub Admin_Deactivate(sender As
Object, e As EventArgs) Handles Me.Deactivate
        txtNama.Select()
    End Sub

    Private Sub btnCari_Click(sender As
Object, e As EventArgs) Handles btnCari.Click
        vAdmin = "Admin"
        FrmListAdmin.Close()
        FrmListAdmin.MdiParent = mdiMenu
        FrmListAdmin.Show()
    End Sub
End Class
```

Tabel 4. 1 Source Code Master

COSTUMER

```vb
Imports System.Data
Imports System.Data.SqlClient

Public Class Customer
    Dim query As String
    Dim conn As New SqlConnection

    Public Sub connect()
        conn.ConnectionString = "Data Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated Security = True"
    End Sub

    Sub Clear()
        txtNama.Text = ""
        txtNoWa.Text = ""
        txtAlamat.Text = ""
        txtPoin.Text = 0
```

```vb
    End Sub

    Private Sub Customer_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
        connect()
        txtKode.Text = ""
        Clear()
    End Sub

    Private Sub btnSimpan_Click(sender As Object, e As EventArgs) Handles
btnSimpan.Click
        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
        query = "Select * From Customer Where kode_customer ='" &
Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            query = "UPDATE Customer SET " &
                "nama = '" & Trim(txtNama.Text) & "'," &
                "nomor_wa = '" & Trim(txtNoWa.Text) & "'," &
                "alamat = '" & Trim(txtAlamat.Text) & "'," &
                "poin = " & CInt(Trim(txtPoin.Text)) &
                "Where kode_customer = '" & Trim(txtKode.Text) & "'"
        Else
            query = "Insert into Customer values ('" & Trim(txtKode.Text) &
"','" & Trim(txtNama.Text) & "','" &
                Trim(txtNoWa.Text) & "','" &
                Trim(txtAlamat.Text) & "'," &
                CInt(Trim(txtPoin.Text)) & ")"
        End If
        drOpen.Close()
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        conn.Close()

        MessageBox.Show("Data Berhasil Disimpan")
        Clear()
        txtKode.Select()
    End Sub


    Public Sub txtKode_LostFocus(sender As Object, e As EventArgs) Handles
txtKode.LostFocus
        If Trim(txtKode.Text) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State = ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Customer where kode_customer='" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    txtKode.Text = drOpen("kode_customer").ToString
                    txtNama.Text = drOpen("nama").ToString
```

```vbnet
                txtNoWa.Text = drOpen("nomor_wa").ToString
                txtAlamat.Text = drOpen("alamat").ToString
                txtPoin.Text = Format(drOpen("poin"), "##,##0").ToString
            End While
        Else
            Clear()
            txtNama.Select()
        End If
        drOpen.Close()
    End If
End Sub

Private Sub btnBatal_Click(sender As Object, e As EventArgs) Handles btnBatal.Click
    Clear()
End Sub

Private Sub btnHapus_Click(sender As Object, e As EventArgs) Handles btnHapus.Click
    If MessageBox.Show("Yakin mau dihapus?", "Konfirmasi", MessageBoxButtons.OKCancel) = vbOK Then
        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
        query = "Delete From Customer Where kode_customer ='" & Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()
        conn.Close()

        MessageBox.Show("Data Has Been Deleted")
        Clear()
        txtKode.Select()
    End If
End Sub

Private Sub Customer_Closed(sender As Object, e As EventArgs) Handles Me.Closed
    txtNama.Select()
    If conn.State = ConnectionState.Open Then conn.Close()
    conn = Nothing
End Sub

Private Sub Customer_Deactivate(sender As Object, e As EventArgs) Handles Me.Deactivate
    txtNama.Select()
End Sub

Private Sub btnCari_Click(sender As Object, e As EventArgs) Handles btnCari.Click
    vCustomer = "Customer"
    FrmListCustomer.Close()
    FrmListCustomer.MdiParent = mdiMenu
    FrmListCustomer.Show()
End Sub


End Class
```

Tabel 4. 2 Customer

PEMBELIAN STOK	PENJUALAN STOK

```vb
Imports System.Data
Imports System.Data.SqlClient

Public Class PembelianStok
    Dim query As String
    Private conn As New
SqlConnection
    Dim sAda As Boolean

    Public Sub connect()
        conn.ConnectionString =
"Data Source =
localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
    End Sub

    Sub clear()
        txtKode.Text =
AutoCode("Beli", Now.Date)
        dtpTanggal.Value =
Now.Date
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
        txtHarga.Text = ""
        txtSubTotal.Text = ""
        dgvDetail.Rows.Clear()
        txtTotal.Text = ""

dgvDetail.Columns(2).HeaderCell.St
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight

dgvDetail.Columns(3).HeaderCell.St
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight

dgvDetail.Columns(4).HeaderCell.St
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight

dgvDetail.Columns(2).DefaultCellSt
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight

dgvDetail.Columns(3).DefaultCellSt
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight

dgvDetail.Columns(4).DefaultCellSt
yle.Alignment =
DataGridViewContentAlignment.Middl
eRight
```

```vb
Imports System.Data
Imports System.Data.SqlClient
Imports
System.Windows.Forms.VisualStyles.VisualSt
yleElement
Imports
System.Windows.Forms.VisualStyles.VisualSt
yleElement.Button

Public Class Penjualan
    Dim query As String
    Private conn As New SqlConnection
    Dim sAda As Boolean
    Public kodeCustomer As String
    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated Security
= True"
    End Sub
    Sub clear()
        txtKode.Text = AutoCode2("Jual",
Now.Date)
        txtKode_C.Text = ""
        txtNama_C.Text = ""
        dtpTanggal.Value = Now.Date
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
        txtHarga.Text = ""
        txtSubTotal.Text = ""
        dgvDetail.Rows.Clear()
        txtTotal.Text = ""

dgvDetail.Columns(2).HeaderCell.Style.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(3).HeaderCell.Style.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(4).HeaderCell.Style.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(2).DefaultCellStyle.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(3).DefaultCellStyle.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(4).DefaultCellStyle.Alig
nment =
DataGridViewContentAlignment.MiddleRight

dgvDetail.Columns(2).DefaultCellStyle.Form
at = "##,##0"
```

```vbnet
dgvDetail.Columns(2).DefaultCellStyle.Format = "##,##0"

dgvDetail.Columns(3).DefaultCellStyle.Format = "##,##0.00"

dgvDetail.Columns(4).DefaultCellStyle.Format = "##,##0.00"
        gbStok.Visible = False
    End Sub

    Private Sub PembelianStok_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        connect()
        txtKode.Text = ""
        clear()
        gbStok.Visible = False
    End Sub

    Private Sub btnSimpan_Click(sender As Object, e As EventArgs) Handles btnSimpan.Click
        If Not IsNumeric(Trim(txtTotal.Text)) Then txtTotal.Text = 0

        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
        query = "Select * from Beli Where no_beli ='" & Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            sAda = True
            query = "update Beli set " &
                    "tanggal = '" & Format(dtpTanggal.Value, "yyyy-MM-dd") & "'," &
                    "total = " & CDec(Trim(txtTotal.Text)) &
                    "where no_beli = '" & Trim(txtKode.Text) & "'"
        Else
            sAda = False
            query = "Insert into Beli values ('" & Trim(txtKode.Text) & "','" &
```

```vbnet
dgvDetail.Columns(3).DefaultCellStyle.Format = "##,##0.00"

dgvDetail.Columns(4).DefaultCellStyle.Format = "##,##0.00"
        gbMenu.Visible = False
        gbPoin.Visible = False
    End Sub

    Private Sub Penjualan_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        connect()
        txtKode.Text = ""
        clear()
        gbMenu.Visible = False
        gbPoin.Visible = False
    End Sub

    Private Sub btnSimpan_Click(sender As Object, e As EventArgs) Handles btnSimpan.Click
        If Not IsNumeric(Trim(txtTotal.Text)) Then txtTotal.Text = 0

        Dim grandTotal As Decimal = CInt(txtTotal.Text)
        Dim penghasil As Decimal
        penghasil = grandTotal
        Dim points As Integer

        points = CInt(penghasil / 5000)
        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
        query = "Select * from Jual Where no_jual ='" & Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()


        Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            sAda = True
            query = "update Jual set " &
                    "kode_customer  = '" & Trim(txtKode_C.Text) & "'," &
                    "tanggal = '" & Format(dtpTanggal.Value, "yyyy-MM-dd") & "'," &
                    "total = " & CDec(Trim(txtTotal.Text)) &
                    " where no_jual = '" & Trim(txtKode.Text) & "'"
        Else
            sAda = False
```

```vb
Format(dtpTanggal.Value, "yyyy-MM-
dd") & "'," &

CDec(Trim(txtTotal.Text)) & ")"
        End If
        drOpen.Close()
        cmdOpen.CommandText =
query
        cmdOpen.ExecuteNonQuery()

        Using cnn = New
SqlConnection
        cnn.ConnectionString =
"Data Source =
localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
            Using cmdX As New
SqlCommand
                cnn.Open()
                cmdX.Connection =
cnn
                query = "Select *
From Beli_Detail Where no_beli ='"
& Trim(txtKode.Text) & "'"
                cmdX.CommandText =
query

cmdX.ExecuteNonQuery()

                Using drX As
SqlDataReader = cmdX.ExecuteReader
                    If drX.HasRows
Then
                        While
drX.Read()

cmdOpen.CommandText = "update Stok
set stok = stok - " & drX("qty") &

" where kode_stok = '" &
drX("kode_stok") & "'"

cmdOpen.ExecuteNonQuery()
                        End While
                    End If
                    drX.Close()
                End Using
            End Using
        End Using

        query = "delete from
Beli_Detail Where no_beli ='" &
Trim(txtKode.Text) & "'"
        cmdOpen.CommandText =
query
        cmdOpen.ExecuteNonQuery()

