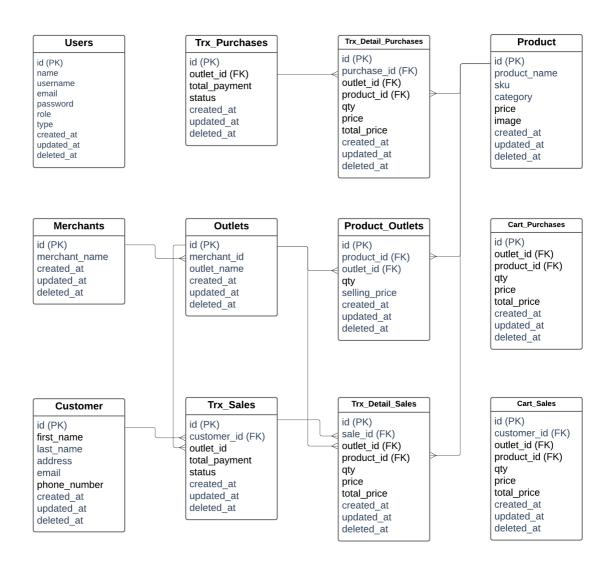
Dokumentasi

1. Entity Relation Diagram (ERD)



2. Data Manipulation Language (DML)

2.1. Membuat database

CREATE DATABASE api_pos;

2.2. Membuat tabel users

CREATE TABLE `users` (
 `id` bigint(20) unsigned NOT NULL AUTO_INCREMENT,
 `name` longtext,

```
`username` varchar(191) DEFAULT NULL,
       'email' varchar(191) DEFAULT NULL,
       `password` longtext,
        `role` enum('superadmin','admin') DEFAULT 'admin',
        `type` enum('merchant','outlet') DEFAULT 'outlet',
       `created_at` datetime(3) DEFAULT NULL,
       'updated at' datetime(3) DEFAULT NULL,
       `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       UNIQUE KEY 'username' ('username'),
       UNIQUE KEY 'email' ('email'),
       KEY 'idx users deleted at' ('deleted at')
      ) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=utf8;
2.3.
      Membuat tabel merchants
      CREATE TABLE `merchants` (
       'id' bigint(20) unsigned NOT NULL AUTO INCREMENT,
       `merchant_name` varchar(191) DEFAULT NULL,
       `created at` datetime(3) DEFAULT NULL,
       `updated_at` datetime(3) DEFAULT NULL,
       `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       UNIQUE KEY 'merchant_name' ('merchant_name'),
       KEY 'idx merchants deleted at' ('deleted at')
      ) ENGINE=InnoDB AUTO_INCREMENT=2 DEFAULT CHARSET=utf8;
2.4.
      Membuat tabel outlets
      CREATE TABLE `outlets` (
       'id' bigint(20) unsigned NOT NULL AUTO_INCREMENT,
       `merchant_id` bigint(20) unsigned NOT NULL,
       `outlet name` varchar(191) DEFAULT NULL,
       `created_at` datetime(3) DEFAULT NULL,
       'updated at' datetime(3) DEFAULT NULL,
       `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       UNIQUE KEY 'outlet_name' ('outlet_name'),
       KEY 'idx outlets deleted at' ('deleted at'),
       KEY `fk_outlets_merchant` (`merchant_id`),
       CONSTRAINT 'fk outlets merchant' FOREIGN KEY ('merchant id')
      REFERENCES 'merchants' ('id')
      ) ENGINE=InnoDB AUTO INCREMENT=4 DEFAULT CHARSET=utf8;
2.5.
      Membuat tabel products
```

