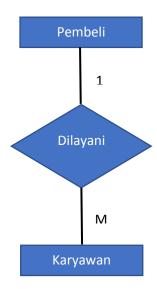
Studi Kasus:

Apotek Seger Waras ingin merubah model pembukuannya dengan komputerisasi maka diperlukan sebuah program yang dapat menampung data penjualan tersebut. Berikut ini adalah alur proses transaksi dalam apotek tersebut.

Transaksi pembelian

Pembeli datang ke apotek dilayani oleh karyawan, karyawan mengecek stok obat dan apabila terdapat obat yang diinginkan maka stok obat berkurang dan karyawan mencatat no kuitansi, pembeli memperoleh obat dan kuitansi.

ERD Apotek



Struktur Tabel:

Apotik Seger Waras, akan merancang 6 Tabel pada Database Apotiknya, yaitu terdiri :

- 1. Tabel Pembeli
- 2. Tabel Obat
- 3. Tabel Karyawaan
- 4. Tabel Banyak
- 5. Tabel Login
- 6. Tabel Stok

Rancangan Tabel

Tabel Pembeli:

No	Field	Type	Size	Null	Index
1	No_nota_pembeli	Varchar	8	N	Primary Key
2	Nama_pembeli	Varchar	30	Y	
3	Total	Number	11		

Tabel Obat:

No	Field	Type	Size	Null	Index
1	Kode_obat	Varchar	8	N	Primary Key
2	Nama_obat	Varchar	30	N	
3	Jenis_obat	Varchar	8	N	
4	Keluhan	Varchar	50	N	

Tabel Karyawaan:

No	Field	Type	Size	Null	Index
1	Nik	Varchar	8	N	Primary Key
2	Nama_karyawan	Varchar	30	N	
3	Alamat_karyawan	Varchar	50	N	
4	Bagian	Varchar	10	Y	

Tabel Banyak:

No	Field	Type	Size	Null	Index
1	No_nota	Varchar	8	N	Foreign Key
2	Kode_obat	Varchar	8	N	Foreign Key
3	Banyaknya	Number	9	N	
4	Sub_total	Number	9		

Tabel Login:

No	Field	Type	Size	Null	Index
1	Nik	Varchar	8	N	Foreign Key
2	Username	Varchar	20	N	Primary Key
3	Password	Number	8	N	

Tabel Stok:

No	Field	Type	Size	Null	Index
1	Kode_obat	Varchar	8	N	Foreign Key
2	Stok	Number	9	N	
3	Harga	Number	9	N	

Tabel Karyawaan:

Nik	Nama_karyawan	Alamat_karyawan	Bagian
18070101	Dewi	Boulevard Gading	Apoteker
18072502	Dini A	Jl Pengangsaan 2	Apoteker
17060102	Desi C	Jl Cakung Raya	Apoteker
17060103	Aris W	Jl Sunter Raya	Admin Gdg
17060104	Ajeng S	Jl Semper Raya	Accounting
17060105	Salma M	Jl Serdang Baru	Purchasing
17060106	Ahmad J	Jl SumurBatu	Kasir 1
17071107	Dedi S	Jl Cempaka Baru	Kasir 2
17090108	Dandi B	Jl Cempaka Wangi	Kasir 3
17060109	Fandi R	Jl Berlian 1	Marketing

Tabel Pembeli:

No_nota_pembeli	Nama_pembeli	Total
0142020	Angga	30,360
0242020	Ayu	87,500
0342020	Andi	50,348
0442020	Anto	79,552
0552020	Bambang	97,572
0652020	Susi	70,910
0752020	Erni	178,680
0862020	Esti	24,860
0962020	Zahlika	43,750
1062020	Zahra	7,091

Tabel Obat:

Vode shot	Noma abat	Ionia abat	V al., la a
Kode_obat	Nama_obat	Jenis_obat	Keluhan
	DIOI WGDI		
DIODICO	BIOLYSIN	ротог	M 121 1 1 1 1 1
BIOIN60	60ML	BOTOL	Memelihara daya tahan tubuh
	CURVIT CL		
CRVTEML	EMUL	BOTOL	Meningkatkan nafsu makan'
	BISOLVON		
BISOELIX	ELIX 60ML	BOTOL	Batuk berdahak radang
210 0 2211 1	BISOLVON FLU	20102	2 www. coraminaria
BISOFLU	60ML	BOTOL	Flu batuk berdahak
DISOLLO		BUTUL	Fiu batuk berdanak
	FARSIFEN 60		
FRSFN	ML	BOTOL	Rematik tulang
	BODREX FLU		
BODREXAT	ATT	BOTOL	Influenza batuk tidak berdahak
	DECOLGEN		
DCLNGEN	SYR 60ML	BOTOL	sakit kepala,hidung tersumbat
DCLNGLN		DOTOL	sakit kepala,muung tersumbat
	DECOLSIN SYR		
DCLSIN	60ML	BOTOL	Demam, bersin-bersin
	CURCUMA		
	PLUS DHA JRK		
CURMPLUS	60ML	BOTOL	Menjaga daya tahan tubuh anak
			, , ,
	CURCUMA		
	PLUS		
	EMULSION		
CURMEMU	STRW	BOTOL	Meningkatkan daya tahan tubuh

Tabel Banyak:

No_nota	Kode_obat	Banyaknya	Sub_total
0142020	BIOIN60	3	30,360
0242020	FRSFN	10	87,500
0342020	BISOELIX	2	50,348
0442020	CURMEMU	4	79,552
0552020	DCLSIN	6	97,572

0652020	BODREXAT	10	70,910
0752020	DCLNGEN	20	178,680
0862020	CURMPLUS	2	24,860
0962020	BODREX4	5	43,750
1062020	BODREXAT	8	7,091

Tabel Login:

Nik	Username	Password
1807001	Dewi	111
18072502	Dini	222
17060102	Desi	333
17060103	Aris	444
17060104	Ajeng	555
17060105	Salma	666
17060106	Ahmad	777
17071107	Dedi	888
17090108	Dandi	999
17060109	Fandi	1010

Tabel Stok:

Kode_obat	Stok	Harga
BIOIN60	50	10,120
CRVTEML	50	48,400
BISOELIX	100	25,174
BISOFLU	20	27,968
FRSFN	30	8,750
BODREXAT	50	7,091
DCLNGEN	70	8,934
DCLSIN	90	16,262
CURMPLUS	60	12,430
CURMEMU	150	19,888

Perancangan SQL

DDL (Data Definition Language)

```
CREATE TABLE karyawaan(
     nik VARCHAR(8) NOT NULL,
     nama_karyawan VARCHAR(30) NOT NULL,
     alamat_karyawan VARCHAR(50) NOT NULL,
     bagian VARCHAR(10) default NULL,
constraint pk_nik primary key(nik)
);
CREATE TABLE pembeli(
     no_nota_pembeli VARCHAR(8) NOT NULL,
     nama_pembeli VARCHAR(30) default NULL,
     total NUMBER(11),
constraint pk_no_nota_pembeli primary key(no_nota_pembeli)
);
CREATE TABLE obat(
     kode_obat VARCHAR(8) NOT NULL,
     nama_obat VARCHAR(30) NOT NULL,
     jenis_obat VARCHAR(8) NOT NULL,
     keluhan VARCHAR(30) NOT NULL,
constraint pk_kode_obat primary key(kode_obat)
);
```

```
CREATE TABLE banyak(
      no_nota VARCHAR(8) NOT NULL,
      kode_obat VARCHAR(8) NOT NULL,
      banyaknya NUMBER(9) NOT NULL,
      sub_total NUMBER(9),
constraint pk_no_nota primary key(no_nota)
);
CREATE TABLE login(
      nik VARCHAR(8) NOT NULL,
      username VARCHAR(20) NOT NULL,
      password NUMBER(8) NOT NULL,
constraint fk_nik foreign key(nik) references nik(nik),
constraint pk_username primary key(username)
);
CREATE TABLE stok(
      kode_obat VARCHAR(8) NOT NULL,
      stok NUMBER(9) NOT NULL,
      harga NUMBER(9) NOT NULL,
constraint fk_obat foreign key(kode_obat) references obat(kode_obat)
);
```