        Dim i As Integer
        For i = 0 To
dgvDetail.Rows.Count - 1
```

```vb
        query = "Insert into Jual
values ('" & Trim(txtKode.Text) & "','" &
Trim(txtKode_C.Text) & "','" &

Format(dtpTanggal.Value, "yyyy-MM-dd") &
"'," &

CDec(Trim(txtTotal.Text)) & ")"
        End If
        drOpen.Close()
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Using cnn = New SqlConnection
        cnn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated Security
= True"
            Using cmdX As New SqlCommand
                cnn.Open()
                cmdX.Connection = cnn
                query = "Select * From
Jual_Detail Where no_jual = '" &
Trim(txtKode.Text) & "'"
                cmdX.CommandText = query
                cmdX.ExecuteNonQuery()

                Using drX As SqlDataReader
= cmdX.ExecuteReader
                    If drX.HasRows Then
                        While drX.Read()

cmdOpen.CommandText = "update Stok set
stok = stok - " & drX("qty") &

" where kode_stok = '" & drX("kode_stok")
& "'"

cmdOpen.ExecuteNonQuery()
                        End While
                    End If
                    drX.Close()
                End Using
            End Using
        End Using

        query = "delete from Jual_Detail
Where no_jual ='" & Trim(txtKode.Text) &
"'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        query = "update Customer set poin
= poin + " & points & " where
kode_customer = '" & Trim(txtKode_C.Text)
& "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim i As Integer
        For i = 0 To dgvDetail.Rows.Count
= 1
```

```vbnet
            If
(dgvDetail.Rows(i).Cells(0).Value
<> "") Then
                query = "insert
into Beli_Detail values ('" &
Trim(txtKode.Text) & "'," & i &
"','" &

Trim(dgvDetail.Rows(i).Cells(0).Va
lue) & "'," &

CDec(dgvDetail.Rows(i).Cells(2).Va
lue) & "," &

CDec(dgvDetail.Rows(i).Cells(3).Va
lue) & "," &

CDec(dgvDetail.Rows(i).Cells(4).Va
lue) & ")"

cmdOpen.CommandText = query

cmdOpen.ExecuteNonQuery()

                query = "update
Stok set stok = stok + " &
CDbl(dgvDetail.Rows(i).Cells(2).Va
lue) &
                        " where
kode_stok = '" &
Trim(dgvDetail.Rows(i).Cells(0).Va
lue) & "'"

cmdOpen.CommandText = query

cmdOpen.ExecuteNonQuery()
            End If
        Next

        conn.Close()

        MessageBox.Show("Data Has
Been Saved")
        clear()
        txtKode.Select()
    End Sub
Public Sub
txtKode_LostFocus(sender As
Object, e As EventArgs) Handles
txtKode.LostFocus
        If Trim(txtKode.Text) <>
"" Then
            Dim cmdOpen As New
SqlCommand
            If conn.State =
ConnectionState.Open Then
conn.Close()
            conn.Open()
            cmdOpen.Connection =
conn
            query = "Select * From
Beli where no_beli ='" &
Trim(txtKode.Text) & "'"
```

```vbnet
            If
(dgvDetail.Rows(i).Cells(0).Value <> "")
Then
                query = "insert into
Jual_Detail values ('" &
Trim(txtKode.Text) & "'," & i & ",'" &

Trim(dgvDetail.Rows(i).Cells(0).Value) &
"'," &

CDbl(dgvDetail.Rows(i).Cells(2).Value) &
"," &

CDbl(dgvDetail.Rows(i).Cells(3).Value) &
"," &

CDbl(dgvDetail.Rows(i).Cells(4).Value) &
")"
                cmdOpen.CommandText =
query
                cmdOpen.ExecuteNonQuery()

                query = "update Stok set
stok =  stok - " &
CDec(dgvDetail.Rows(i).Cells(2).Value) &
                        " where kode_stok
= '" &
Trim(dgvDetail.Rows(i).Cells(0).Value) &
"'"
                cmdOpen.CommandText =
query
                cmdOpen.ExecuteNonQuery()
            End If
        Next

        conn.Close()

        MessageBox.Show("Data Has Been
Saved")
        clear()
        txtKode.Select()

    End Sub

    Public Sub txtKode_LostFocus(sender As
Object, e As EventArgs) Handles
txtKode.LostFocus
        If Trim(txtKode.Text) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * from Jual
Where no_jual ='" & Trim(txtKode.Text) &
"'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
```

```vbnet
            cmdOpen.CommandText =
query

            Dim drOpen As
SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While
drOpen.Read()
                    txtKode.Text =
drOpen("no_beli").ToString

dtpTanggal.Value =
drOpen("tanggal").ToString
                    txtTotal.Text
= Format(drOpen("total"),
"##,##0.00")
                End While


dgvDetail.Rows.Clear()
                drOpen.Close()
                If conn.State =
ConnectionState.Open Then
conn.Close()
                conn.Open()
                query = "Select *
From vBeli_Detail Where no_beli =
'" & Trim(txtKode.Text) & "' order
by no"

                cmdOpen.Connection
= conn

cmdOpen.CommandText = query

cmdOpen.ExecuteNonQuery()

                drOpen =
cmdOpen.ExecuteReader

                If drOpen.HasRows
Then
                    While
drOpen.Read()

dgvDetail.Rows.Add(drOpen("kode_st
ok"), drOpen("nama"),
drOpen("qty"), drOpen("harga"),
drOpen("sub_total"))
                    End While
                End If
                drOpen.Close()
                conn.Close()
            Else
                clear()
            End If
            drOpen.Close()
        End If
    End Sub

    Private Sub
btnBatal_Click(sender As Object, e
```

```vbnet
                txtKode.Text =
drOpen("no_jual").ToString
                txtKode_C.Text =
drOpen("kode_customer").ToString
                dtpTanggal.Value =
drOpen("tanggal").ToString
                txtTotal.Text =
Format(drOpen("total"), "##,##0.00")
            End While

            dgvDetail.Rows.Clear()
            drOpen.Close()
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            query = "Select * From
vJual_Detail Where no_jual = '" &
Trim(txtKode.Text) & "' order by no"

            cmdOpen.Connection = conn
            cmdOpen.CommandText =
query
            cmdOpen.ExecuteNonQuery()

            drOpen =
cmdOpen.ExecuteReader

            If drOpen.HasRows Then
                While drOpen.Read()

dgvDetail.Rows.Add(drOpen("kode_stok"),
drOpen("nama"), drOpen("qty"),
drOpen("harga"), drOpen("sub_total"))
                End While
            End If
            drOpen.Close()
            conn.Close()
        Else
            clear()
            txtKode_C.Select()
        End If
        drOpen.Close()
    End If
End Sub

    Private Sub btnBatal_Click(sender As
Object, e As EventArgs) Handles
btnBatal.Click
        clear()
    End Sub

Private Sub btnHapus_Click(sender As
Object, e As EventArgs) Handles
btnHapus.Click
        If MessageBox.Show("Yakin mau
Dihapus?", "Konfirmasi",
MessageBoxButtons.OKCancel) = vbOK Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
```

```vbnet
As EventArgs) Handles
btnBatal.Click
        clear()
    End Sub

    Private Sub
btnHapus_Click(sender As Object, e
As EventArgs) Handles
btnHapus.Click
        If MessageBox.Show("Yakin
mau Dihapus?", "Konfirmasi",
MessageBoxButtons.OKCancel) = vbOK
Then
            Dim cmdOpen As New
SqlCommand
            If conn.State =
ConnectionState.Open Then
conn.Close()
            conn.Open()
            cmdOpen.Connection =
conn
            query = "Delete from
Beli Where no_beli = '" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

            Using cnn = New
SqlConnection

cnn.ConnectionString = "Data
Source = localhost\SQLEXPRESS;
Initial Catalog = lagoods_ep;
Integrated Security = True"
                Using cmdX As New
SqlCommand
                    cnn.Open()

cmdX.Connection = cnn
                    query =
"Select * from Beli_Detail Where
no_beli = '" & Trim(txtKode.Text)
& "'"

cmdX.CommandText = query

cmdX.ExecuteNonQuery()

                    Using drX As
SqlDataReader = cmdX.ExecuteReader
                        If
drX.HasRows Then
                            While
drX.Read()

cmdOpen.CommandText = "update Stok
set stok = stok - " & drX("qty") &

" where kode_stok = '" &
drX("kode_stok") & "'"
```

```vbnet
                query = "Delete from Jual
Where no_jual = '" & Trim(txtKode.Text) &
"'"
                cmdOpen.CommandText = query
                cmdOpen.ExecuteNonQuery()

            Using cnn = New SqlConnection
                cnn.ConnectionString =
"Data Source = localhost\SQLEXPRESS;
Initial Catalog = lagoods_ep; Integrated
Security = True"
                Using cmdX As New
SqlCommand
                    cnn.Open()
                    cmdX.Connection = cnn
                    query = "Select * from
Jual_Detail Where no_jual = '" &
Trim(txtKode.Text) & "'"
                    cmdX.CommandText =
query
                    cmdX.ExecuteNonQuery()

                    Using drX As
SqlDataReader = cmdX.ExecuteReader
                        If drX.HasRows
Then
                            While
drX.Read()

cmdOpen.CommandText = "update Stok set
stok = stok - " & drX("qty") &

" where kode_stok = '" & drX("kode_stok")
& "'"

cmdOpen.ExecuteNonQuery()
                            End While
                        End If
                        drX.Close()
                    End Using
                End Using
            End Using

            query = "Delete from
Jual_Detail where no_jual = '" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query
            cmdOpen.ExecuteNonQuery()
            conn.Close()

