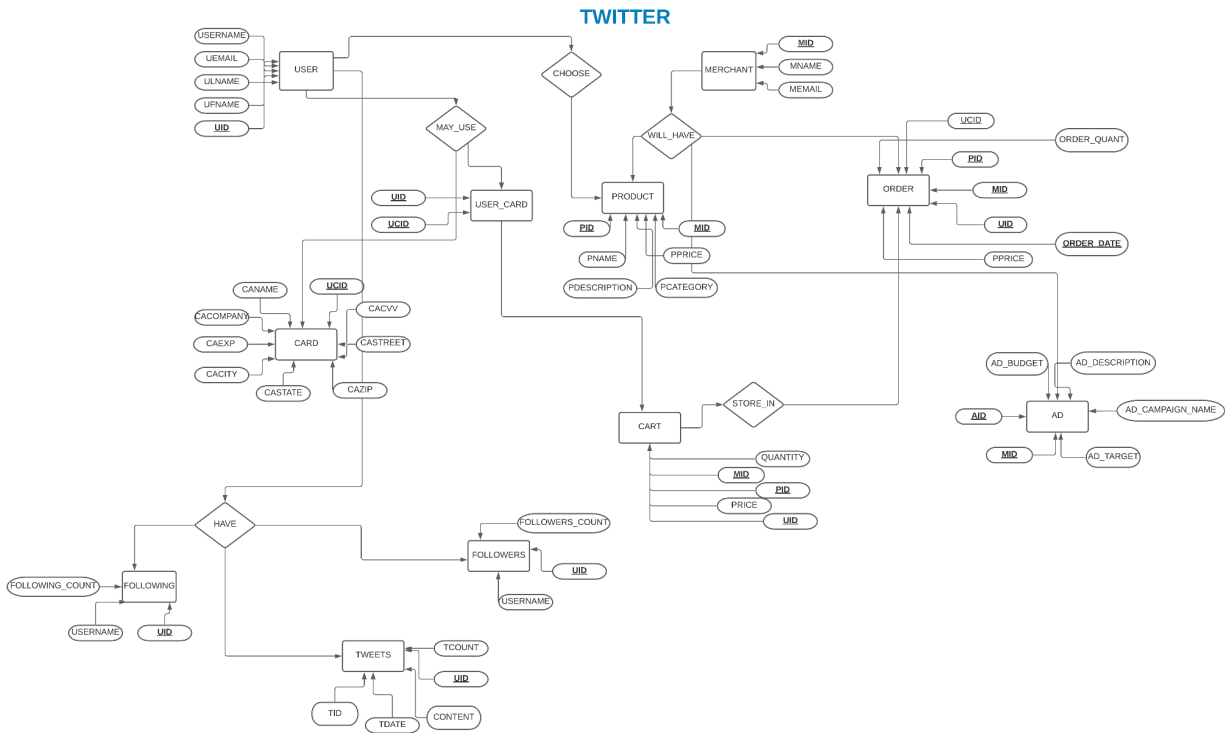# CSCI 362 project

Twitter relational model

SQL Code to create the mini world

create database Twitter;

CREATE TABLE Twitter.user
#good practice of creating the schema with the new tables name.
(username   varchar(15) not null,
ufname   varchar(15) not null,
lname   varchar(15) not null,
uemail varchar(50) not null,
uid   integer(4),
unique (username),
primary key (uid));
#creation of the primary key.

CREATE TABLE Twitter.merchant
#Same as the table above.
(mname varchar(25) not null,

mid integer(4),
memail varchar(25) not null,
primary key (mid),
unique (mname));

CREATE TABLE Twitter.product
(pid integer(4),
mid integer(4),
pname varchar(15) not null,
pprice decimal(4) not null,
pdescription varchar(25),
pcategory varchar(15),
primary key (pid,mid),
foreign key (mid) references Twitter.merchant(mid));

CREATE TABLE Twitter.card
(ucid integer(4),
cacvv char(3) not null,
castreet varchar(25) not null,
cazip char(5) not null,
castate char(2) not null,
cacity varchar(10) not null,
caexp date,
cacompany varchar(10) not null,
caname varchar(15) not null,
primary key (ucid));

