

TUGAS 7

DANU BRADITYA REPHA
311810241
TI 18 B1



Praktikum Perancangan Basis Data UPB 2021

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Normalisasi Data PT. Indomarco Adi Prima

DIJUAL KEPADA :

TOKO SIMAUNG
PASIR JENGKOL RT 18/18 MAJALAYA
KARAWANG-41371



PT. INDOMARCO ADI PRIMA
Importer & Distributor - Consumer Products

PT INDOMARCO ADI PRIMA
Indofood Tower Lt. 19
Jl. Jend Sudirman KAV 76-78 Setiabudi
Jakarta Selatan
01.300.553.3.092.000

TANGGAL : 08/10/20
KODE PELANGGAN : 11855
SALESMAN : S744-SUHENDAR

FAKTUR : 152310
JATUH TEMPO : 07/11/20

KODE BARANG	NAMA BARANG	JUMLAH	HARGA SATUAN	TOTAL
158826	AMDK Club 220 ML	10	17,800	178,000
143018	AMDK Club 330 ML	5	29,000	145,000
143019	AMDK Club 600 ML	185	31,500	5,827,500
TOTAL YANG DIBAYAR				6,150,500



Normalisasi Data 1NF

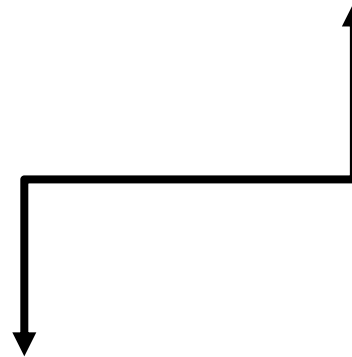
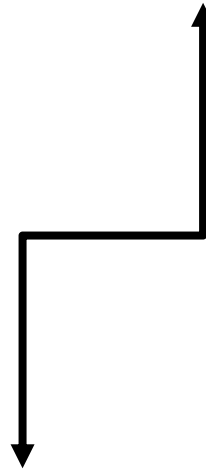
No. Faktur	Tanggal	Kode Pelanggan	Nama Pelanggan	Kode Barang	Nama Barang	Jumlah	Harga Satuan	Total	Total Faktur	Tanggal Tempo
152310	08/10/20	11855	Toko Simaung	158826	AMDK Club 220 ML	10	17.800	178.000	6.150.500	07/11/20
				143018	AMDK Club 330 ML	5	29.000	145.000		
				143019	AMDK Club 600 ML	185	31.500	5.827.500		



Normalisasi Data 2NF

Kode Pelanggan	Nama Pelanggan
11855	Toko Simaung

Kode Barang	Nama Barang	Harga Satuan
158826	AMDK Club 220 ML	17.800
143018	AMDK Club 330 ML	29.000
143019	AMDK Club 600 ML	31.500



No. Faktur	Tanggal	Kode Pelanggan	Nama Pelanggan	Kode Barang	Nama Barang	Jumlah	Harga Satuan
152310	08/10/20	11855	Toko Simaung	158826	AMDK Club 220 ML	10	17.800
				143018	AMDK Club 330 ML	5	29.000
				143019	AMDK Club 600 ML	185	31.500