            MessageBox.Show("Data Has Been
Deleted")
            clear()
        End If
    End Sub

    Private Sub btnCari_Click(sender As
Object, e As EventArgs) Handles
btnCari.Click
        vJualP = "JualP"
        FrmListPenjualan.Close()
        FrmListPenjualan.MdiParent =
mdiMenu
```

```vb
cmdOpen.ExecuteNonQuery()
                            End
While
                        End If

drX.Close()
                    End Using
                End Using
            End Using

            query = "Delete from
Beli_Detail where no_beli = '" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()
            conn.Close()

            MessageBox.Show("Data
Has Been Deleted")
            clear()
        End If
    End Sub

    Private Sub
btnCari_Click(sender As Object, e
As EventArgs) Handles
btnCari.Click
        vBeliP = "BeliP"
        FrmListPembelian.Close()
        FrmListPembelian.MdiParent
= mdiMenu
        FrmListPembelian.Show()
    End Sub

    Private Sub
txtQty_KeyPress(sender As Object,
e As KeyPressEventArgs) Handles
txtQty.KeyPress
        If Asc(e.KeyChar) <>
Asc(vbBack) Then
            If Asc(e.KeyChar) <
Asc(0) Or Asc(e.KeyChar) > Asc(9)
Then
                e.Handled = True
            End If
        End If
    End Sub
Private Sub
txtHarga_KeyPress(sender As
Object, e As KeyPressEventArgs)
Handles txtHarga.KeyPress
        If Asc(e.KeyChar) <>
Asc(vbBack) Then
            If Asc(e.KeyChar) <
Asc(0) Or Asc(e.KeyChar) > Asc(9)
Then
                e.Handled = True
            End If
        End If
    End Sub

        FrmListPenjualan.Show()
    End Sub

    Private Sub txtQty_KeyPress(sender As
Object, e As KeyPressEventArgs) Handles
txtQty.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack)
Then
            If Asc(e.KeyChar) < Asc(0) Or
Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub txtHarga_KeyPress(sender
As Object, e As KeyPressEventArgs) Handles
txtHarga.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack)
Then
            If Asc(e.KeyChar) < Asc(0) Or
Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub txtQty_LostFocus(sender As
Object, e As EventArgs) Handles
txtQty.LostFocus
        If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
        If Not
IsNumeric(Trim(txtHarga.Text)) Then
txtHarga.Text = 0

        txtQty.Text =
Format(CDec(txtQty.Text), "##,##0")
        txtSubTotal.Text =
Format(CDec(txtQty.Text) *
CDec(txtHarga.Text), "##,##0.00")
    End Sub

    Private Sub txtHarga_LostFocus(sender
As Object, e As EventArgs) Handles
txtHarga.LostFocus
        If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
        If Not
IsNumeric(Trim(txtHarga.Text)) Then
txtHarga.Text = 0

        txtQty.Text =
Format(CDec(txtQty.Text), "##,##0.00")
        txtSubTotal.Text =
Format(CDec(txtQty.Text) *
CDec(txtHarga.Text), "##,##0.00")
    End Sub
```

```vb
    Private Sub
txtQty_LostFocus(sender As Object,
e As EventArgs) Handles
txtQty.LostFocus
        If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
        If Not
IsNumeric(Trim(txtHarga.Text))
Then txtHarga.Text = 0

        txtQty.Text =
Format(CDec(txtQty.Text),
"##,##0")
        txtSubTotal.Text =
Format(CDec(txtQty.Text) *
CDec(txtHarga.Text), "##,##0.00")
    End Sub

    Private Sub
txtHarga_LostFocus(sender As
Object, e As EventArgs) Handles
txtHarga.LostFocus
        If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
        If Not
IsNumeric(Trim(txtHarga.Text))
Then txtHarga.Text = 0

        txtQty.Text =
Format(CDec(txtQty.Text),
"##,##0.00")
        txtSubTotal.Text =
Format(CDec(txtQty.Text) *
CDec(txtHarga.Text), "##,##0.00")
    End Sub

    Private Sub
btnTambah_Click(sender As Object,
e As EventArgs) Handles
btnTambah.Click
        gbStok.Visible = True
    End Sub

    Function GetNameStok(X As
String) As String
        Dim Y As String = ""
        If Trim(X) <> "" Then
            Dim cmdOpen As New
SqlCommand
            If conn.State =
ConnectionState.Open Then
conn.Close()
            conn.Open()
            cmdOpen.Connection =
conn
            query = "Select * From
Stok where kode_stok = '" &
Trim(X) & "'"
            cmdOpen.CommandText =
query

    Private Sub btnTambah_Click(sender As
Object, e As EventArgs) Handles
btnTambah.Click
        gbMenu.Visible = True
    End Sub

    Function GetNameStok(X As String) As
String
        Dim Y As String = ""
        If Trim(X) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Stok
where kode_stok = '" & Trim(X) & "'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    Y =
drOpen("nama").ToString
                End While
            End If
            drOpen.Close()
        End If
        Return Y
    End Function
    Function GetPriceStok(X As String) As
Decimal
        Dim Y As Decimal = 0
        If Trim(X) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State =
ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Stok
where kode_stok = '" & Trim(X) & "'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    Y =
drOpen("harga_jual").ToString
                End While
            End If
            drOpen.Close()
        End If
        Return Y
    End Function

    Private Sub btnBersihkan_Click(sender
As Object, e As EventArgs) Handles
btnBersihkan.Click
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
```

```vbnet
            Dim drOpen As
SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While
drOpen.Read()
                    Y =
drOpen("nama").ToString
                End While
            End If
            drOpen.Close()
        End If
        Return Y
    End Function

    Function GetPriceStok(X As
String) As Decimal
        Dim Y As Decimal = 0
        If Trim(X) <> "" Then
            Dim cmdOpen As New
SqlCommand
            If conn.State =
ConnectionState.Open Then
conn.Close()
            conn.Open()
            cmdOpen.Connection =
conn
            query = "Select * From
Stok where kode_stok = '" &
Trim(X) & "'"
            cmdOpen.CommandText =
query

            Dim drOpen As
SqlDataReader =
cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While
drOpen.Read()
                    Y =
drOpen("harga_beli").ToString
                End While
            End If
            drOpen.Close()
        End If
        Return Y
    End Function
    Private Sub
btnBersihkan_Click(sender As
Object, e As EventArgs) Handles
btnBersihkan.Click
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
        txtHarga.Text = ""
        txtSubTotal.Text = ""
    End Sub
    Private Sub Total()
        Dim XTotal As Decimal = 0
        For i = 0 To
dgvDetail.Rows.Count - 1
```

```vbnet
        txtHarga.Text = ""
        txtSubTotal.Text = ""
    End Sub

    Private Sub Total()
        Dim XTotal As Decimal = 0
        For i = 0 To dgvDetail.Rows.Count
- 1
            XTotal = XTotal +
dgvDetail.Rows(i).Cells(4).Value
            txtTotal.Text = Format(XTotal,
"##,##0.00")
        Next
    End Sub

    Private Sub btnTambah_S_Click(sender
As Object, e As EventArgs) Handles
btnTambah_S.Click
        If (Trim(txtKode_S.Text) <> "" And
Trim(txtNama_S.Text) <> "") Then
            If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
            If Not
IsNumeric(Trim(txtHarga.Text)) Then
txtHarga.Text = 0
            Dim ketemu As Boolean = False
            Dim temp As Integer
            For i As Integer = 0 To
dgvDetail.RowCount = 1 And Not ketemu
                If
dgvDetail.Rows(i).Cells(0).Value.ToString
= Trim(txtKode_S.Text) Then
                    ketemu = True
                    temp = i
                End If
            Next

            If ketemu Then
dgvDetail.Rows(temp).Cells(2).Value =
txtQty.Text

dgvDetail.Rows(temp).Cells(3).Value =
txtHarga.Text

dgvDetail.Rows(temp).Cells(4).Value =
CDec(txtHarga.Text) * CDec(txtQty.Text)
            Else

dgvDetail.Rows.Add(Trim(txtKode_S.Text),
Trim(txtNama_S.Text), txtQty.Text,
txtHarga.Text, CDec(txtHarga.Text) *
CDec(txtQty.Text))
            End If

            Total()
            Call
btnBersihkan_Click(sender, e)
            txtKode_S.Select()
        End If
    End Sub
```

```vbnet
            XTotal = XTotal +
dgvDetail.Rows(i).Cells(4).Value
            txtTotal.Text =
Format(XTotal, "##,##0.00")
        Next
    End Sub
    Private Sub
btnTambah_S_Click(sender As
Object, e As EventArgs) Handles
btnTambah_S.Click
        If (Trim(txtKode_S.Text)
<> "" And Trim(txtNama_S.Text) <>
"") Then
            If Not
IsNumeric(Trim(txtQty.Text)) Then
txtQty.Text = 0
            If Not
IsNumeric(Trim(txtHarga.Text))
Then txtHarga.Text = 0
            Dim ketemu As Boolean
= False
            Dim temp As Integer
            For i As Integer = 0
To dgvDetail.RowCount = 1 And Not
ketemu
                If
dgvDetail.Rows(i).Cells(0).Value.T
oString = Trim(txtKode_S.Text)
Then
                    ketemu = True
                    temp = i
                End If
            Next