CREATE TABLE `products` (

```
'id' bigint(20) unsigned NOT NULL AUTO INCREMENT,
        `product name` longtext,
        `sku` varchar(191) DEFAULT NULL,
        `category` longtext,
        'price' bigint(20) DEFAULT NULL,
        'image' longtext,
        `created at` datetime(3) DEFAULT NULL,
        `updated_at` datetime(3) DEFAULT NULL,
        `deleted at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       UNIQUE KEY 'sku' ('sku'),
       KEY `idx_products_deleted_at` (`deleted_at`)
      ) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=utf8;
2.6.
      Membuat tabel customers
      CREATE TABLE `customers` (
        `id` bigint(20) unsigned NOT NULL AUTO_INCREMENT,
        `first_name` longtext,
        `last name` longtext,
        `address` longtext,
        'email' varchar(191) DEFAULT NULL,
        `phone number` varchar(191) DEFAULT NULL,
        `created_at` datetime(3) DEFAULT NULL,
        'updated at' datetime(3) DEFAULT NULL,
        `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       UNIQUE KEY 'email' ('email'),
       UNIQUE KEY 'phone number' ('phone number'),
       KEY `idx_customers_deleted_at` (`deleted_at`)
      ) ENGINE=InnoDB AUTO_INCREMENT=3 DEFAULT CHARSET=utf8;
2.7.
      Membuat tabel product outlets
       CREATE TABLE 'product outlets' (
        `id` bigint(20) unsigned NOT NULL AUTO_INCREMENT,
        'product id' bigint(20) unsigned NOT NULL,
        'outlet id' bigint(20) unsigned NOT NULL,
        `qty` bigint(20) DEFAULT NULL,
        `selling_price` bigint(20) DEFAULT NULL,
        `created_at` datetime(3) DEFAULT NULL,
       'updated at' datetime(3) DEFAULT NULL,
        'deleted at' datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       KEY `idx_product_outlets_deleted_at` (`deleted_at`),
       KEY 'fk product outlets product ('product id'),
       KEY `fk_product_outlets_outlet` (`outlet_id`),
```

```
CONSTRAINT `fk_product_outlets_outlet` FOREIGN KEY (`outlet_id`)
REFERENCES 'outlets' ('id'),
 CONSTRAINT 'fk product outlets product' FOREIGN KEY ('product id')
REFERENCES 'products' ('id')
) ENGINE=InnoDB AUTO_INCREMENT=7 DEFAULT CHARSET=utf8;
Membuat tabel cart purchases(pembelian)
CREATE TABLE `cart_purchases` (
 'id' bigint(20) unsigned NOT NULL AUTO INCREMENT,
 `outlet id` bigint(20) unsigned NOT NULL,
 `product_id` bigint(20) unsigned NOT NULL,
 `qty` bigint(20) DEFAULT NULL,
 'price' bigint(20) DEFAULT NULL,
 'total price' bigint(20) DEFAULT NULL,
 `created at` datetime(3) DEFAULT NULL,
 `updated_at` datetime(3) DEFAULT NULL,
 `deleted_at` datetime(3) DEFAULT NULL,
 PRIMARY KEY ('id'),
 KEY `idx_cart_purchases_deleted_at` (`deleted_at`),
 KEY `fk_cart_purchases_outlet` (`outlet_id`),
 KEY 'fk cart purchases product' ('product id'),
 CONSTRAINT `fk_cart_purchases_outlet` FOREIGN KEY (`outlet_id`)
REFERENCES 'outlets' ('id'),
 CONSTRAINT 'fk cart purchases product' FOREIGN KEY ('product id')
REFERENCES 'products' ('id')
) ENGINE=InnoDB AUTO_INCREMENT=12 DEFAULT CHARSET=utf8;
Membuat tabel transaction purchases (transaksi pembelian)
CREATE TABLE 'trx purchases' (
 'id' bigint(20) unsigned NOT NULL AUTO_INCREMENT,
 `outlet id` bigint(20) unsigned NOT NULL,
 `total_payment` bigint(20) DEFAULT NULL,
 `status` enum('paid','unpaid') DEFAULT 'unpaid',
 `created_at` datetime(3) DEFAULT NULL,
 'updated at' datetime(3) DEFAULT NULL,
 `deleted_at` datetime(3) DEFAULT NULL,
 PRIMARY KEY ('id'),
 KEY `idx_trx_purchases_deleted_at` (`deleted_at`),
 KEY 'fk trx purchases outlet' ('outlet id'),
 CONSTRAINT 'fk trx purchases outlet' FOREIGN KEY ('outlet id')
REFERENCES 'outlets' ('id')
) ENGINE=InnoDB AUTO INCREMENT=4 DEFAULT CHARSET=utf8;
```

2.8.

2.9.