Normalisasi Data 3NF

Kode Pelanggan	Nama Pelanggan
11855	Toko Simaung

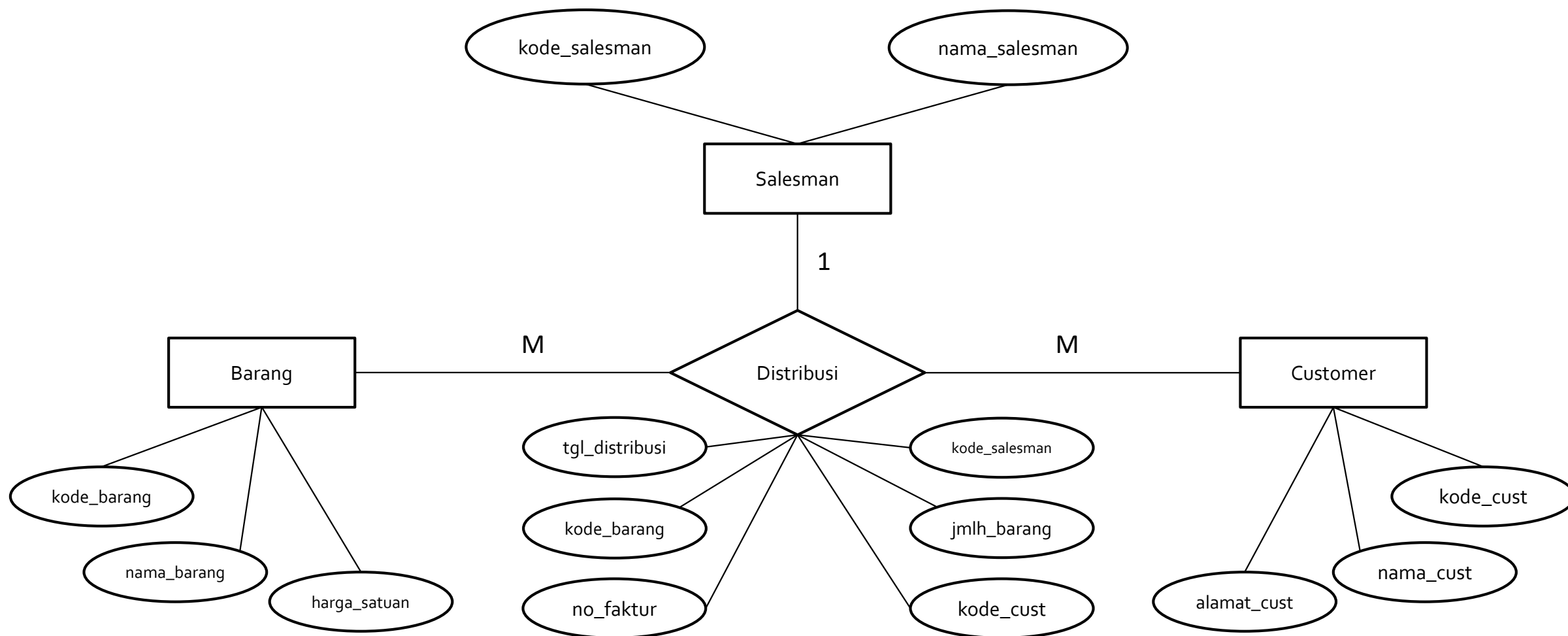
Kode Barang	Nama Barang	Harga Satuan
158826	AMDK Club 220 ML	17.800
143018	AMDK Club 330 ML	29.000
143019	AMDK Club 600 ML	31.500

No. Faktur	Tanggal	Kode Pelanggan	Nama Pelanggan
152310	08/10/20	11855	Toko Simaung

No. Faktur	Kode Barang	Nama Barang	Jumlah	Harga Satuan	Total	Total Faktur	Tanggal Tempo
152310	158826	AMDK Club 220 ML	10	17.800	178.000	6.150.500	07/11/20
	143018	AMDK Club 330 ML	5	29.000	145.000		
	143019	AMDK Club 600 ML	185	31.500	5.827.500		



Diagram ERD PT. Indomarco Adi Prima





Tabel/Entitas & Atributnya

Entity = Customer, Barang, Salesman

Atribut = Customer (kode_cust, nama_cust, alamat_cust), Barang (kode_barang, nama_barang, harga_satuan), Salesman (kode_salesman, nama_salesman)

Relationship = Distribusi (tgl_distribusi, kode_cust, kode_barang, kode_salesman, no_faktur, jmlh_barang)