            If ketemu Then

dgvDetail.Rows(temp).Cells(2).Valu
e = txtQty.Text

dgvDetail.Rows(temp).Cells(3).Valu
e = txtHarga.Text

dgvDetail.Rows(temp).Cells(4).Valu
e = CDec(txtHarga.Text) *
CDec(txtQty.Text)
            Else

dgvDetail.Rows.Add(Trim(txtKode_S.
Text), Trim(txtNama_S.Text),
txtQty.Text, txtHarga.Text,
CDec(txtHarga.Text) *
CDec(txtQty.Text))
            End If

            Total()
            Call
btnBersihkan_Click(sender, e)
            txtKode_S.Select()
        End If
    End Sub

    Private Sub
btnSelesai_Click(sender As Object,
```

```vbnet
    Private Sub btnSelesai_Click(sender As
Object, e As EventArgs) Handles
btnSelesai.Click
        gbMenu.Visible = False
    End Sub

    Private Sub btnCari_S_Click(sender As
Object, e As EventArgs) Handles
btnCari_S.Click
        vStok = "JualStok"
        FrmListStok.Close()
        FrmListStok.MdiParent = mdiMenu
        FrmListStok.Show()
    End Sub

    Public Sub txtKode_S_LostFocus(sender
As Object, e As EventArgs) Handles
txtKode_S.LostFocus
        If Trim(txtKode_S.Text) <> "" Then
            txtNama_S.Text =
GetNameStok(Trim(txtKode_S.Text))
            txtHarga.Text =
Format(GetPriceStok(Trim(txtKode_S.Text)),
"##,##0.00")

        End If
    End Sub

    Private Sub txtQty_GotFocus(sender As
Object, e As EventArgs) Handles
txtQty.GotFocus
        txtQty.SelectAll()
    End Sub

    Private Sub txtHarga_GotFocus(sender
As Object, e As EventArgs) Handles
txtHarga.GotFocus
        txtHarga.SelectAll()
    End Sub

    Private Sub
dgvDetail_DoubleClick(sender As Object, e
As EventArgs) Handles
dgvDetail.DoubleClick
        If
dgvDetail.CurrentRow.Cells(0).Value <> ""
Then
            gbMenu.Visible = True
            txtKode_S.Text =
dgvDetail.CurrentRow.Cells(0).Value
            txtNama_S.Text =
dgvDetail.CurrentRow.Cells(1).Value
            txtQty.Text =
Format(CDec(dgvDetail.CurrentRow.Cells(2).
Value), "##,##0")
            txtHarga.Text =
Format(CDec(dgvDetail.CurrentRow.Cells(3).
Value), "##,##0.00")
            txtSubTotal.Text =
Format(CDec(dgvDetail.CurrentRow.Cells(4).
Value), "##,##0.00")
        End If
    End Sub
```

```vbnet
e As EventArgs) Handles
btnSelesai.Click
        gbStok.Visible = False
    End Sub

    Private Sub
btnCari_S_Click(sender As Object,
e As EventArgs) Handles
btnCari_S.Click
        vStok = "BeliStok"
        FrmListStok.Close()
        FrmListStok.MdiParent =
mdiMenu
        FrmListStok.Show()
    End Sub

    Public Sub
txtKode_S_LostFocus(sender As
Object, e As EventArgs) Handles
txtKode_S.LostFocus
        If Trim(txtKode_S.Text) <>
"" Then
            txtNama_S.Text =
GetNameStok(Trim(txtKode_S.Text))
            txtHarga.Text =
Format(GetPriceStok(Trim(txtKode_S
.Text)), "##,##0.00")

        End If
    End Sub

    Private Sub
txtQty_GotFocus(sender As Object,
e As EventArgs) Handles
txtQty.GotFocus
        txtQty.SelectAll()
    End Sub

    Private Sub
txtHarga_GotFocus(sender As
Object, e As EventArgs) Handles
txtHarga.GotFocus
        txtHarga.SelectAll()
    End Sub

    Private Sub
dgvDetail_DoubleClick(sender As
Object, e As
DataGridViewCellEventArgs) Handles
dgvDetail.CellDoubleClick
        If
dgvDetail.CurrentRow.Cells(0).Valu
e <> "" Then
            gbStok.Visible = True
            txtKode_S.Text =
dgvDetail.CurrentRow.Cells(0).Valu
e
            txtNama_S.Text =
dgvDetail.CurrentRow.Cells(1).Valu
e
            txtQty.Text =
Format(CDec(dgvDetail.CurrentRow.C
ells(2).Value), "##,##0")

Private Sub btnCari_C_Click(sender As
Object, e As EventArgs) Handles
btnCari_C.Click
        vCustomer = "CustomerJual"
        FrmListCustomer.Close()
        FrmListCustomer.MdiParent =
mdiMenu
        FrmListCustomer.Show()
    End Sub


    Public Sub txtKode_C_LostFocus(sender
As Object, e As EventArgs) Handles
txtKode_C.LostFocus
        kodeCustomer = txtKode_C.Text
        If Trim(txtKode_C.Text) <> "" Then
            Using cnn = New SqlConnection
                cnn.ConnectionString =
"Data Source = localhost\SQLEXPRESS;
Initial Catalog = lagoods_ep; Integrated
Security = True"
                Using cmdX As New
SqlCommand
                    cnn.Open()
                    cmdX.Connection = cnn
                    query = "Select * from
Customer Where kode_customer ='" &
Trim(txtKode_C.Text) & "'"
                    cmdX.CommandText =
query

                    'Buat Data Adapter
                    Using drX As
SqlDataReader = cmdX.ExecuteReader
                        If drX.HasRows
Then
                            While
drX.Read()

txtNama_C.Text = drX("nama")

txtSisaPoin.Text = Format(drX("poin"),
"##,##0").ToString
                            End While
                        End If
                        drX.Close()
                    End Using
                End Using
            End Using
        End If
    End Sub


    Private Sub btnPoin_Click(sender As
Object, e As EventArgs) Handles
btnPoin.Click
        gbPoin.Visible = True
    End Sub


    Private Sub btnProses_Click(sender As
Object, e As EventArgs) Handles
btnProses.Click
```

```vb
            txtHarga.Text =
Format(CDec(dgvDetail.CurrentRow.C
ells(3).Value), "##,##0.00")
            txtSubTotal.Text =
Format(CDec(dgvDetail.CurrentRow.C
ells(4).Value), "##,##0.00")
        End If
    End Sub

    Private Sub
PembelianStok_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then
conn.Close()
    End Sub
End Class
```

```vb
        txtTotal.Text = txtTotal.Text -
(CInt(cbPoin.Text) * 1000)


        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
        query = "SELECT * FROM Customer
WHERE kode_customer = '" &
Trim(txtKode_C.Text) & "'"
        cmdOpen.CommandText = query

        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            drOpen.Read()
            Dim currentPoints As Integer =
CInt(drOpen("poin"))
            drOpen.Close()

            ' Calculate the new points by
subtracting the points from cbPoin from
the current points
            Dim selectedPoints As Integer
= CInt(cbPoin.Text)
            If selectedPoints <=
currentPoints Then
                Dim newPoints As Integer =
currentPoints - selectedPoints

                query = "UPDATE Customer
SET poin = " & newPoints &
                        " WHERE
kode_customer = '" & Trim(txtKode_C.Text)
& "'"

                cmdOpen.CommandText =
query
                cmdOpen.ExecuteNonQuery()
                conn.Close()

                MessageBox.Show("Harga
Terpotong")
            Else
                conn.Close()
                MessageBox.Show("Poin Mu
Tidak Cukup")
            End If
        Else
            drOpen.Close()
            MessageBox.Show("Customer
Tidak Ditemukan")
            conn.Close()
            cbPoin.Select()
        End If
    End Sub

    Private Sub Button1_Click(sender As
Object, e As EventArgs) Handles
btnSelesai_P.Click
```

```
                                         gbPoin.Visible = False
                                    End Sub


                                  End Class
```

Tabel 4. 3 Pembelian Dan Penjualan Stok

CATERING

```
Imports System.Data
Imports System.Data.SqlClient

Public Class Catering
    Dim query As String
    Private conn As New SqlConnection
    Private totalQty As Integer = 0
    Private Sub connect()
        conn.ConnectionString = "Data Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated Security = True"
    End Sub

    Sub clear()
        txtKode.Text = AutoCode3("Catering", Now.Date)
        txtNama.Text = ""
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
        dgvDetail.Rows.Clear()
        dgvDetail.Columns(2).HeaderCell.Style.Alignment =
DataGridViewContentAlignment.MiddleRight
        dgvDetail.Columns(2).DefaultCellStyle.Alignment =
DataGridViewContentAlignment.MiddleRight
        dgvDetail.Columns(2).DefaultCellStyle.Format = "##,##0"
        gbMenu.Visible = True
    End Sub

    Private Sub Catering_Load(sender As Object, e As EventArgs) Handles
MyBase.Load
        connect()
        txtKode.Text = ""
        clear()
        gbMenu.Visible = True
    End Sub

    Private Sub btnSimpan_Click(sender As Object, e As EventArgs) Handles
btnSimpan.Click
        Dim cmdOpen As New SqlCommand
        If conn.State = ConnectionState.Open Then conn.Close()
```