CREATE TABLE Twitter.order
(order_date char(8),
pprice decimal(4),
order_quantity integer(2),
ucid integer(4),
pid integer(4),
mid integer(4),
uid integer(4),
primary key (uid, mid, pid, order_date),
#primary key is a combination of a foreign key and local file.
foreign key (uid) references Twitter.user(uid),
foreign key (mid) references Twitter.merchant(mid),
foreign key (pid) references Twitter.product(pid),

foreign key (ucid) references Twitter.card(ucid));
#Foreign key referencing to an outside table.

CREATE TABLE Twitter.ad
(ad_campaign_name varchar(25) not null,
ad_budget decimal(4) not null,
ad_description varchar(15),
ad_target varchar(15) not null,
aid integer(4),
mid integer(4),
primary key (aid),
foreign key (mid) references Twitter.merchant(mid));

CREATE TABLE Twitter.cart
(quantity integer(2),
mid integer(4),
pid integer(4),
price decimal(4),
uid integer(4),
primary key (mid, pid, uid),
foreign key (mid) references Twitter.merchant(mid),
foreign key (pid) references Twitter.product(pid),
foreign key (uid) references Twitter.user(uid));

CREATE TABLE Twitter.user_card
(uid integer(4),
ucid integer(4),
primary key (uid, ucid),
foreign key (uid) references Twitter.user(uid),
foreign key(ucid) references Twitter.card(ucid));

CREATE TABLE Twitter.followers
(followers_count varchar(10),
uid integer(4),
username varchar(15),
primary key (uid),
foreign key(uid) references Twitter.user(uid));

CREATE TABLE Twitter.following
(following_count varchar(10),

uid integer(4),
username varchar(15),
primary key(uid),
foreign key(uid) references Twitter.user(uid));

CREATE TABLE Twitter.tweets
(tcount varchar(5),
tid integer(4),
uid integer(4),
tdate date,
content varchar(140) not null,
primary key(uid, tid),
foreign key(uid) references Twitter.user(uid));

Name	Engine	Version	Row Format	Rows	Avg Row Length	Data Length	Max Data Length	Index
ad	InnoDB	10	Dynamic	5	3276	16.0 KiB	0.0 bytes	
card	InnoDB	10	Dynamic	3	5461	16.0 KiB	0.0 bytes	
cart	InnoDB	10	Dynamic	0	0	16.0 KiB	0.0 bytes	
followers	InnoDB	10	Dynamic	1	16384	16.0 KiB	0.0 bytes	
following	InnoDB	10	Dynamic	1	16384	16.0 KiB	0.0 bytes	
merchant	InnoDB	10	Dynamic	5	3276	16.0 KiB	0.0 bytes	
order	InnoDB	10	Dynamic	0	0	16.0 KiB	0.0 bytes	
product	InnoDB	10	Dynamic	4	4096	16.0 KiB	0.0 bytes	
tweets	InnoDB	10	Dynamic	1	16384	16.0 KiB	0.0 bytes	
user	InnoDB	10	Dynamic	3	5461	16.0 KiB	0.0 bytes	
user_card	InnoDB	10	Dynamic	0	0	16.0 KiB	0.0 bytes	

Count: 11   Maintenance >   Inspect Table   Refresh

SQL Code to insert, delete and modify the tables.
Ad table
DELETE FROM ad WHERE aid = 0002;
UPDATE ad SET ad_campaign_name = 'soda' WHERE mid = 0001;

| | 8 | 21:02:35 | DELETE FROM ad WHERE aid = 0002 | 1 row(s) affected | 0.016 sec |
| | 9 | 21:02:49 | UPDATE ad SET ad_campaign_name = 'soda' WHERE mid = 0001 | 0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0 | 0.000 sec |

Card table

DELETE FROM card WHERE ucid = 2000;

UPDATE card SET caname = 'CSCI' WHERE ucid = 3000;

	11	21:06:41	DELETE FROM card WHERE ucid = 2000	1 row(s) affected	0.000 sec
	12	21:06:46	UPDATE card SET caname = 'CSCI' WHERE ucid = 3000	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.016 sec