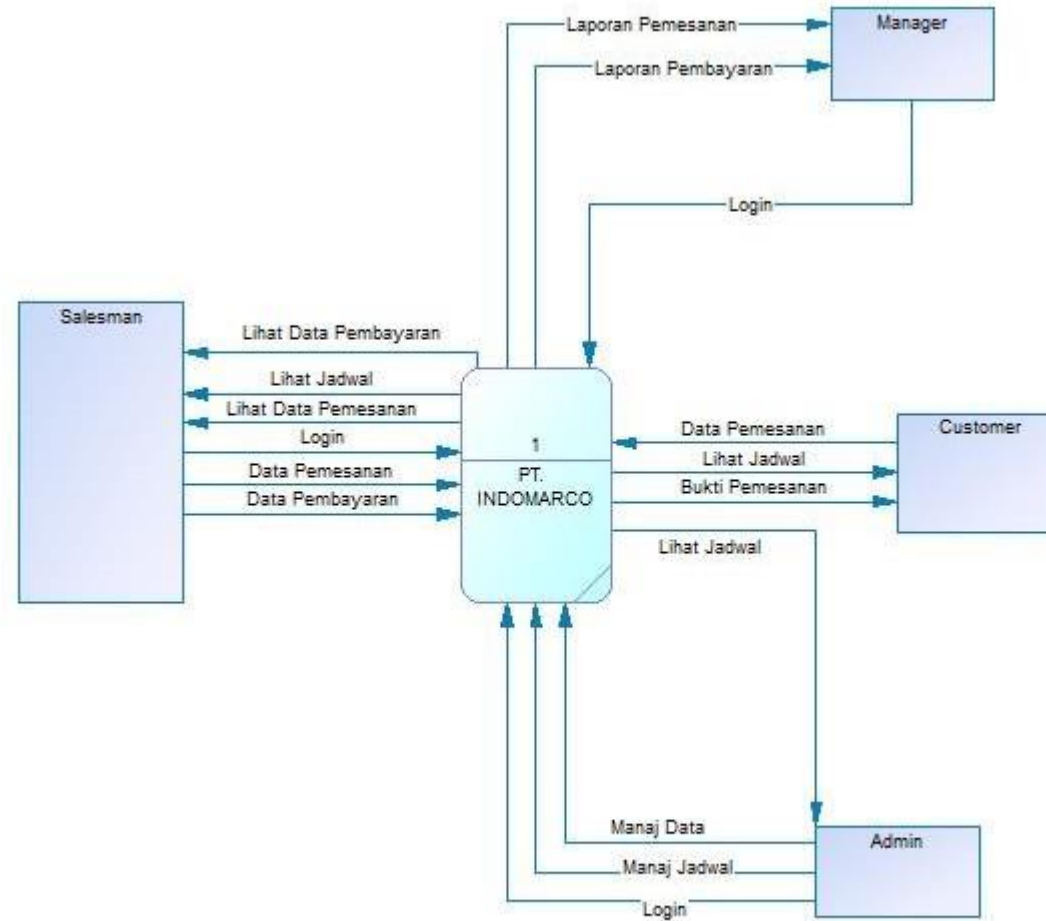


Kardinalitas Antar Tabel/Entitas

- ERD Kardinalitas Salesman dan Barang memiliki relationship Distribusi dan memiliki kardinalitas yaitu ***One to Many*** dimana seorang salesman dapat memilih banyak barang dan sebaliknya beberapa barang dapat dipilih oleh seorang salesman.
- ERD Kardinalitas Salesman dan Customer memiliki relationship Distribusi dan memiliki kardinalitas yaitu ***One to Many*** dimana seorang salesman melayani beberapa customer dan sebaliknya beberapa customer hanya dapat dilayani seorang salesman.
- ERD Kardinalitas Customer dan Barang memiliki relationship Distribusi dan memiliki kardinalitas yaitu ***Many to Many*** dimana beberapa customer dapat memilih beberapa barang dan sebaliknya beberapa barang dapat dipilih oleh beberapa customer.