2.10. Membuat tabel transaction detail purchases (transaksi pembelian)

```
CREATE TABLE `trx_detail_purchases` (
        'id' bigint(20) unsigned NOT NULL AUTO INCREMENT,
        `purchase_id` bigint(20) unsigned NOT NULL,
        `outlet id` bigint(20) unsigned NOT NULL,
        'product id' bigint(20) unsigned NOT NULL,
        `qty` bigint(20) DEFAULT NULL,
        `price` bigint(20) DEFAULT NULL,
        `total price` bigint(20) DEFAULT NULL,
        `created at` datetime(3) DEFAULT NULL,
        `updated_at` datetime(3) DEFAULT NULL,
        `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       KEY 'idx trx detail purchases deleted at' ('deleted at'),
       KEY `fk_trx_detail_purchases_product` (`product_id`),
       KEY `fk_trx_detail_purchases_outlet` (`outlet_id`),
       KEY `fk_trx_purchases_detail` (`purchase_id`),
       CONSTRAINT 'fk trx detail purchases outlet' FOREIGN KEY ('outlet id')
       REFERENCES 'outlets' ('id'),
       CONSTRAINT `fk_trx_detail_purchases_product` FOREIGN KEY
      ('product id') REFERENCES 'products' ('id'),
       CONSTRAINT `fk_trx_purchases_detail` FOREIGN KEY (`purchase_id`)
       REFERENCES 'trx purchases' ('id')
      ) ENGINE=InnoDB AUTO_INCREMENT=11 DEFAULT CHARSET=utf8;
2.11. Membuat tabel cart sales(penjualan)
       CREATE TABLE `cart sales` (
        'id' bigint(20) unsigned NOT NULL AUTO_INCREMENT,
        `customer_id` bigint(20) unsigned NOT NULL,
        `outlet id` bigint(20) unsigned NOT NULL,
        `product_id` bigint(20) unsigned NOT NULL,
        `qty` bigint(20) DEFAULT NULL,
        `price` bigint(20) DEFAULT NULL,
        'total price' bigint(20) DEFAULT NULL,
        `created_at` datetime(3) DEFAULT NULL,
        'updated at' datetime(3) DEFAULT NULL,
        `deleted_at` datetime(3) DEFAULT NULL,
       PRIMARY KEY ('id'),
       KEY `idx_cart_sales_deleted_at` (`deleted_at`),
       KEY 'fk cart sales customer' ('customer id'),
       KEY 'fk cart sales outlet' ('outlet id'),
       KEY `fk_cart_sales_product` (`product_id`),
       CONSTRAINT 'fk cart sales customer' FOREIGN KEY ('customer id')
       REFERENCES 'customers' ('id'),
```

```
CONSTRAINT `fk_cart_sales_outlet` FOREIGN KEY (`outlet_id`)
      REFERENCES 'outlets' ('id'),
        CONSTRAINT 'fk cart sales product' FOREIGN KEY ('product id')
      REFERENCES 'products' ('id')
      ) ENGINE=InnoDB AUTO INCREMENT=9 DEFAULT CHARSET=utf8;
2.12. Membuat tabel transaction sales (transaksi penjualan)
      CREATE TABLE 'trx sales' (
        'id' bigint(20) unsigned NOT NULL AUTO_INCREMENT,
        'customer id' bigint(20) unsigned NOT NULL,
        'outlet id' bigint(20) unsigned NOT NULL,
        `total_payment` bigint(20) DEFAULT NULL,
        `status` enum('paid','unpaid') DEFAULT 'unpaid',
        `created_at` datetime(3) DEFAULT NULL,
        'updated at' datetime(3) DEFAULT NULL,
        'deleted at' datetime(3) DEFAULT NULL,
        PRIMARY KEY ('id'),
        KEY `idx_trx_sales_deleted_at` (`deleted_at`),
        KEY 'fk trx sales customer' ('customer id'),
        KEY `fk_trx_sales_outlet` (`outlet_id`),
        CONSTRAINT `fk_trx_sales_customer` FOREIGN KEY (`customer_id`)
       REFERENCES 'customers' ('id'),
        CONSTRAINT `fk_trx_sales_outlet` FOREIGN KEY (`outlet_id`) REFERENCES
       `outlets` (`id`)
      ) ENGINE=InnoDB AUTO_INCREMENT=7 DEFAULT CHARSET=utf8;
2.13. Membuat tabel transaction detail sales (transaksi penjualan)
       CREATE TABLE `trx detail sales` (
        'id' bigint(20) unsigned NOT NULL AUTO_INCREMENT,
        `sale_id` bigint(20) unsigned DEFAULT NULL,
        `outlet id` bigint(20) unsigned DEFAULT NULL,
        `product_id` bigint(20) unsigned DEFAULT NULL,
        `qty` bigint(20) DEFAULT NULL,
        `price` bigint(20) DEFAULT NULL,
        'total price' bigint(20) DEFAULT NULL,
        `created_at` datetime(3) DEFAULT NULL,
        'updated at' datetime(3) DEFAULT NULL,
        `deleted_at` datetime(3) DEFAULT NULL,
        PRIMARY KEY ('id'),
        KEY `idx_trx_detail_sales_deleted_at` (`deleted_at`),
        KEY 'fk trx detail sales product' ('product id'),
        KEY 'fk trx detail sales outlet' ('outlet id'),
        KEY `fk_trx_sales_detail` (`sale_id`),
        CONSTRAINT 'fk trx detail sales outlet' FOREIGN KEY ('outlet id')
       REFERENCES 'outlets' ('id'),
```