```vb
        conn.Open()
        cmdOpen.Connection = conn
        query = "Select * From Catering Where kode_catering ='" &
Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
        If drOpen.HasRows Then
            sAda = True
            query = "update Catering set " &
                    "nama = '" & Trim(txtNama.Text) & "'" &
                    "Total = " & CInt(txtTotal.Text) &
                    "where kode_catering = '" & Trim(txtKode.Text) & "'"
        Else
            sAda = False
            query = "Insert into Catering values('" & Trim(txtKode.Text) &
"','" & Trim(txtNama.Text) & "'," &
                    CInt(txtTotal.Text) & ")"
        End If
        drOpen.Close()
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        query = "delete from Catering_Detail where kode_catering ='" &
Trim(txtKode.Text) & "'"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        Dim i As Integer
        For i = 0 To dgvDetail.Rows.Count - 1
            If (dgvDetail.Rows(i).Cells(0).Value <> "") Then
                query = "insert into Catering_Detail values ('" &
Trim(txtKode.Text) & "'," & i & ",'" &
                        Trim(dgvDetail.Rows(i).Cells(0).Value) & "','" &
                        Trim(dgvDetail.Rows(i).Cells(1).Value) & "'," &
                        CDec(dgvDetail.Rows(i).Cells(2).Value) & ")"
                cmdOpen.CommandText = query
                cmdOpen.ExecuteNonQuery()
            End If
        Next

        conn.Close()

        MessageBox.Show("Data Berhasil Disimpan")
        clear()
        txtKode.Select()
    End Sub

    Public Sub txtKode_LostFocus(sender As Object, e As EventArgs) Handles
txtKode.LostFocus
        If Trim(txtKode.Text) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State = ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn

            query = "Select * From Catering where kode_catering ='" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query

            Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
            If drOpen.HasRows Then
```

```vbnet
                While drOpen.Read()
                    txtKode.Text = drOpen("kode_catering").ToString
                    txtNama.Text = drOpen("nama").ToString
                End While

                dgvDetail.Rows.Clear()
                drOpen.Close()

                If conn.State = ConnectionState.Open Then conn.Close()
                conn.Open()

                query = "Select * From Catering_Detail Where kode_catering = '"
& Trim(txtKode.Text) & "' order by no"

                cmdOpen.Connection = conn
                cmdOpen.CommandText = query
                cmdOpen.ExecuteNonQuery()

                drOpen = cmdOpen.ExecuteReader


                If drOpen.HasRows Then
                    While drOpen.Read()
                        dgvDetail.Rows.Add(drOpen("kode_stok"), drOpen("nama"),
drOpen("qty"))
                    End While
                End If
                drOpen.Close()
                conn.Close()
            End If
            drOpen.Close()
        End If
    End Sub

    Private Sub btnBatal_Click(sender As Object, e As EventArgs) Handles
btnBatal.Click
        clear()
    End Sub

    Private Sub btnHapus_Click(sender As Object, e As EventArgs) Handles
btnHapus.Click
        If MessageBox.Show("Yakin mau Dihapus?", "Konfirmasi",
MessageBoxButtons.OKCancel) = vbOK Then
            Dim cmdOpen As New SqlCommand
            If conn.State = ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Delete from Catering Where kode_catering = '" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query
            cmdOpen.ExecuteNonQuery()
            query = "Delete from Catering_Detail Where kode_catering = '" &
Trim(txtKode.Text) & "'"
            cmdOpen.CommandText = query
            cmdOpen.ExecuteNonQuery()

            MessageBox.Show("Data Has Been Deleted")
            clear()
            txtKode.Select()
        End If
    End Sub
```

```vb
    Private Sub btnCari_Click(sender As Object, e As EventArgs) Handles
btnCari.Click
        vCatering = "Catering"
        FrmListCatering.Close()
        FrmListCatering.MdiParent = mdiMenu
        FrmListCatering.Show()
    End Sub

    Private Sub Catering_Closed(sender As Object, e As EventArgs) Handles
Me.Closed
        txtNama.Select()
        If conn.State = ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub

    Private Sub txtQty_KeyPress(sender As Object, e As KeyPressEventArgs)
Handles txtQty.KeyPress
        If Asc(e.KeyChar) <> Asc(vbBack) Then
            If Asc(e.KeyChar) < Asc(0) Or Asc(e.KeyChar) > Asc(9) Then
                e.Handled = True
            End If
        End If
    End Sub

    Private Sub txtQty_LostFocus(sender As Object, e As EventArgs) Handles
txtQty.LostFocus
        If Not IsNumeric(Trim(txtQty.Text)) Then txtQty.Text = 0
        txtQty.Text = Format(CDec(txtQty.Text), "##,##0")
    End Sub
    Function GetNameStok(X As String) As String
        Dim Y As String = ""
        If Trim(X) <> "" Then
            Dim cmdOpen As New SqlCommand
            If conn.State = ConnectionState.Open Then conn.Close()
            conn.Open()
            cmdOpen.Connection = conn
            query = "Select * From Stok where kode_stok = '" & Trim(X) & "'"
            cmdOpen.CommandText = query

            'Buat Data Adapter
            Dim drOpen As SqlDataReader = cmdOpen.ExecuteReader
            If drOpen.HasRows Then
                While drOpen.Read()
                    Y = drOpen("nama").ToString
                End While
            End If
            drOpen.Close()
        End If
        Return Y
    End Function

    Private Sub btnTambah_S_Click(sender As Object, e As EventArgs) Handles
btnTambah_S.Click
        Dim qty As Integer = 0

        If Integer.TryParse(txtQty.Text, qty) Then
            totalQty += qty
            txtTotal.Text = totalQty.ToString() * 3000
        Else
            MessageBox.Show("Input qty tidak valid.")
        End If

        If (Trim(txtKode_S.Text) <> "" And Trim(txtNama_S.Text) <> "") Then
```

```vbnet
            If Not IsNumeric(Trim(txtQty.Text)) Then txtQty.Text = 0
            Dim ketemu As Boolean = False
            Dim temp As Integer
            For i As Integer = 0 To dgvDetail.RowCount = 1 And Not ketemu
                If dgvDetail.Rows(i).Cells(0).Value.ToString =
Trim(txtKode_S.Text) Then
                    ketemu = True
                    temp = i
                End If
            Next

            If ketemu Then
                dgvDetail.Rows(temp).Cells(2).Value = txtQty.Text
            Else
                dgvDetail.Rows.Add(Trim(txtKode_S.Text), Trim(txtNama_S.Text),
(txtQty.Text))
            End If

            Call btnBersihkan_Click(sender, e)
            txtKode_S.Select()
        End If
    End Sub

    Private Sub btnBersihkan_Click(sender As Object, e As EventArgs) Handles
btnBersihkan.Click
        txtKode_S.Text = ""
        txtNama_S.Text = ""
        txtQty.Text = ""
    End Sub

    Private Sub btnCari_S_Click(sender As Object, e As EventArgs) Handles
btnCari_S.Click
        vStok = "Paket"
        FrmListStok.Close()
        FrmListStok.MdiParent = mdiMenu
        FrmListStok.Show()
    End Sub

    Public Sub txtKode_S_LostFocus(sender As Object, e As EventArgs) Handles
txtKode_S.LostFocus
        If Trim(txtKode_S.Text) <> "" Then
            txtNama_S.Text = GetNameStok(Trim(txtKode_S.Text))
        End If
    End Sub

    Private Sub txtQty_GotFocus(sender As Object, e As EventArgs) Handles
txtQty.GotFocus
        txtQty.SelectAll()
    End Sub

    Private Sub dgvDetail_CellDoubleClick(sender As Object, e As
DataGridViewCellEventArgs) Handles dgvDetail.CellDoubleClick
        If dgvDetail.CurrentRow.Cells(0).Value <> "" Then
            gbMenu.Visible = True
            txtKode_S.Text = dgvDetail.CurrentRow.Cells(0).Value
            txtKode_S_LostFocus(sender, e)
            txtQty.Text = Format(CDec(dgvDetail.CurrentRow.Cells(2).Value),
"##,##0")
        End If
    End Sub

    Private Sub Catering_Deactivate(sender As Object, e As EventArgs) Handles
Me.Deactivate
```

```
            txtNama.Select()
    End Sub


End Class
```

Tabel 4. 4 Catering

4.5.3 SOURCE CODE LAPORAN LIST

STOK	ADMIN
| ```
Imports System.Data
Imports System.Data.SqlClient

Public Class FrmListStok
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated Security
= True"
    End Sub

    Private Sub FrmListStok_Load(sender
As Object, e As EventArgs) Handles
MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("ID Stok")
        cboCari.Items.Add("Nama Stok")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn

        query = "Select * From Stok order
by kode_stok"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
``` | ```
Imports System.Data
Imports System.Data.SqlClient
Imports
System.Diagnostics.Eventing.Reader

Public Class FrmListAdmin
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString =
"Data Source = localhost\SQLEXPRESS;
Initial Catalog = lagoods_ep;
Integrated Security = True"
    End Sub

    Private Sub
FrmListAdmin_Load(sender As Object,
e As EventArgs) Handles MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("Kode
Admin")
        cboCari.Items.Add("Nama")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New
SqlCommand
        If conn.State =
ConnectionState.Open Then
conn.Close()
        conn.Open()
        cmdOpen.Connection = conn
``` |

```vb
        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("kode_stok").ToString,
drOpen("nama"), drOpen("harga_beli"),
drOpen("harga_jual"), drOpen("stok"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()


dgv.Columns(3).DefaultCellStyle.Format =
"Rp#,##0.00"

dgv.Columns(4).DefaultCellStyle.Format =
"Rp#,##0.00"

dgv.Columns(5).DefaultCellStyle.Format =
"##,##0"
    End Sub

    Private Sub txtCari_KeyDown(sender As
Object, e As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter Then
            If cboCari.Text <> "" Then
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection = conn
                Select Case cboCari.Text
                    Case "ID Stok" :
jenis = "kode_stok"
                    Case "Nama Stok" :
jenis = "nama"
                End Select

                dgv.Rows.Clear()

                query = "Select * From
Stok Where " & jenis & " like '%" &
Trim(txtCari.Text) & "%'"
                query = query & " Order
By kode_stok"
                cmdOpen.CommandText =
query
                cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1
```