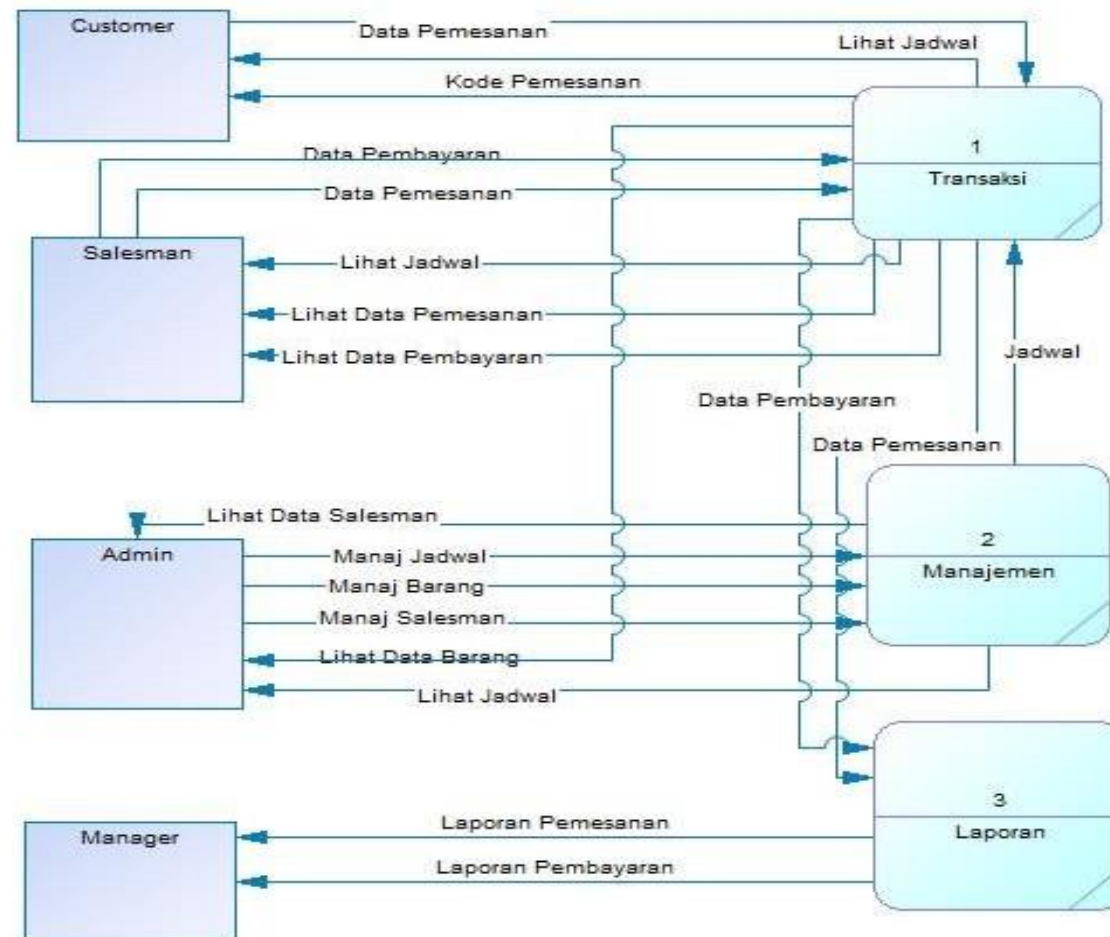


Konteks Diagram



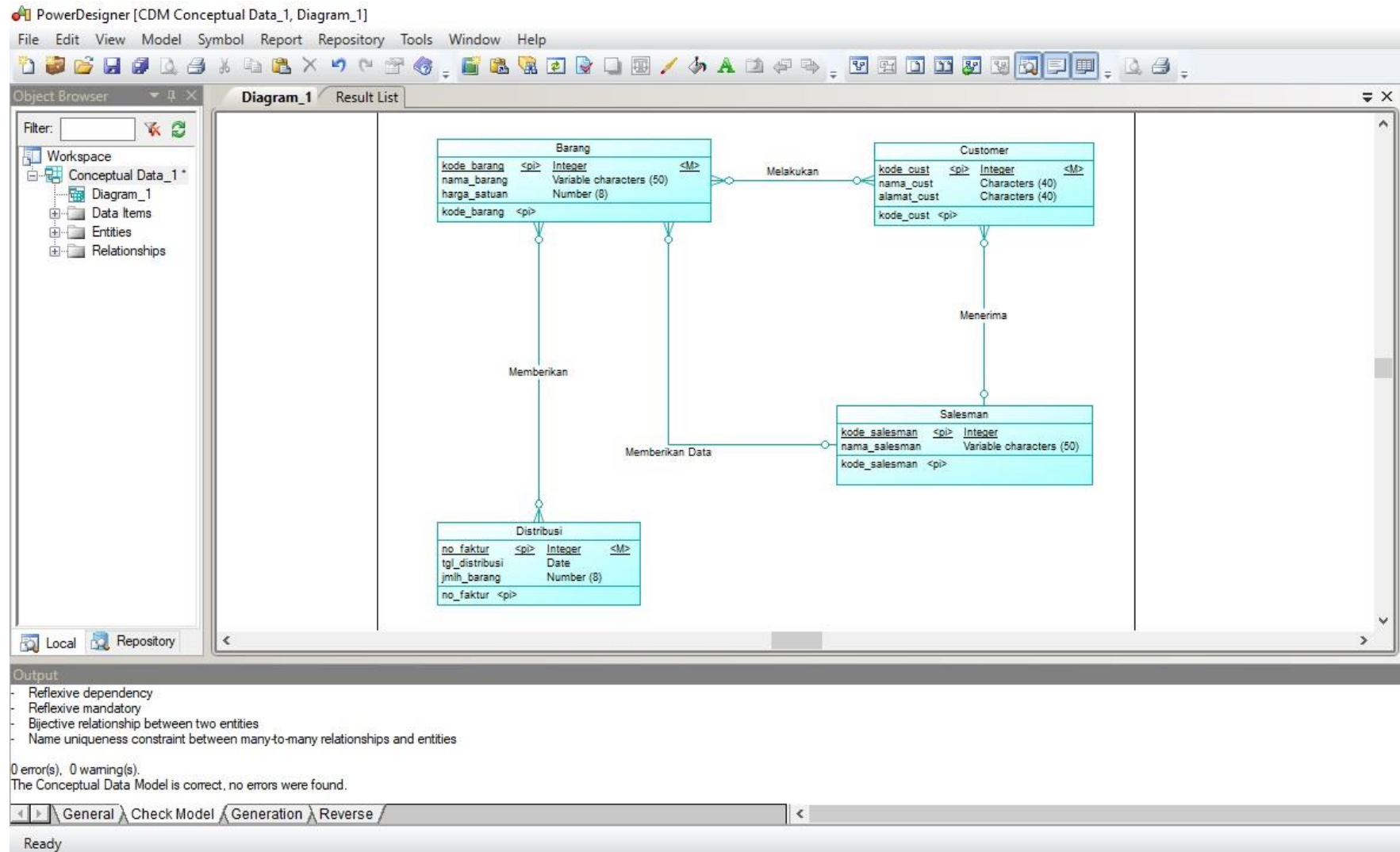


DFD lvl 0



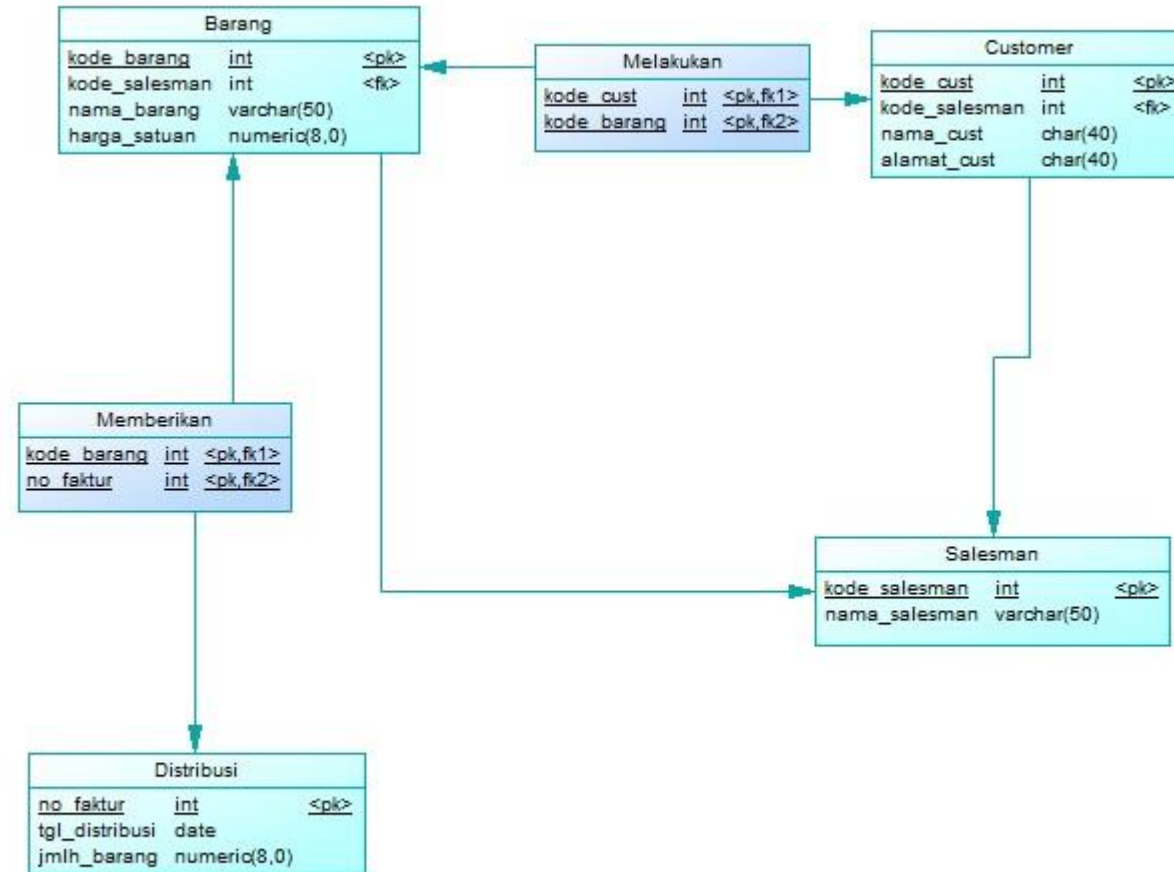


CDM





PDM





Create Database

```
C:\Windows\system32\cmd.exe - mysql -u root

MariaDB [(none)]> create database Danu_311810241;
Query OK, 1 row affected (0.003 sec)

MariaDB [(none)]> use Danu_311810241
Database changed
MariaDB [Danu_311810241]>
```



Bentuk Table Dengan Perintah SQL di Database (Salesman & Barang)

C:\Windows\system32\cmd.exe - mysql -u root

```
