MYSQL
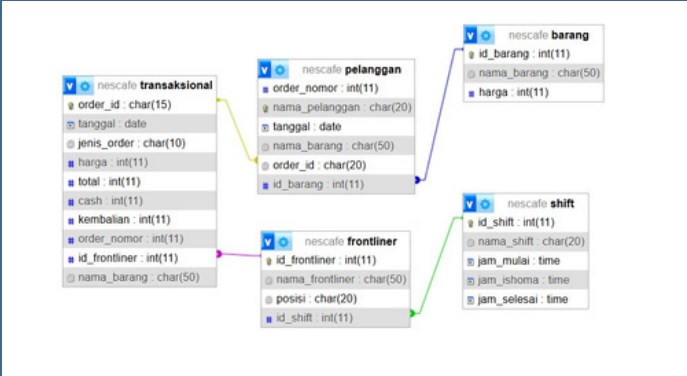
cashier system and employee management

Permasalahan = Pencatatan transaksi penjualan secara manual berisiko menimbulkan kesalahan dan data yang tidak terorganisir, sehingga menyulitkan pencarian serta rekap data transaksi, pelanggan, dan produk.

Tujuan = Tujuan: Mengembangkan database penjualan yang rapi dan mudah dikelola dengan MySQL melalui perancangan ERD, normalisasi data, dan penggunaan query SQL.

ERD (Entity Relationship Diagram)

implementasi DDL (struktur)

```
CREATE TABLE shift (
    id_shift int,
    nama_shift char(20),
    jam_mulai time,
    jam_ishoma time,
    jam_selesai time,
    primary key (id_shift)
    );
describe shift;
```

DML (pengisian & pengolahan data)

```
insert into shift values
(0815, 'pagi', '8:00', '12:00-13:00', '15:00'),
(1522, 'siang', '15:00', '15:00-22:00', '22:00');

select *from shift;
```

TCL (pengelolaan database)

```
218  START TRANSACTION;
219  INSERT INTO transaksional
220  (order_id, tanggal, jenis_order, harga, total, cash, kembalian, order_nomor, id_frontline
221  VALUES
222  ('NE/20251016/106', '2026-10-19', 'take away', 8000, 8000, 10000, 2000, 0106, 104623);
223  COMMIT;
224
225
```

group by (pengelompokan data)

```
8   select id_frontliner,nama_frontliner,count(*) as total
9   from frontliner
0   where id_shift=0815
1   group by id_frontliner
2   order by total;
3
```

having (agregasi & pengelompokan data)

```
select nama_frontliner,posisi,count(id_frontliner) as jumlah_frontliner
from frontliner
where id_frontliner = '104620'
group by nama_frontliner
having count(id_frontliner)
order by nama_frontliner;
```

join

```
select frontliner.nama_frontliner, transaksional.order_id
from frontliner
left join transaksional
on frontliner.id_frontliner = transaksional.id_frontliner;
```

output having

```
184  select nama_frontliner,posisi,count(id_frontliner) as jumlah_frontliner
185  from frontliner
186  where id_frontliner = '104620'
187  group by nama_frontliner
188  having count(id_frontliner)
189  order by nama_frontliner;
```

nama_frontliner	posisi	jumlah_frontliner
yessi sabitha	kasir	1

output group by

```
178  select id_frontliner,nama_frontliner,count(*) as total
179  from frontliner
180  where id_shift=0815
181  group by id_frontliner
182  order by total;
```

id_frontliner	nama_frontliner	total
104622	dimas wibi anggoro	1
104621	ahmad fajar khoirul	1
104620	yessi sabitha	1

output join

```
196  select frontliner.nama_frontliner, transaksional.order_id
197  from frontliner
198  left join transaksional
199  on frontliner.id_frontliner = transaksional.id_frontliner;
```

nama_frontliner	order_id
yessi sabitha	NE/20251016/104
ahmad fajar khoirul	NE/20251016/105
ahmad fajar khoirul	NE/20251016/105
dimas wibi anggoro	NULL
raden fajar risky	NULL
farhanazahra rahma	NULL