```vb
        query = "Select * From Admin
order by kode_admin"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
        Dim drOpen As SqlDataReader
= cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("kode_admin").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("level_wa"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()

    End Sub

    Private Sub
txtCari_KeyDown(sender As Object, e
As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter
Then
            If cboCari.Text <> ""
Then
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then
conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn
                Select Case
cboCari.Text
                    Case "Kode
Admin" : jenis = "kode_admin"
                    Case "Nama" :
jenis = "nama"
                End Select

                dgv.Rows.Clear()

                query = "Select *
From Admin Where " & jenis & " like
'%" & Trim(txtCari.Text) & "%'"
                query = query & "
Order By kode_admin"
                cmdOpen.CommandText
= query

cmdOpen.ExecuteNonQuery()

                    'Buat Data Adapter
```

```vb
                    'Buat Data Adapter
                    If drOpen.HasRows Then
                        While drOpen.Read()
                            dgv.Rows.Add(i,
drOpen("kode_stok").ToString,
drOpen("nama"), drOpen("harga_beli"),
drOpen("harga_jual"), drOpen("stok"))
                            i = i + 1
                        End While
                    End If
                    drOpen.Close()
                    conn.Close()
                Else
                    Dim cmdOpen As New
SqlCommand
                    If conn.State =
ConnectionState.Open Then conn.Close()
                    conn.Open()
                    cmdOpen.Connection = conn

                    dgv.Rows.Clear()

                    query = "Select * From
Stok "
                    query = query & " Order
By kode_stok"
                    cmdOpen.CommandText =
query
                    cmdOpen.ExecuteNonQuery()

                    'Buat Data Adapter
                    Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                    Dim i As Integer
                    i = 1

                    'Buat Data Adapter
                    If drOpen.HasRows Then
                        While drOpen.Read()
                            dgv.Rows.Add(i,
drOpen("kode_stok").ToString,
drOpen("nama"), drOpen("harga_beli"),
drOpen("harga_jual"), drOpen("stok"))
                            i = i + 1
                        End While
                    End If
                    drOpen.Close()
                    conn.Close()
                End If
        End If
    End Sub

    Private Sub
dgv_CellDoubleClick(sender As Object, e
As DataGridViewCellEventArgs) Handles
dgv.CellDoubleClick
        If dgv.CurrentRow.Cells(1).Value
<> "" Then
            Select Case vStok
                Case "BeliStok"

PembelianStok.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
```

```vb
                Dim drOpen As
SqlDataReader =
cmdOpen.ExecuteReader
                    Dim i As Integer
                    i = 1

                    'Buat Data Adapter
                    If drOpen.HasRows
Then
                        While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_admin").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("level_wa"))
                            i = i + 1
                        End While
                    End If
                    drOpen.Close()
                    conn.Close()
                Else
                    Dim cmdOpen As New
SqlCommand
                    If conn.State =
ConnectionState.Open Then
conn.Close()
                    conn.Open()
                    cmdOpen.Connection =
conn

                    dgv.Rows.Clear()

                    query = "Select *
From Admin "
                    query = query & "
Order By kode_admin"
                    cmdOpen.CommandText
= query

cmdOpen.ExecuteNonQuery()

                    'Buat Data Adapter
                    Dim drOpen As
SqlDataReader =
cmdOpen.ExecuteReader
                    Dim i As Integer
                    i = 1

                    'Buat Data Adapter
                    If drOpen.HasRows
Then
                        While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_admin").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("level_wa"))
                            i = i + 1
                        End While
                    End If
                    drOpen.Close()
```

```vbnet
                        Call
PembelianStok.txtKode_S_LostFocus(sender,
e)
                    Case "Stok"
                        Stok.txtID.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Stok.txtID_LostFocus(sender, e)
                    Case "JualStok"

Penjualan.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Penjualan.txtKode_S_LostFocus(sender, e)
                    Case "Paket"

Catering.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Catering.txtKode_S_LostFocus(sender, e)
            End Select
            Me.Close()
        End If
    End Sub

    Private Sub dgv_KeyDown(sender As
Object, e As KeyEventArgs) Handles
dgv.KeyDown
        If e.KeyCode = Keys.Enter Then
            If
dgv.CurrentRow.Cells(1).Value <> "" Then
                Select Case vStok
                    Case "BeliStok"

PembelianStok.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
PembelianStok.txtKode_S_LostFocus(sender,
e)
                    Case "Stok"
                        Stok.txtID.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Stok.txtID_LostFocus(sender, e)
                    Case "JualStok"

Penjualan.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Penjualan.txtKode_S_LostFocus(sender, e)
                    Case "Paket"

Catering.txtKode_S.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Catering.txtKode_S_LostFocus(sender, e)
                End Select
                Me.Close()
            End If
        End If
    End Sub

                conn.Close()
            End If
        End If
    End Sub


    Private Sub
dgv_CellDoubleClick(sender As
Object, e As
DataGridViewCellEventArgs) Handles
dgv.CellDoubleClick
        If
dgv.CurrentRow.Cells(1).Value <> ""
Then
            Select Case vAdmin
                Case "Admin"

Admin.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                    Call
Admin.txtKode_LostFocus(sender, e)
            End Select
            Me.Close()
        End If
    End Sub

    Private Sub dgv_KeyDown(sender
As Object, e As KeyEventArgs)
Handles dgv.KeyDown
            If e.KeyCode = Keys.Enter
Then
            Select Case vAdmin
                Case "Admin"

Admin.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                    Call
Admin.txtKode_LostFocus(sender, e)
            End Select
            Me.Close()
        End If
    End Sub

    Private Sub
FrmListAdmin_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then
conn.Close()
        conn = Nothing
    End Sub
End Class
```

```vb
        Private Sub FrmListStok_Closed(sender
As Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub


End Class
```

Tabel 4. 5 Source Code Laporan List

COSTUMER	PEMBELIAN STOK
| ```vb
Imports System.Data
Imports System.Data.SqlClient

Public Class FrmListCustomer
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
    End Sub

    Private Sub
FrmListCustomer_Load(sender As Object,
e As EventArgs) Handles MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("Kode
Customer")
        cboCari.Items.Add("Nama
Customer")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn

        query = "Select * From
Customer order by kode_customer"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
``` | ```vb
Imports System.Data
Imports System.Data.SqlClient
Imports
System.Diagnostics.Eventing.Reader

Public Class FrmListPembelian
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
    End Sub

    Private Sub
FrmListPembelian_Load(sender As Object,
e As EventArgs) Handles MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("No Beli")
        cboCari.Items.Add("Tanggal")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn

        query = "Select * From Beli
order by no_beli"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
``` |

```vbnet
        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("kode_customer").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("alamat"), drOpen("poin"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()


dgv.Columns(5).DefaultCellStyle.Format
= "##,##0"
    End Sub

    Private Sub txtCari_KeyDown(sender
As Object, e As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter Then
            If cboCari.Text <> "" Then
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn
                Select Case
cboCari.Text
                    Case "Kode
Customer" : jenis = "kode_customer"
                    Case "Nama
Customer" : jenis = "nama"
                End Select

                dgv.Rows.Clear()

                query = "select * From
Customer Where " & jenis & " Like '%"
& Trim(txtCari.Text) & "%'"
                query = query & "
Order By kode_customer"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
```

```vbnet
        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("no_beli").ToString,
drOpen("tanggal"), drOpen("total"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()


dgv.Columns(3).DefaultCellStyle.Format
= "Rp#,##0.00"
    End Sub

    Private Sub txtCari_KeyDown(sender
As Object, e As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter Then
            If cboCari.Text <> "" Then
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn
                Select Case
cboCari.Text
                    Case "No Beli" :
jenis = "no_beli"
                    Case "Tanggal" :
jenis = "tanggal"
                End Select

                dgv.Rows.Clear()

                query = "Select * From
Beli Where " & jenis & " like '%" &
Trim(txtCari.Text) & "%'"
                query = query & " Order
By no_beli"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While drOpen.Read()
```

```vb
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_customer").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("alamat"), drOpen("poin"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            Else
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn

                dgv.Rows.Clear()

                query = "select * From
Customer "
                query = query & "
Order By kode_customer"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_customer").ToString,
drOpen("nama"), drOpen("nomor_wa"),
drOpen("alamat"), drOpen("poin"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            End If
        End If

    End Sub

    Private Sub
dgv_CellDoubleClick(sender As Object,
e As DataGridViewCellEventArgs)
Handles dgv.CellDoubleClick

                dgv.Rows.Add(i,
drOpen("no_beli").ToString,
drOpen("tanggal"), drOpen("total"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            Else
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn

                dgv.Rows.Clear()

                query = "Select * From
Beli "
                query = query & " Order
By no_beli"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While drOpen.Read()
                        dgv.Rows.Add(i,
drOpen("no_beli").ToString,
drOpen("tanggal"), drOpen("total"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            End If
        End If
    End Sub

    Private Sub
dgv_CellDoubleClick(sender As Object, e
As DataGridViewCellEventArgs) Handles
dgv.CellDoubleClick
        If
dgv.CurrentRow.Cells(1).Value <> ""
Then
            Select Case vBeliP
                Case "BeliP"

PembelianStok.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
```

```vbnet
            If
dgv.CurrentRow.Cells(1).Value <> ""
Then
                Select Case vCustomer
                    Case "Customer"

Customer.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Customer.txtKode_LostFocus(sender, e)
                    Case "CustomerJual"

Penjualan.txtKode_C.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Penjualan.txtKode_C_LostFocus(sender,
e)
                End Select
                Me.Close()
            End If
    End Sub