Relasi Tabel

- Karyawan Melayani Pembeli

Tabel Utama : Karyawan Tabel Kedua : Pembeli

Relationship : One-to-many (1:M)

- Pembeli Membeli Obat Tabel Utama : Pembeli Tabel Kedua : Obat

Relationship : Many-to-many (M:M)

- Karyawan Melakukan Stok

Tabel Utama : Karyawan Tabel Kedua : Stok

Relationship : One-to-M (1:M)

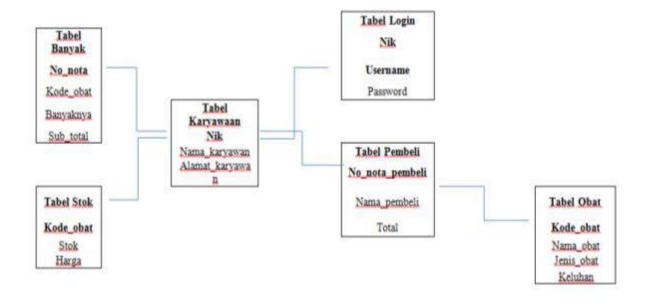
Karyawan Melakukan Login
 Tabel Utama : Karyawan
 Tabel Kedua : Login

Relationship : One-to-one (1:1)

- Karyawan Mengarsip Banyak

Tabel Utama : Karyawan Tabel Kedua : Banyak

Relationship : One-to-Many (1:M)



Pengisian Tabel

DML (Data Manipulation Language)

```
insert into karyawaan values('18070101','Dewi','Boulevard Gading','Apoteker'); insert into karyawaan values('18072502','Dini A','Jl Pengangsaan 2','Apoteker'); insert into karyawaan values('17060102','Desi C','Jl Cakung Raya','Apoteker'); insert into karyawaan values('17060103','Aris W','Jl Sunter Raya','Admin Gdg'); insert into karyawaan values('17060104','Ajeng S','Jl Semper Raya','Accounting'); insert into karyawaan values('17060105','Salma M','Jl Serdang Baru','Purchasing'); insert into karyawaan values('17060106','Ahmad J','Jl Sumur Batu','Kasir 1'); insert into karyawaan values('17071107','Dedi S','Jl Cempaka Baru','Kasir 2'); insert into karyawaan values('17090108','Dandi B','Jl Cempaka Wangi','Kasir 3'); insert into karyawaan values('17060109','Fandi R','Jl Berlian 1','Marketing');
```

```
CQL: Insert into haryonan unions('10070181','Best','Best','Besterd Gading','Spetcher 1 rev areated.

QQL: insert into heryonan - walues('10070182','Data B','JI Pengenganen 2','Rpotc Ber');

L rev areated.

QQL: insert into heryonann - walues('17060182','Data B','JI Cabung Baye','Apatake P');

L rev areated.

QQL: insert into haryonann - walues('17060182','Bris W','JI Canter Baye','Admin Gadang');

EQL: insert into haryonann - walues('17060182','Bris W','JI Sunter Baye','Admin Gadang');

ERROR et into haryonann - walues('17060182','Bris W','JI Sunter Baye','Admin Gadang');

ERROR et into haryonann - walues('17060182','Bris W','JI Sunter Baye','Admin Gadang');

ERROR et into haryonann - walues('17060184','Bring E','JI Sunuer Raye','Busum Galang');

L rev areated.

QQL: insert into haryonann - walues('17060184','Salas H','JI Sunur Batu','Barir I');

L rev areated.

QQL: insert into haryonann - walues('17060184','Bhend J','JI Sunur Batu','Barir I');

L rev areated.

QQL: insert into haryonann - walues('17060184','Bhend J','JI Sunur Batu','Barir I');

L rev areated.

QQL: insert into haryonann - walues('17050186','Bodi B','JI Canpaka Bare','Barir Z');

L rev areated.
```

```
insert into pembeli values('0142020','Angga','30360'); insert into pembeli values('0242020','Ayu','87500'); insert into pembeli values('0342020','Andi','50348'); insert into pembeli values('0442020','Anto','79552'); insert into pembeli values('0552020','Bambang','97572'); insert into pembeli values('0652020','Susi','70910'); insert into pembeli values('0752020','Erni','178680'); insert into pembeli values('0862020','Esti','24860');
```

