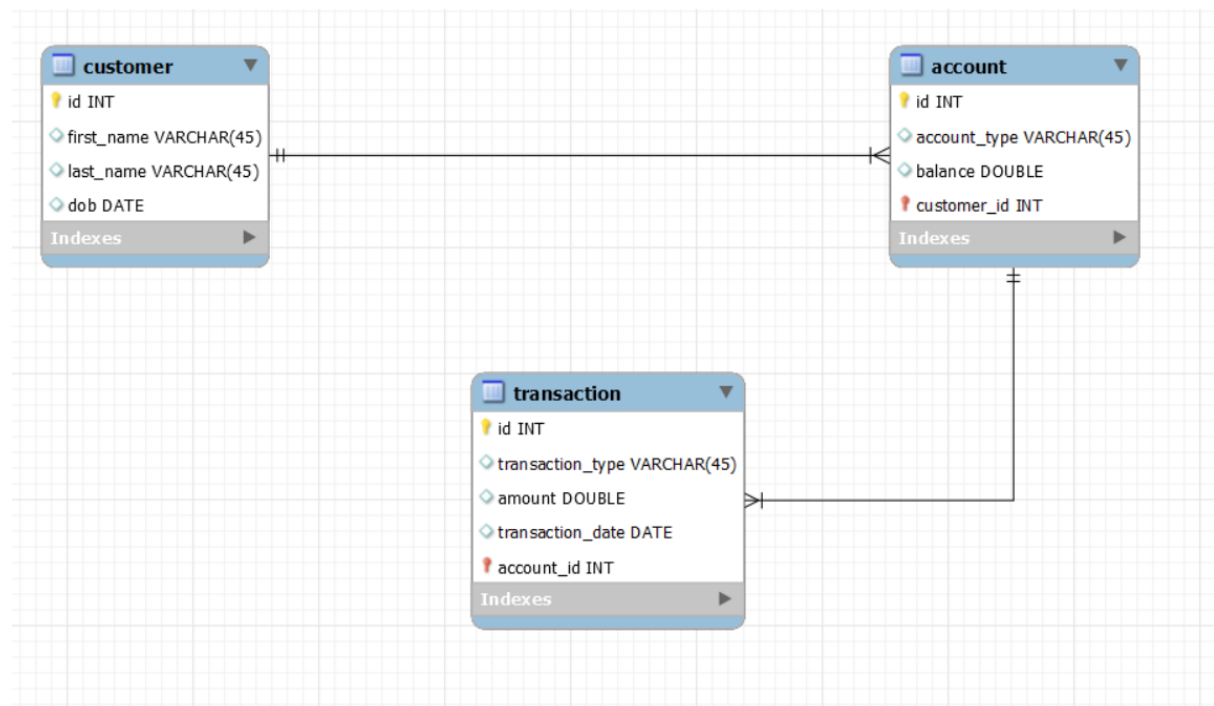
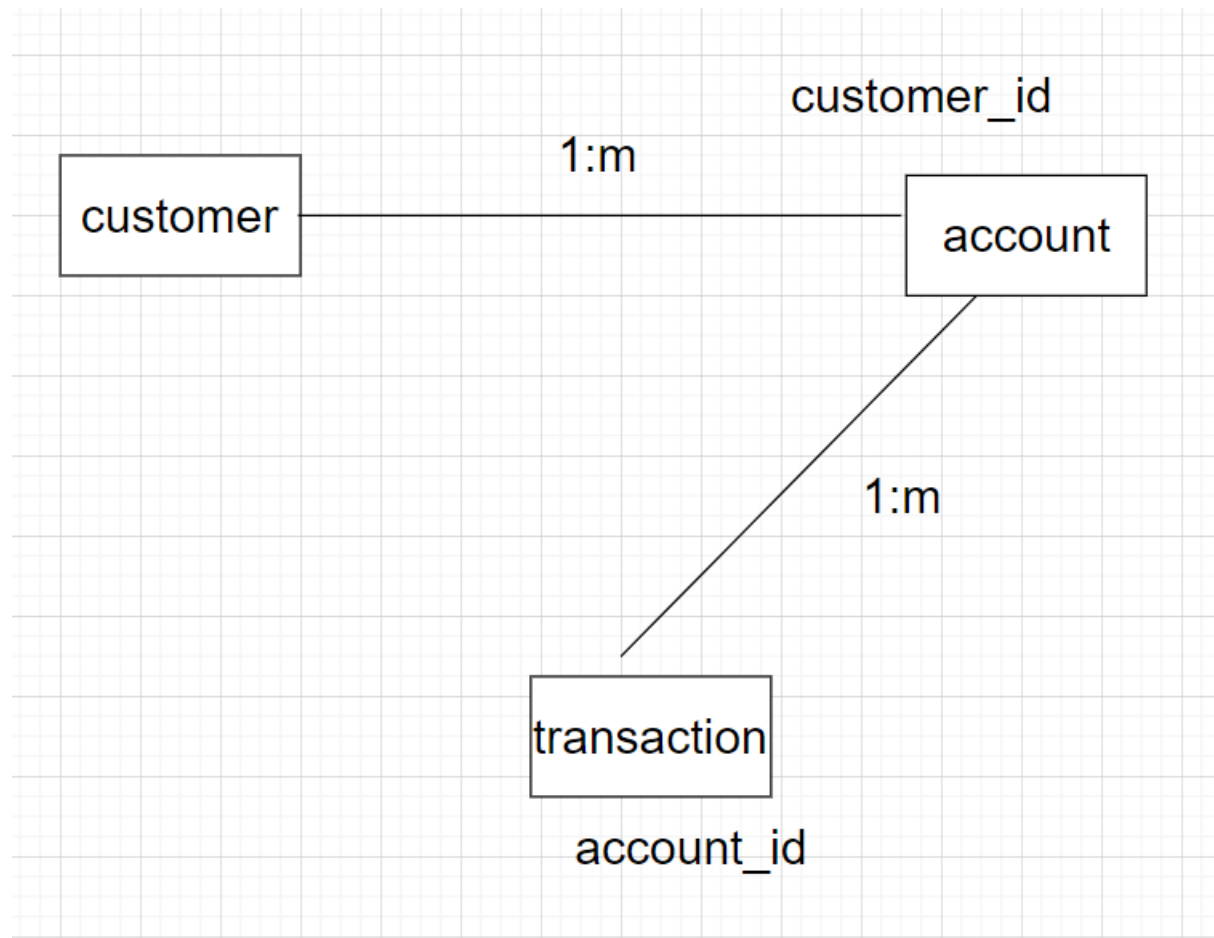