MariaDB [danu_311810241]> create table SALESMAN
-> (
->   KODE_SALESMAN      int not null,
->   NAMA_SALESMAN      varchar(50),
->   primary key (KODE_SALESMAN)
-> );
Query OK, 0 rows affected (0.035 sec)
```

```
MariaDB [danu_311810241]> desc salesman;
```

Field	Type	Null	Key	Default	Extra
KODE_SALESMAN	int(11)	NO	PRI	NULL	
NAMA_SALESMAN	varchar(50)	YES		NULL	

2 rows in set (0.020 sec)

C:\Windows\system32\cmd.exe - mysql -u root

```
MariaDB [danu_311810241]> create table BARANG
-> (
->   KODE_BARANG         int not null,
->   KODE_SALESMAN       int,
->   NAMA_BARANG         varchar(50),
->   HARGA_SATUAN        numeric(8,0),
->   primary key (KODE_BARANG),
->   constraint FK_MEMBERIKAN_DATA foreign key (KODE_SALESMAN)
->     references SALESMAN (KODE_SALESMAN) on delete restrict on update restrict
-> );
Query OK, 0 rows affected (0.034 sec)
```

```
MariaDB [danu_311810241]> desc barang;
```

Field	Type	Null	Key	Default	Extra
KODE_BARANG	int(11)	NO	PRI	NULL	
KODE_SALESMAN	int(11)	YES	MUL	NULL	
NAMA_BARANG	varchar(50)	YES		NULL	
HARGA_SATUAN	decimal(8,0)	YES		NULL	