insert into pembeli values('0962020', 'Zahlika', '43750');

insert into pembeli values('1062020', 'Zahra', '7091');

```
Fig.) invert into pookeli values('MC42M20','Negas','3M360'))

1 row treated.

Fig.) invert into pookeli values('MC42M20','Nyu','8V580'))

2 row created.

Fig.) invert into pookeli values('MC42M20','Neta','09480'))

2 row created.

Fig.) invert into pookeli values('MC42M20','Neta','7V5520'))

2 row created.

Fig.) invert into pookeli values('MC52M20','Neta','7V572');

2 row created.

Fig.) invert into pookeli values('MC52M20','Evel','170600'))

2 row created.

Fig.) invert into pookeli values('MC52M20','Evel','170600'))

2 row created.

Fig.) invert into pookeli values('MC52M20','Evel','170600');

2 row created.

Fig.) invert into pookeli values('MC52M20','Evel','20h10')

2 row created.

Fig.) invert into pookeli values('MF52M20','Zabliba','40750');

2 row created.
```

insert into obat values('BIOIN60','BIOLYSIN 60ML','BOTOL','Memelihara daya tahan tubuh');

insert into obat values('CRVTEML','CURVIT CL EMUL ','BOTOL','Meningkatkan nafsu makan');

insert into obat values('BISOELIX','BISOLVON ELIX 60ML','BOTOL','Batuk berdahak radang');

insert into obat values('BISOFLU','BISOLVON FLU 60ML','BOTOL','Flu batuk berdahak');

insert into obat values('FRSFN','FARSIFEN 60 ML','BOTOL','Rematik tulang');

insert into obat values('BODREXAT','BODREX FLU ATT','BOTOL','Influenza batuk tidak berdahak');

insert into obat values('DCLNGEN','DECOLGEN SYR 60ML ','BOTOL','Msakit kepala,hidung tersumbat');

insert into obat values('DCLSIN','DECOLSIN SYR 60ML ','BOTOL','Demam, bersinbersin');

insert into obat values('CURMPLUS','CURCUMA PLUS DHA JRK 60ML','BOTOL','Menjaga daya tahan tubuh anak');

insert into obat values('CURMEMU','CURCUMA PLUS EMULSION STRW','BOTOL','Meningkatkan daya tahan tubuh');



```
insert into banyak values('0142020','BIOIN60','3','30360');
insert into banyak values('0242020','CRVTEML','10','87500');
insert into banyak values('0342020','BISOELIX','2','50348');
insert into banyak values('0442020','BISOFLU','4','79552');
insert into banyak values('0552020','FRSFN','6','97572');
insert into banyak values('0652020','BODREXAT','10','70910');
insert into banyak values('0752020','DCLNGEN','20','178680');
insert into banyak values('0862020','DCLSIN','2','24860');
insert into banyak values('0962020','CURMPLUS','5','43750');
insert into banyak values('1062020','CURMEMU','8','7091');
```