Banking Assignment



SQL DDL Scripts

-- MySQL Workbench Forward Engineering

-- Schema bank_hex_feb_24

-- Schema bank_hex_feb_24

CREATE SCHEMA IF NOT EXISTS `bank_hex_feb_24` DEFAULT
CHARACTER SET utf8 ;

USE `bank_hex_feb_24` ;

-- Table `bank_hex_feb_24`.`customer`

CREATE TABLE IF NOT EXISTS `bank_hex_feb_24`.`customer` (
 `id` INT NOT NULL AUTO_INCREMENT,
 `first_name` VARCHAR(45) NULL,
 `last_name` VARCHAR(45) NULL,
 `dob` DATE NULL,
 PRIMARY KEY (`id`))

ENGINE = InnoDB;

-- Table `bank_hex_feb_24`.`account`

```
CREATE TABLE IF NOT EXISTS `bank_hex_feb_24`.`account` (  
  `id` INT NOT NULL AUTO_INCREMENT,  
  `account_type` VARCHAR(45) NULL,  
  `balance` DOUBLE NULL,  
  `customer_id` INT NOT NULL,  
  PRIMARY KEY (`id`, `customer_id`),  
  INDEX `fk_account_customer_idx` (`customer_id` ASC) ,  
  CONSTRAINT `fk_account_customer`  
    FOREIGN KEY (`customer_id`)  
    REFERENCES `bank_hex_feb_24`.`customer` (`id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

-- Table `bank_hex_feb_24`.`transaction`