4 rows in set (0.020 sec)



Bentuk Table Dengan Perintah SQL di Database (Customer & Distribusi)

```
C:\Windows\system32\cmd.exe - mysql -u root
MariaDB [danu_311810241]> create table CUSTOMER
-> (
->   KODE_CUST          int not null,
->   KODE_SALESMAN      int,
->   NAMA_CUST          char(40),
->   ALAMAT_CUST        char(40),
->   primary key (KODE_CUST),
->   constraint FK_MENERIMA foreign key (KODE_SALESMAN)
->     references SALESMAN (KODE_SALESMAN) on delete restrict on update restrict
-> );
Query OK, 0 rows affected (0.034 sec)

MariaDB [danu_311810241]> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| KODE_CUST  | int(11)   | NO   | PRI | NULL    |       |
| KODE_SALESMAN | int(11)   | YES  | MUL | NULL    |       |
| NAMA_CUST  | char(40)  | YES  |     | NULL    |       |
| ALAMAT_CUST | char(40)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.019 sec)
```

```
C:\Windows\system32\cmd.exe - mysql -u root
MariaDB [danu_311810241]> create table DISTRIBUSI
-> (
->   NO_FAKTUR          int not null,
->   TGL_DISTRIBUSI     date,
->   JMLH_BARANG         numeric(8,0),
->   primary key (NO_FAKTUR)
-> );
Query OK, 0 rows affected (0.038 sec)

MariaDB [danu_311810241]> desc distribusi;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NO_FAKTUR  | int(11)   | NO   | PRI | NULL    |       |
| TGL_DISTRIBUSI | date      | YES  |     | NULL    |       |
| JMLH_BARANG | decimal(8,0) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.020 sec)
```