Cart table

DELETE FROM cart WHERE pid = 0001;

UPDATE cart SET quantity = 200 WHERE mid = 0001;

	13	21:08:34	DELETE FROM cart WHERE pid = 0001	0 row(s) affected	0.000 sec
	14	21:12:08	UPDATE cart SET quantity = 200 WHERE mid = 0001	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.016 sec

followers table

DELETE FROM followers WHERE uid = 3000;

UPDATE followers SET username = '362' WHERE uid = 2000;

	15	21:14:57	DELETE FROM followers WHERE uid = 3000	0 row(s) affected	0.000 sec
	16	21:15:01	UPDATE followers SET username = '362' WHERE uid = 2000	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.297 sec

following table

DELETE FROM following WHERE uid = 3000;

UPDATE following SET username = '362' WHERE uid = 2000;

	17	21:15:57	DELETE FROM following WHERE uid = 3000	0 row(s) affected	0.000 sec
	18	21:16:00	UPDATE following SET username = '362' WHERE uid = 2000	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.078 sec

merchant table

Key constraint when trying to delete.

UPDATE merchant SET mname = 'NotGoogle' WHERE mid = 0002;

	22	21:18:55	UPDATE merchant SET mname = 'NotGoogle' WHERE mid = 0002	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec

order table

DELETE FROM Twitter.order WHERE pid = 0101;

UPDATE Twitter.order SET order_date = 12/20/2021 WHERE mid = 0201;

	23	21:23:53	DELETE FROM Twitter.order WHERE pid = 0101	0 row(s) affected	0.000 sec
	24	21:23:56	UPDATE Twitter.order SET order_date = 12/20/2021 WHERE mid = 0201	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec

product table

DELETE FROM product WHERE pid = 1010;

UPDATE product SET pdescription = 'Best looking accesory' WHERE mid = 0201;

	25	21:25:33	DELETE FROM product WHERE pid = 1010	1 row(s) affected	0.015 sec
	26	21:25:37	UPDATE product SET pdescription = 'Best looking accesory' WHERE mid = 0201	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec

tweets table
DELETE FROM Twitter.merchant WHERE tid = 9999;
I do not understand why it is not working.
UPDATE tweets SET content = 'Best looking accesory ever' WHERE uid = 2000;

| | 35 | 21:32:11 | DELETE FROM Twitter.merchant WHERE tid = 9999 | Error Code: 1054. Unknown column 'tid' in 'where clause' | 0.000 sec |
| | 36 | 21:32:16 | UPDATE tweets SET content = 'Best looking accesory ever' WHERE uid = 2000 | 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0 | 0.000 sec |

user table
DELETE FROM user WHERE uid = 3620;
UPDATE user SET uemail = 'CSCS362@ronnycoste.com' WHERE uid = 3000;

| | 37 | 21:34:43 | DELETE FROM user WHERE uid = 3620 | 1 row(s) affected | 0.016 sec |
| | 38 | 21:34:47 | UPDATE user SET uemail = 'CSCS362@ronnycoste.com' WHERE uid = 3000 | 0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0 | 0.000 sec |

user_card table
DELETE FROM user_card WHERE uid = 3000;
UPDATE user_card SET ucid = '5000' WHERE uid = 3000;

| | 39 | 21:35:27 | DELETE FROM user_card WHERE uid = 3000 | 0 row(s) affected | 0.000 sec |
| | 40 | 21:37:24 | UPDATE user_card SET ucid = '5000' WHERE uid = 3000 | 0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0 | 0.000 sec |

Sample SQL codes to retrieve data from tables.

```
4 •    select pname from Twitter.product p
5      where p.mid = 0101;
6      |
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

pname
Maclook Air
lookMac
airlook
Maclook pro

```
3 •    select count(*) from Twitter.product p
4      where p.mid = 0101;
5
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

count(*)
4

```sql
7  ●      select memail   from merchant m
8         where m.mname = 'Motorola';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

	memail
▶	motorola@test.com