

w17-p1: create user_xx in postgresQL server, enter two data, the first one is about your

The screenshot displays the PostgreSQL Enterprise Studio interface. On the left, the 'Schemas (1)' tree shows the 'public' schema containing various database objects. The 'Tables (4)' folder is expanded, showing 'cart_32', 'category_32', 'shop_32', and 'user_32'. The 'user_32' table is selected, and its 'Columns (3)' and 'Constraints (1)' are visible. The 'Columns' list includes 'user_id', 'name', and 'email'. The 'Constraints' list includes 'user_32_pkey'. The main query editor shows the following SQL code:

```
1 INSERT INTO user_32(user_id,name,email)
2 VALUES
3 (1,'黃嘉雄','405416032@gms.tku.edu.tw'),
4 (2,'test','test@gmail.com')
5
6 /*
7 CREATE TABLE user_32(
8     user_id int,
9     name varchar(255),
10    email varchar(255),
11    PRIMARY KEY (user_id)
12 )
13 */
```

The 'Messages' tab at the bottom shows the execution results:

```
INSERT 0 2
Query returned successfully in 123 msec.
```

The status bar at the bottom indicates 'Total rows: 0 of 0' and 'Query complete 00:00:00.123'.

	user_id [PK] integer	name character varying (255)	email character varying (255)
1	1	黃嘉雄	405416032@gms.tku.e...
2	2	test	test@gmail.com

w17-p2: create cart_xx in postgresQL server, enter five data, one for each category

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File Object Tools Help

Browser

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card_32

Columns (4)

- card_id
- user_id
- product_id
- amount

Constraints (3)

- card_32_pkey
- card_32_product_id_fkey
- card_32_user_id_fkey

Indexes RLS Policies Rules Triggers

Query

```
1 INSERT INTO card_32(card_id,user_id,product_id, amount)
2 VALUES
3 (1,1,6,1),
4 (2,1,15,2),
5 (3,1,20,1),
6 (4,1,28,3),
7 (5,1,35,2)
8
9
10
11 CREATE TABLE card_32(
12 card_id int,
13 user_id int REFERENCES user_32 ON DELETE SET NULL ON UPDATE CASCADE,
14 product_id int REFERENCES shop_32 ON DELETE SET NULL ON UPDATE CASCADE,
15 amount int,
16 PRIMARY KEY (card_id)
17 )
```

Query History

Scratch Pad

Data output Messages Notifications

INSERT 0 5

Query returned successfully in 51 msec.

Data output Messages Notifications

	card_id [PK] integer	user_id integer	product_id integer	amount integer
1	1	1	6	1
2	2	1	15	2
3	3	1	20	1
4	4	1	28	3
5	5	1	35	2

w17-p3: give query to get related data for cart info shown in ej3

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- Tables (4)
 - cart_32
 - Columns (4)
 - cart_id
 - user_id
 - product_id
 - amount
 - Constraints (3)
 - cart_32_pkey
 - cart_32_product_id_fkey
 - cart_32_user_id_fkey
 - Indexes
 - RLS Policies
 - Rules
 - Triggers
 - category_32
 - shop_32
 - user_32
 - Columns (3)
 - user_id

Query

```

1 |,U.name as user_name , S.name as product_name, price, amount, S.remote_url as image
2 |is C ,user_32 as U, shop_32 as S
3 |d = U.user_id AND C.product_id = S.id

```

Data output Messages Notifications

	cart_id	user_name	product_name	price	amount	image
1	1	黃蕭謙	Brown Brim	25	1	https://i.lib.co/ZYW3V...
2	2	黃蕭謙	Black Jean Shearling	125	2	https://i.lib.co/XzcwL...
3	3	黃蕭謙	Adidas NMD	220	1	https://i.lib.co/0s3pdn...
4	4	黃蕭謙	Blue Tanktop	25	3	https://i.lib.co/7CQVJ...
5	5	黃蕭謙	Camo Down Vest	325	2	https://i.lib.co/xJS0T3...

Total rows: 5 of 5 Query complete 00:00:00.048

w17-p4: insert data in order to violate the key constraints, foreign key constraints

crown_32/postgres@PostgreSQL 14

Query Query History

```

1 |INSERT INTO cart_32(cart_id,user_id,product_id, amount)
2 |VALUES
3 |    (1,3,6,1)
4 |
5 |/*
6 |CREATE TABLE cart_32(
7 |    cart_id int,
8 |    user_id int REFERENCES user_32 ON DELETE SET NULL ON UPDATE CASCADE,
9 |    product_id int REFERENCES shop_32 ON DELETE SET NULL ON UPDATE CASCADE,
10 |    amount int,
11 |    PRIMARY KEY (cart_id)
12 |)
13 |*/

```

Data output Messages Notifications

ERROR: duplicate key value violates unique constraint "cart_32_pkey"

DETAIL: Key (cart_id)=(1) already exists.

SQL state: 23505

Query Query History Scratch Pad x

```
1 INSERT INTO cart_32(cart_id,user_id,product_id, amount)
2 VALUES
3     (6,3,6,1)
4
5 /*
6 CREATE TABLE cart_32(
7     cart_id int,
8     user_id int REFERENCES user_32 ON DELETE SET NULL ON UPDATE CASCADE,
9     product_id int REFERENCES shop_32 ON DELETE SET NULL ON UPDATE CASCADE,
10    amount int,
11    PRIMARY KEY (cart_id)
12 )
13 */
```

Data output Messages Notifications

ERROR: insert or update on table "cart_32" violates foreign key constraint "cart_32_user_id_fkey"
DETAIL: Key (user_id)=(3) is not present in table "user_32".
SQL state: 23503

crown_32/postgres@PostgreSQL 14

Query Query History Scrato

```
1 INSERT INTO cart_32(cart_id,user_id,product_id, amount)
2 VALUES
3     (6,1,5,1)
4
5 /*
6 CREATE TABLE cart_32(
7     cart_id int,
8     user_id int REFERENCES user_32 ON DELETE SET NULL ON UPDATE CASCADE,
9     product_id int REFERENCES shop_32 ON DELETE SET NULL ON UPDATE CASCADE,
10    amount int,
11    PRIMARY KEY (cart_id)
12 )
13 */
```

Data output Messages Notifications

ERROR: insert or update on table "cart_32" violates foreign key constraint "cart_32_product_id_fkey"
DETAIL: Key (product_id)=(5) is not present in table "shop_32".
SQL state: 23503

w17-p5.1: test ON UPDATE CASCADE

	user_id [PK] integer	name character varying (255)	email character varying (255)
1	1	黃嘉雄	405416032@gms.tku.e...
2	5	test	test@gmail.com

```

1 SELECT * FROM public.cart_32
2 ORDER BY cart_id ASC

```

Data output Messages Notifications

	cart_id [PK] integer	user_id integer	product_id integer	amount integer
1	1	1	6	1
2	2	1	15	2
3	3	1	20	1
4	4	1	28	3
5	5	1	35	2
6	6	1	6	1
7	7	5	10	1
8	8	5	20	2

w17-p5.2: test ON DELETE SET NULL

	user_id [PK] integer	name character varying (255)	email character varying (255)
1	1	黄嘉雄	405416032@gms.tku.e...
2	5	test	test@gmail.com

	cart_id [PK] integer	user_id integer	product_id integer	amount integer
1	1	1	6	1
2	2	1	15	2
3	3	1	20	1
4	4	1	28	3
5	5	1	35	2
6	6	1	6	1
7	7	[null]	10	1
8	8	[null]	20	2