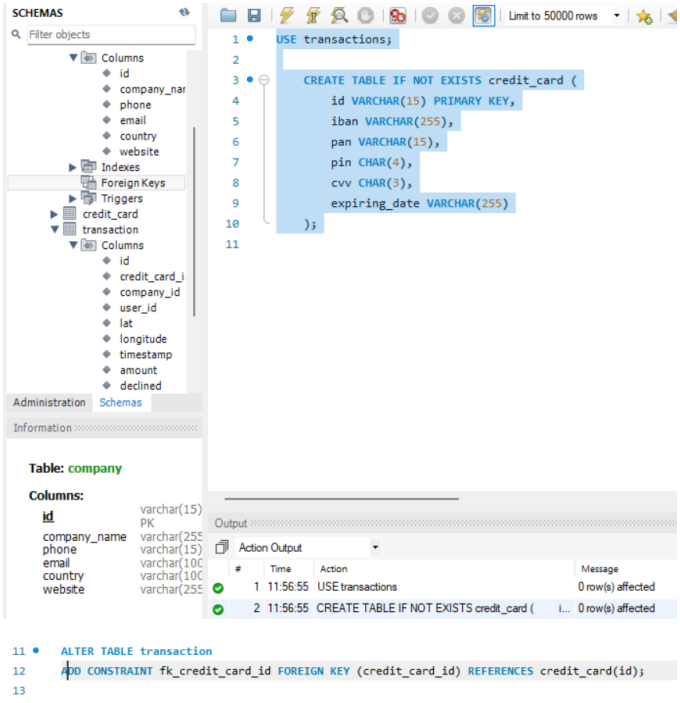
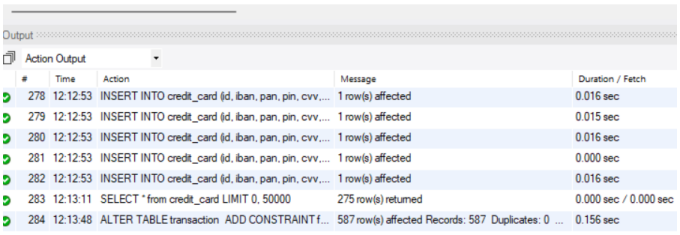
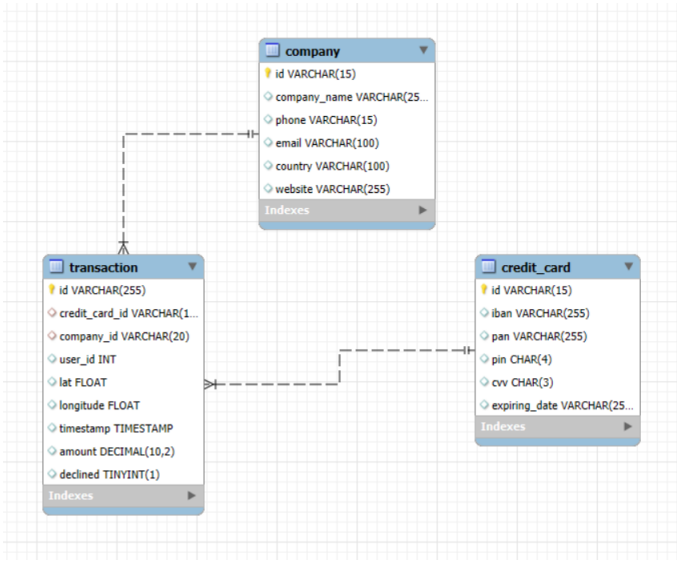
N1E1







La nueva tabla se relaciona en 1:N con transaction usando credit_card_id como clave foránea, siendo la tabla credit_card 1 y transaction N. La relación tiene sentido ya que una

misma tarjeta puede hacer varias transacciones mientras que una misma transacción no es posible hacerla con distintas tarjetas.

N1E2

```
18 •  UPDATE credit_card
19    SET iban = "R323456312213576817699999"
20    WHERE id = "CcU-2938";
21
22 •  SELECT iban FROM credit_card WHERE id = "CcU-2938";
```

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

iban
R323456312213576817699999

credit_card 2

Output

Action Output

#	Time	Action	Message
1	13:13:20	UPDATE credit_card SET iban = "R323456312213...	1 row(s) affected Rows matched: 1 Changed: 1 W...
2	13:14:02	SELECT iban FROM credit_card WHERE id = "Cc...	1 row(s) returned

N1E3

```
25    -- Exercici 3
26    -- En la taula "transaction" ingressa un nou usuari
27 •  INSERT INTO credit_card (id) VALUES ("CcU-9999"); -- Placeholder credit_card id para que no dé error insertar en transaction
28 •  INSERT INTO company (id) VALUES ("b-9999"); -- Mismo placeholder
29 •  INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) VALUES ('108B1D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999',
30 •  SELECT * FROM transaction WHERE credit_card_id = "CcU-9999";
```

esult Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
108B1D1D-5B23-A76C-55EF-C568E49A99DD	CcU-9999	b-9999	9999	829.999	-117.999	NULL	111.11	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

ansaction 6

utput

Action Output

#	Time	Action	Message
1	13:29:56	SELECT * FROM transaction WHERE credit_card_id = "CcU-9999" LIMIT 0, 50000	0 row(s) returned
2	13:30:10	INSERT INTO credit_card (id) VALUES ("CcU-9999")	1 row(s) affected
3	13:30:10	INSERT INTO company (id) VALUES ("b-9999")	1 row(s) affected
4	13:30:10	INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) VALUES ('1...	1 row(s) affected
5	13:30:24	SELECT * FROM transaction WHERE credit_card_id = "CcU-9999" LIMIT 0, 50000	1 row(s) returned

En este ejercicio he añadido una fila tanto a credit_card como a company con un solo dato (la primary key en ambas, que es la foreign key en transaction) para que al intentar añadir una fila a transaction no dé error por la falta de datos.