    Private Sub dgv_KeyDown(sender As
Object, e As KeyEventArgs) Handles
dgv.KeyDown
        If e.KeyCode = Keys.Enter Then
            If
dgv.CurrentRow.Cells(1).Value <> ""
Then
                Select Case vCustomer
                    Case "Customer"

Customer.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Customer.txtKode_LostFocus(sender, e)
                    Case
"CustomerJual"

Penjualan.txtKode_C.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Penjualan.txtKode_C_LostFocus(sender,
e)
                End Select
                Me.Close()
            End If
        End If
    End Sub

    Private Sub
FrmListCustomer_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub
End Class


                Call
PembelianStok.txtKode_LostFocus(sender,
e)
                End Select
                Me.Close()
            End If
        End Sub

    Private Sub dgv_KeyDown(sender As
Object, e As KeyEventArgs) Handles
dgv.KeyDown
        If e.KeyCode = Keys.Enter Then
            If
dgv.CurrentRow.Cells(1).Value <> ""
Then
                Select Case vBeliP
                    Case "BeliP"

PembelianStok.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
PembelianStok.txtKode_LostFocus(sender,
e)
                End Select
                Me.Close()
            End If
        End If
    End Sub

    Private Sub
FrmListPembelian_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub
End Class
```

Tabel 4. 6 Customer Dan Pembelian Stok

PENJUALAN	CATERING

PENJUALAN

```vbnet
Imports System.Data
Imports System.Data.SqlClient
Imports
System.Diagnostics.Eventing.Reader

Public Class FrmListPenjualan
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
    End Sub
    Private Sub
FrmListPenjualan_Load(sender As
Object, e As EventArgs) Handles
MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("No Jual")
        cboCari.Items.Add("Kode
Customer")
        cboCari.Items.Add("Tanggal")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn

        query = "Select * From Jual
order by no_jual"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("no_jual").ToString,
drOpen("kode_customer"),
drOpen("tanggal"), drOpen("total"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()


dgv.Columns(4).DefaultCellStyle.Format
= "Rp#,##0.00"
```

CATERING

```vbnet
Imports System.Data
Imports System.Data.SqlClient

Public Class FrmListCatering
    Dim query As String
    Dim conn As New SqlConnection
    Dim jenis As String

    Public Sub connect()
        conn.ConnectionString = "Data
Source = localhost\SQLEXPRESS; Initial
Catalog = lagoods_ep; Integrated
Security = True"
    End Sub

    Private Sub
FrmListPaket_Load(sender As Object, e
As EventArgs) Handles MyBase.Load
        Dim i As Integer
        cboCari.Items.Clear()
        cboCari.Items.Add("Kode")
        cboCari.Items.Add("Nama
Paket")

        cboCari.SelectedIndex = 1
        connect()
        Dim cmdOpen As New SqlCommand
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn.Open()
        cmdOpen.Connection = conn

        query = "Select * From
Catering order by kode_catering"
        cmdOpen.CommandText = query
        cmdOpen.ExecuteNonQuery()

        'Buat Data Adapter
        Dim drOpen As SqlDataReader =
cmdOpen.ExecuteReader
        i = 1

        'Buat Data Adapter
        If drOpen.HasRows Then
            While drOpen.Read()
                dgv.Rows.Add(i,
drOpen("kode_catering").ToString,
drOpen("nama"))
                i = i + 1
            End While
        End If
        drOpen.Close()
        conn.Close()
    End Sub

    Private Sub txtCari_KeyDown(sender
As Object, e As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter Then
            If cboCari.Text <> "" Then
```

```vb
    End Sub

    Private Sub txtCari_KeyDown(sender
As Object, e As KeyEventArgs) Handles
txtCari.KeyDown
        If e.KeyCode = Keys.Enter Then
            If cboCari.Text <> "" Then
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn
                Select Case
cboCari.Text
                    Case "No Jual" :
jenis = "no_jual"
                    Case "Kode
Customer" : jenis = "kode_customer"
                    Case "Tanggal" :
jenis = "tanggal"
                End Select

                dgv.Rows.Clear()

                query = "Select * From
Jual Where " & jenis & " like '%" &
Trim(txtCari.Text) & "%'"
                query = query & "
Order no_jual"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("no_jual").ToString,
drOpen("kode_customer"),
drOpen("tanggal"), drOpen("total"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            Else
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
```

```vb
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn
                Select Case
cboCari.Text
                    Case "Kode" :
jenis = "kode_catering"
                    Case "Nama Paket"
: jenis = "nama"
                End Select

                dgv.Rows.Clear()

                query = "Select * From
Catering Where " & jenis & " like '%"
& Trim(txtCari.Text) & "%'"
                query = query & "
Order By kode_catering"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_paket").ToString,
drOpen("nama"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()

            Else
                Dim cmdOpen As New
SqlCommand
                If conn.State =
ConnectionState.Open Then conn.Close()
                conn.Open()
                cmdOpen.Connection =
conn

                dgv.Rows.Clear()

                query = "Select * From
Catering "
                query = query & "
Order By kode_catering"
```

```vb
                cmdOpen.Connection =
conn

                dgv.Rows.Clear()

                query = "Select * From
Jual "
                query = query & "
Order By no_jual"
                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("no_jual").ToString,
drOpen("kode_customer"),
drOpen("tanggal"), drOpen("total"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            End If
        End If
    End Sub

    Private Sub
dgv_CellDoubleClick(sender As Object,
e As DataGridViewCellEventArgs)
Handles dgv.CellDoubleClick
        If
dgv.CurrentRow.Cells(1).Value <> ""
Then
            Select Case vJualP
                Case "JualP"

Penjualan.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                    Call
Penjualan.txtKode_LostFocus(sender, e)
            End Select
            Me.Close()
        End If
    End Sub

    Private Sub dgv_KeyDown(sender As
Object, e As KeyEventArgs) Handles
dgv.KeyDown
        If e.KeyCode = Keys.Enter Then

                cmdOpen.CommandText =
query

cmdOpen.ExecuteNonQuery()

                'Buat Data Adapter
                Dim drOpen As
SqlDataReader = cmdOpen.ExecuteReader
                Dim i As Integer
                i = 1

                'Buat Data Adapter
                If drOpen.HasRows Then
                    While
drOpen.Read()

dgv.Rows.Add(i,
drOpen("kode_catering").ToString,
drOpen("nama"))
                        i = i + 1
                    End While
                End If
                drOpen.Close()
                conn.Close()
            End If
        End If
    End Sub

    Private Sub
dgv_CellDoubleClick(sender As Object,
e As DataGridViewCellEventArgs)
Handles dgv.CellDoubleClick
        If
dgv.CurrentRow.Cells(1).Value <> ""
Then
            Select Case vCatering
                Case "Catering"

Catering.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                    Call
Catering.txtKode_LostFocus(sender, e)
            End Select
            Me.Close()
        End If
    End Sub

    Private Sub
FrmListCatering_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub

    Private Sub dgv_KeyDown(sender As
Object, e As KeyEventArgs) Handles
dgv.KeyDown
        If e.KeyCode = Keys.Enter Then
            If
dgv.CurrentRow.Cells(1).Value <> ""
Then
```

```vb
                If
dgv.CurrentRow.Cells(1).Value <> ""
Then
                    Select Case vBeliP
                        Case "jualP"

Penjualan.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                            Call
Penjualan.txtKode_LostFocus(sender, e)
                    End Select
                    Me.Close()
                End If
        End If
    End Sub

    Private Sub
FrmListPenjualan_Closed(sender As
Object, e As EventArgs) Handles
Me.Closed
        If conn.State =
ConnectionState.Open Then conn.Close()
        conn = Nothing
    End Sub
End Class
```

```vb
                Select Case vCatering
                    Case "Catering"