```

CREATE TABLE IF NOT EXISTS `bank_hex_feb_24`.`transaction` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `transaction_type` VARCHAR(45) NULL,
  `amount` DOUBLE NULL,
  `transaction_date` DATE NULL,
  `account_id` INT NOT NULL,
  PRIMARY KEY (`id`, `account_id`),
  INDEX `fk_transaction_account1_idx` (`account_id` ASC) ,
  CONSTRAINT `fk_transaction_account1`
    FOREIGN KEY (`account_id`)
    REFERENCES `bank_hex_feb_24`.`account` (`id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```
mysql> describe customer;
```

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	NULL	auto_increment
first_name	varchar(45)	YES		NULL	
last_name	varchar(45)	YES		NULL	
dob	date	YES		NULL	

4 rows in set (0.01 sec)

mysql> describe account;

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	NULL	auto_increment
account_type	varchar(45)	YES		NULL	
balance	double	YES		NULL	
customer_id	int(11)	NO	PRI	NULL	

4 rows in set (0.00 sec)

mysql> describe transaction;

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	NULL	auto_increment
transaction_type	varchar(45)	YES		NULL	
amount	double	YES		NULL	
transaction_date	date	YES		NULL	
account_id	int(11)	NO	PRI	NULL	

Insertions

```
use bank_hex_feb_24;
```

```
show tables;
```

```
insert into customer(first_name,last_name,dob) values
```

```
('harry','potter','2002-03-21'),
```

```
('ronald','weasley','2001-02-10'),
```

```
('hermione','granger','2002-11-15');
```

```
/*
```

```
+---+-----+-----+-----+
```

```
| id | first_name | last_name | dob      |
```

```
+---+-----+-----+-----+
```

```
| 1 | harry      | potter    | 2002-03-21 |
```

```
| 2 | ronald     | weasley   | 2001-02-10 |
```

```
| 3 | hermione   | granger   | 2002-11-15 |
```

```
+---+-----+-----+-----+
```

```
*/
```

```
insert into account(account_type,balance,customer_id) values
```

```
('savings',50000,1) ,
```

```
('current',120000,2) ,
```

```
('zero_balance',100000,3),
```

```
('current',150000,1) ,
```

```
('savings',30000,3);
```

```

/*
+---+-----+-----+-----+
| id | account_type | balance | customer_id |
+---+-----+-----+-----+
| 1 | savings      | 50000  | 1           |
| 2 | current      | 120000 | 2           |
| 3 | zero_balance | 100000 | 3           |
| 4 | current      | 150000 | 1           |
| 5 | savings      | 30000  | 3           |
+---+-----+-----+-----+
*/

```

```

insert into transaction(transaction_type,amount,transaction_date,account_id)
values
('deposit', 10000, '2024-02-01',1),
('withdrawal', 5000, '2024-02-02',1),
('deposit', 20000, '2024-02-02',2),
('withdrawal', 8000, '2024-02-02',3),
('transfer', 20000, '2024-02-01',4),
('transfer', 7000, '2024-02-05',5);

```

```

/*
+---+-----+-----+-----+-----+
| id | transaction_type | amount | transaction_date | account_id |
+---+-----+-----+-----+-----+
| 1 | deposit         | 10000  | 2024-02-01      | 1           |

```

2	withdrawal	5000	2024-02-02	1
3	deposit	20000	2024-02-02	2
4	withdrawal	8000	2024-02-02	3
5	transfer	20000	2024-02-01	4
6	transfer	7000	2024-02-05	5

+---+-----+-----+-----+-----+

*/