Bentuk Table Dengan Perintah SQL di Database (Melakukan & Memberikan)

```
C:\Windows\system32\cmd.exe - mysql -u root
MariaDB [danu_311810241]> create table MELAKUKAN
-> (
->   KODE_CUST          int not null,
->   KODE_BARANG        int not null,
->   primary key (KODE_CUST, KODE_BARANG),
->   constraint FK_MELAKUKAN foreign key (KODE_CUST)
->     references CUSTOMER (KODE_CUST) on delete restrict on update restrict,
->   constraint FK_MELAKUKAN2 foreign key (KODE_BARANG)
->     references BARANG (KODE_BARANG) on delete restrict on update restrict
-> );
Query OK, 0 rows affected (0.034 sec)

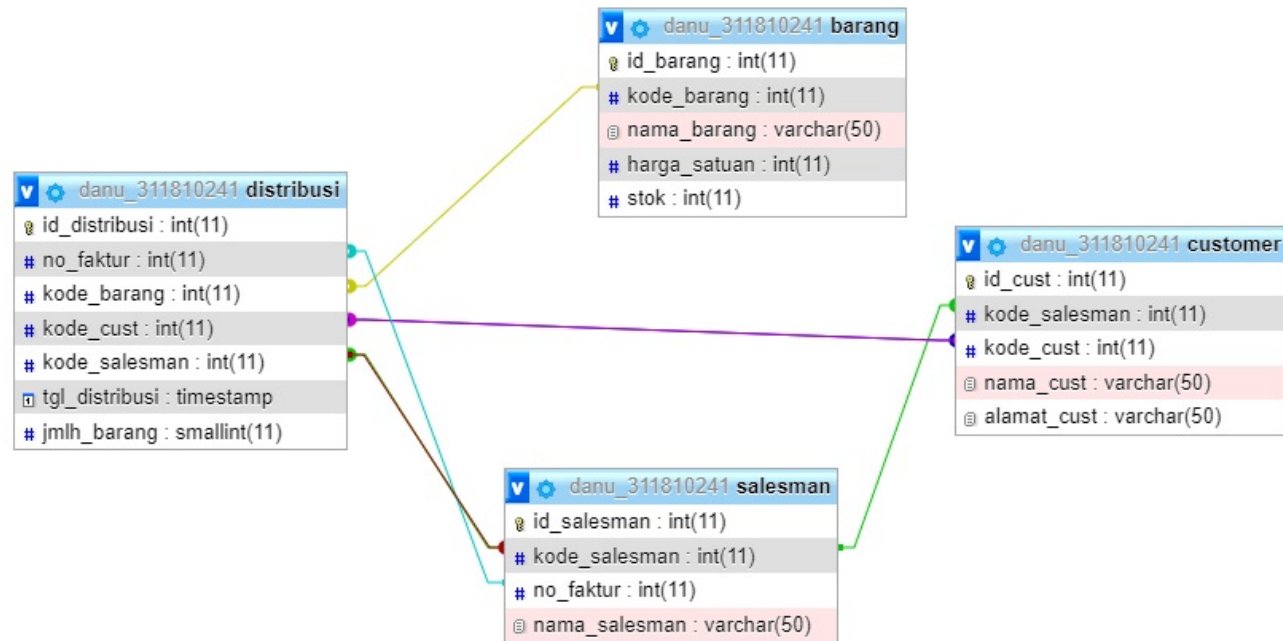
MariaDB [danu_311810241]> desc melakukan;
+-----+-----+-----+-----+-----+-----+
| Field      | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| KODE_CUST  | int(11)| NO   | PRI | NULL    |       |
| KODE_BARANG| int(11)| NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.021 sec)
```

```
C:\Windows\system32\cmd.exe - mysql -u root
MariaDB [danu_311810241]> create table MEMBERIKAN
-> (
->   KODE_BARANG        int not null,
->   NO_FAKTUR          int not null,
->   primary key (KODE_BARANG, NO_FAKTUR),
->   constraint FK_MEMBERIKAN foreign key (KODE_BARANG)
->     references BARANG (KODE_BARANG) on delete restrict on update restrict,
->   constraint FK_MEMBERIKAN2 foreign key (NO_FAKTUR)
->     references DISTRIBUSI (NO_FAKTUR) on delete restrict on update restrict
-> );
Query OK, 0 rows affected (0.032 sec)

MariaDB [danu_311810241]> desc memberikan;
+-----+-----+-----+-----+-----+-----+
| Field      | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| KODE_BARANG| int(11)| NO   | PRI | NULL    |       |
| NO_FAKTUR  | int(11)| NO   | PRI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.021 sec)
```




Designer Database





Tabel Inner Join

Berikut adalah tugas pertemuan 7 - Menampilkan Data Table MYSQL

Tabel Barang

Kode Barang	Nama Barang	Harga Satuan	Stok
158826	AMDK CLUB 220 ML	17800	100
143018	AMDK CLUB 330 ML	29000	100
143019	AMDK CLUB 600 ML	31500	100
143020	AMDK CLUB1500 ML	32000	100

Table Customer

Kode Salesman	Kode Customer	Nama Customer	Alamat Customer
745	11855	TOKO SIMAUNG	PASIR JENGKOL RT 18/18 MAJALAYA KARAWANG
746	11856	TOKO BERKAH	JL TUPAREV KARAWANGPAWITAN KARAWANG
744	11857	TOKO 256	JL PARAHYANGAN ADIARSA KARAWANG

Table Sales

Kode Salesman	Nomor Faktur	Nama Salesman
744	152310	SUHENDAR
745	152311	DANU
746	152312	INDRA

Table Inner Join

Kode Barang	Nama Barang	Harga Satuan	Stok
158826	AMDK CLUB 220 ML	17800	100
143018	AMDK CLUB 330 ML	29000	100
143019	AMDK CLUB 600 ML	31500	100

Table LEFT Join

Kode Barang	Nama Barang	Harga Satuan	Tanggal Distribusi	Jumlah Barang
143019	AMDK CLUB 600 ML	31500	2021-05-26 20:58:19	185
158826	AMDK CLUB 220 ML	17800	2021-05-26 20:58:24	20
143018	AMDK CLUB 330 ML	29000	2021-05-26 20:58:27	10
143020	AMDK CLUB1500 ML	32000		



Terima Kasih