Catering.txtKode.Text =
dgv.CurrentRow.Cells(1).Value
                        Call
Catering.txtKode_LostFocus(sender, e)
                End Select
                Me.Close()
            End If
        End If
    End Sub
End Class
```

Tabel 4. 7 Penjualan Dan Catering

BAB 5 TESTING

5.1 Admin Simpan

Bukti Data Tersimpan Di Data Base :

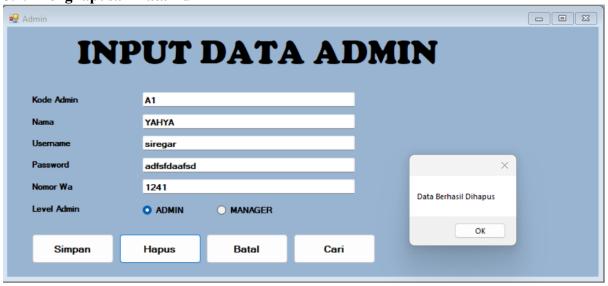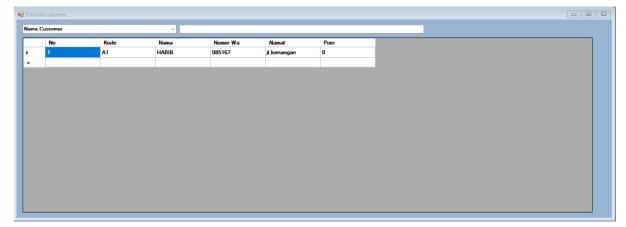|	kode_admin	nama	username	password	nomor_wa	level_wa
1	A1	YAHYA	siregar	adfsfdaafsd	1241	Admin

Gambar 5. 1 Admin Simpan

5.1.2 Penghapusan Data Admin

Gambar 5. 2 Penghapusan Data Admin

5.2.1 Customer Simpan

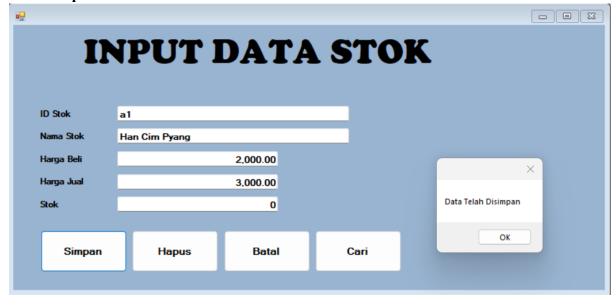Bukti Data Tersimpan Di Data Base :
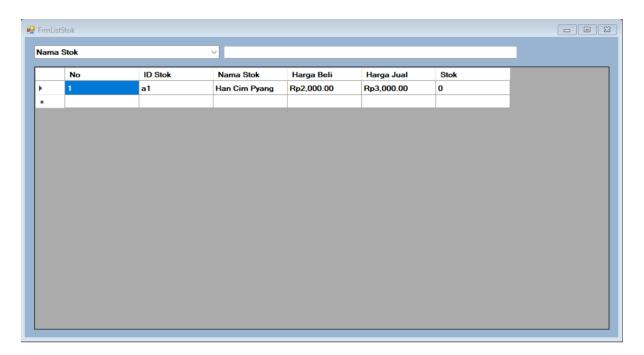

Gambar 5. 3 Customer Simpan

5.2.2 Penhapusan Data Customer

Gambar 5. 4 Penghapusan Data Customer
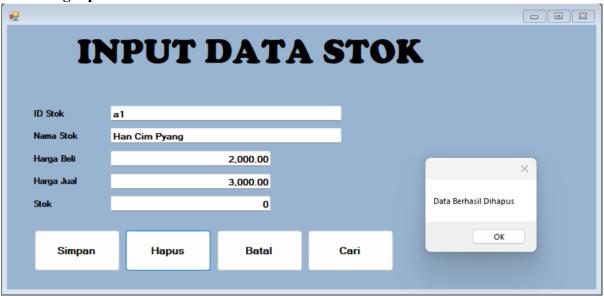
5.3.1 Simpan data Stok

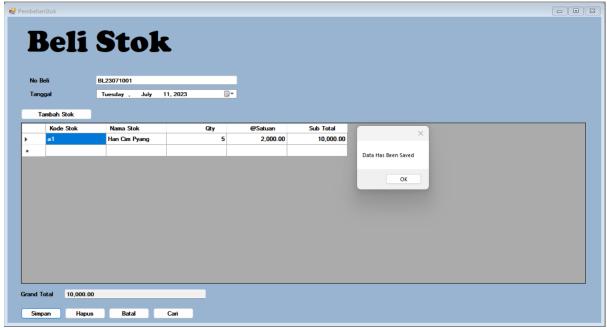## Bukti Data Tersimpan Di Data Base :

Gambar 5. 5 Simpan Data Stok

5.3.2 Penghapusan data Stok

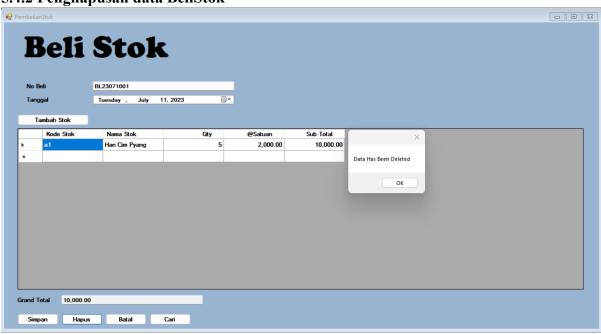*Gambar 5. 6 Penghapusan Data Stok*

5.4.1 Simpan PembelianStok

Bukti Data Tersimpan Di Data Base :
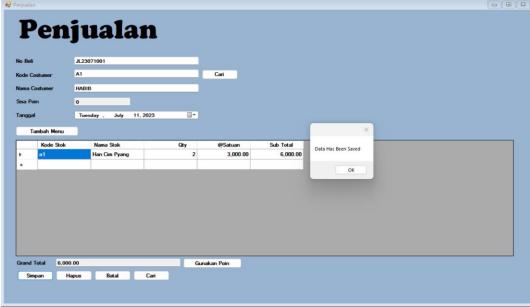

Gambar 5. 7 Simpan Pembelian Stok
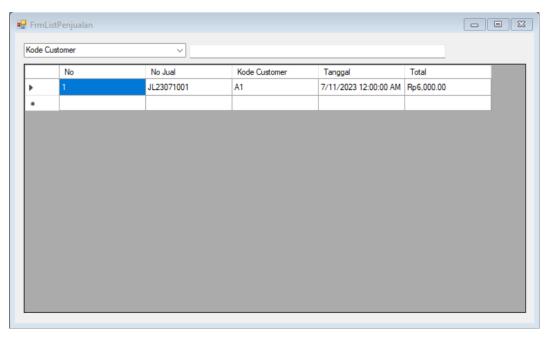
5.4.2 Penghapusan data BeliStok

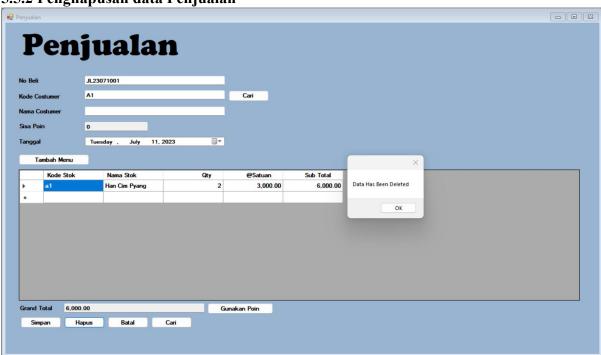*Gambar 5. 8 Penghapusan Data BeliStok*

5.5.1 Penyimpanan data Penjualan

Bukti Data Tersimpan Di Data Base :

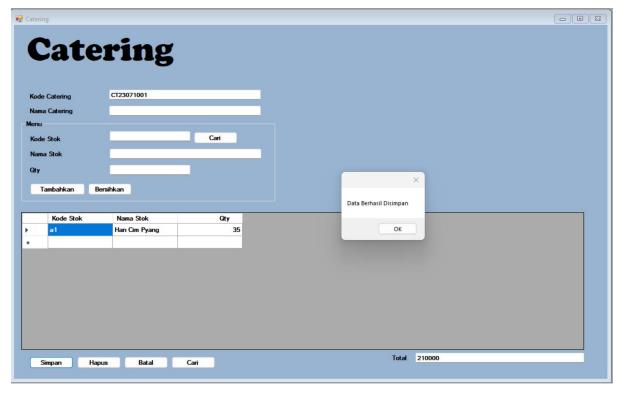|	no_jual	kode_customer	tanggal	total
1	JL23071001	A1	2023-07-11	6000.00

Gambar 5. 9 Penyimpanan Data Penjualan

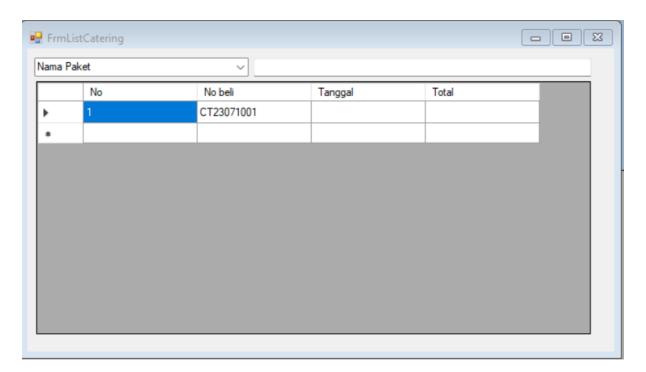## 5.5.2 Penghapusan data Penjualan

Gambar 5. 10 Penghapusan Data Penjualan

5.6.1 Penyimpanan data Catering

Bukti Data Tersimpan Di Data Base :

Gambar 5. 11 Penyimpanan Data Catering

5.6.2 Penghapusan data Catering

Gambar 5. 12 Penghapusan Data Catering

Bab 6 Operation System

Cara Penggunaan :

1. Buka Visual Studio 2023
2. Buka file yang sudah dibuat
3. Jalankan Aplikasi
4. Input Stok data
5. Input Customer data
6. Input Admin data
7. Proses Semua Pembelian Stok, Penjualan Stok, dan Catering di Transfer
8. Untuk Check Admin bisa di liat di Laporan

Requeirement :

Minimum system requirements

- OS: Microsoft Windows 7
- Processor: 1 GHz Pentium III or AMD Athlon Processor
- Memory: 256 MB of RAM
- Graphics: 64 MB Video Card (Geforce 3 or better)
- Hard Drive: 200 Mb of free hard disk space

BAB 7 MAINTENANCE

Untuk perawatan mungkin akan dilakukan setahun sekali, dimana nomor bon hanya dapat diupdate sampai 9999 angka, jika melewati itu program akan menimpah data lama atau mungkin database akan error, dimana hal tersebut bahaya bagi data lama.. Oleh karena itu programmer akan datang menambah jumlah data yang akan disimpan pada data tersebut.

Untuk aplikasi kami yang pertama ini, mungkin masih memliki kekurangan dimana hal ini mungkin akan kami update kedepannya, yakni :

1. Data masih bisa minus, dimana hal tersebut tidak boleh terjadi.
2. Interaksi yang masih kurang, dimana aplikasi kami masih kebanyakan menggunakan teks, yang dimana seharusnya menggunakan gambar yang jauh lebih bersahabat dengan manusia, dan gampang digunakan.