insert into stok values('BIOIN60','50','10120');
insert into stok values('CRVTEML','50','48400');
insert into stok values('BISOELIX','100','25174');
insert into stok values('BISOFLU','20','27968');
insert into stok values('FRSFN','30','8750');
insert into stok values('BODREXAT','50','7091');
insert into stok values('DCLNGEN','70','8934');
insert into stok values('DCLSIN','90','16262');
insert into stok values('CURMPLUS','60','12430');
insert into stok values('CURMEMU','150','19888');

```
I was created.

CQLD invert into stab values('CBUTEML','GB','40400');

L res created.

CQLD invert into stab values('BISOSLIR','180",'25174');

L res created.

CQLD invert into stab values('BISOSLIR','180",'27768');

L res created.

CQLD invert into stab values('BISEN','30','8758');

L res created.

CQLD invert into stab values('BOSENAT','5H','7071');

L res created.

CQLD invert into stab values('BCLNEBN','70','8794');

L res created.

CQLD invert into stab values('BCLNEBN','70','8874');

L res created.

CQLD invert into stab values('CHROSEN','70','12430');

L res created.

CQLD invert into stab values('CHROSEN','50','12430');

L res created.

CQLD invert into stab values('CHROSEN','50','12430');

L res created.

CQLD invert into stab values('CHROSEN','50','12430');

L res created.
```

insert into login values('1807001','Dewi ','111');
insert into login values('18072502','Dini','222');
insert into login values('17060102','Desi','333');
insert into login values('17060103','Aris','444');
insert into login values('17060104','Ajeng','555');
insert into login values('17060105','Salma','666');
insert into login values('17060106','Ahmad','777');
insert into login values('17071107','Dedi','888');
insert into login values('17090108','Dandi','999');
insert into login values('17060109','Fandi','1010');

```
I was created.

SGAD insert lets bugin walnes('11786B182', 'Best', '232'):
insert into legis walnes('11786B182', 'Best', '322'):
INSERT at less 1:
SWE-1288Y: value too large for colone 'MRT, '5001MT, 'MSE' Carreal: 9, maximum:
SGAD insert into legis walnes('1286B183', 'Ario', '494'):
L rea created.
SGAD insert into legis walnes('1286B183', 'Ario', '494'):
L rea created.
SGAD insert into legis walnes('1286B183', 'Ealma', '555'):
L rea created.
SGAD insert into legis walnes('1286B185', 'Ealma', '556'):
L rea created.
SGAD insert into legis walnes('1286B185', 'Band', '777'):
L rea created.
SGAD insert into legis walnes('1286B185', 'Band', '777'):
L rea created.
SGAD insert into legis walnes('1286B185', 'Band', '1888'):insert into legis walnes('1286B185', 'Band', '1888'):insert into legis walnes('1286B185', 'Fand', '1888', 'Insert into legis walnes('1286B185', 'Fa
```

Report Apotik Seger Waras

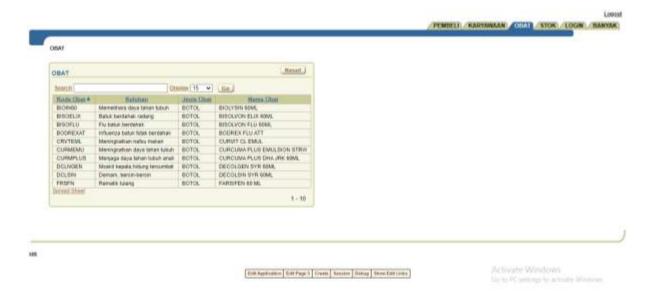
-Report Pembeli-



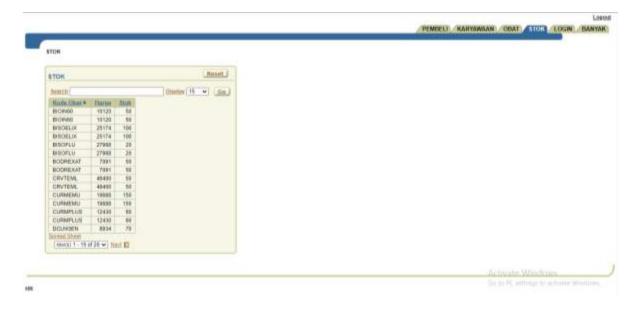
-Report Karyawan-



-Report Obat-



-Report Stok-



-Report Login-



-Report Banyak-