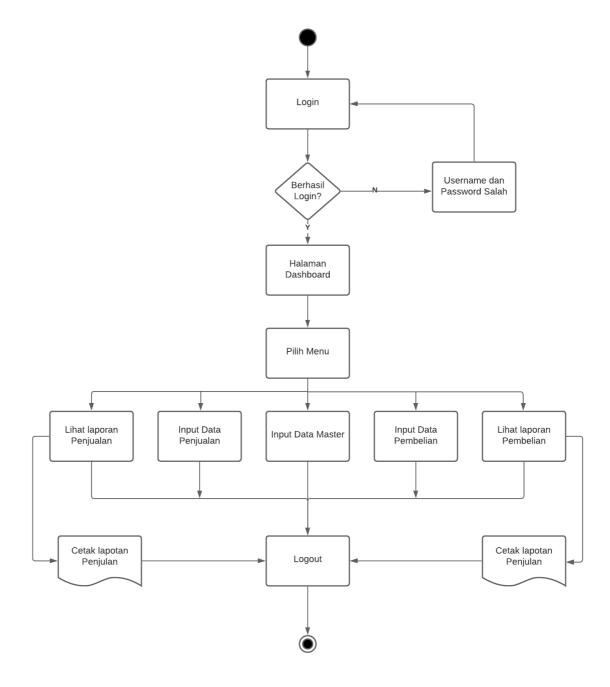
CONSTRAINT `fk_trx_detail_sales_product` FOREIGN KEY (`product_id`) REFERENCES `products` (`id`),

CONSTRAINT `fk_trx_sales_detail` FOREIGN KEY (`sale_id`) REFERENCES `trx_sales` (`id`)

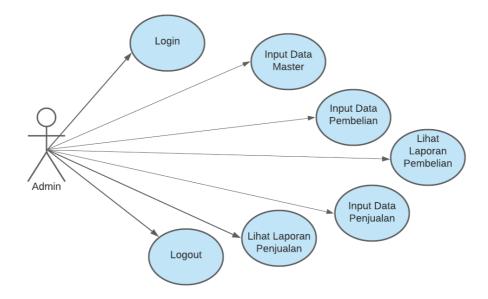
) ENGINE=InnoDB AUTO_INCREMENT=9 DEFAULT CHARSET=utf8;

2.14. Membuat tabel transaction sales (transaksi penjualan)

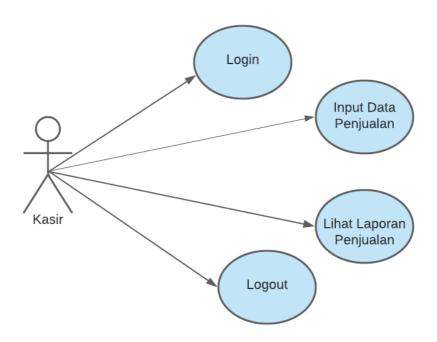
3. Activity Diagrams



4. Use Case Diagrams



Use case diagram admin



Use case diagram Kasir