En un entorno real pediría esos datos a quien me los tuviera que proporcionar.

N1E4

```
35 •  ALTER TABLE credit_card
36    DROP COLUMN pan;
37 •  SELECT * FROM credit_card WHERE id = "CcU-9999";
```

esult Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

id	iban	pin	cvv	expiring_date
CcU-9999	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL

edit_card 8 ×

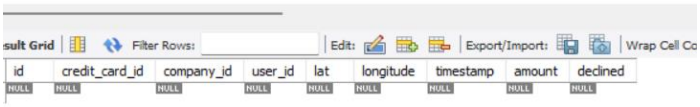
utput

Action Output

#	Time	Action	Message
1	13:39:08	ALTER TABLE credit_card DROP COLUMN pan	0 row(s) affected Records: 0 Duplicates: 0 Warnin...
2	13:39:14	SELECT * FROM credit_card WHERE id = "CcU-9...	1 row(s) returned

N2E1

```
2 •  DELETE FROM transaction
3    WHERE id = "02C6201E-D90A-1859-B4EE-88D2986D3B02";
4
5 •  select * from transaction where id = "02C6201E-D90A-1859-B4EE-88D2986D3B02";
```



id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Action Output

#	Time	Action	Message
1	13:45:29	DELETE FROM transaction WHERE id = "02C620...	1 row(s) affected
2	13:45:33	select * from transaction where id = "02C6201E-D9...	0 row(s) returned

N2E2

```
7    -- Exercici 2
8    -- La secció de màrqueting desitja tenir accés a informació
9 •  CREATE VIEW `VistaMarketing` AS
10   SELECT company_name, phone, country, avg(amount) AS Average
11   FROM company
12   JOIN transaction
13   ON (company.id = company_id)
14   GROUP BY company_name, phone, country
15   ORDER BY Average desc;
16
17 •  select * from vistamarketing;
18
```

Result Grid

company_name	phone	country	Average
Eget Ipsum Ltd	03 67 44 56 72	United States	473.075000
Non Magna LLC	06 71 73 13 17	United Kingdom	468.345000
Sed Id Limited	07 28 18 18 13	United States	461.210000
Justo Eu Arcu Ltd	08 42 56 71 52	Italy	443.635000
Eget Tincidunt Dui Institute	05 35 93 32 44	Netherlands	442.520000

Output

Action Output

#	Time	Action	Message
1	10:27:23	CREATE VIEW `VistaMarketing` AS SELECT com...	0 row(s) affected
2	10:27:28	select * from vistamarketing LIMIT 0, 50000	101 row(s) returned

N2E3

```
17      -- Exercici 3
18      -- Filtra la vista VistaMarketing per a mostrar només les
19  •   SELECT *
20      FROM vistamarketing
21      WHERE country = "Germany";
22
```

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

company_name	phone	country	Average
Aliquam PC	01 45 73 52 16	Germany	385.265000
Ac Industries	09 34 65 40 60	Germany	289.645000
Rutrum Non Inc.	02 66 31 61 09	Germany	266.900000
Nunc Interdum Incorporated	05 18 15 48 13	Germany	244.025238
Augue Foundation	06 88 43 15 63	Germany	240.800000

vistamarketing 4 ×

Output

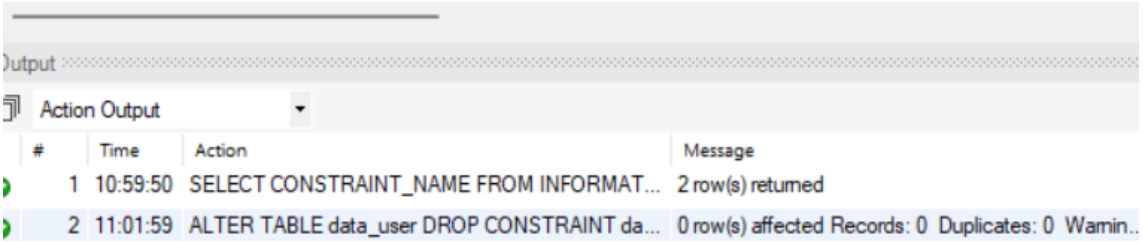
Action Output

#	Time	Action	Message
1	10:30:57	SELECT * FROM vistamarketing WHERE country =...	8 row(s) returned

N3E1

Para empezar vemos que la foreign key que ha intentado crear está mal hecha (la relación 1:N está al revés, siendo transaction el 1 en lugar de la N) así que buscamos cuál es el nombre de la regla constraint y la eliminamos.

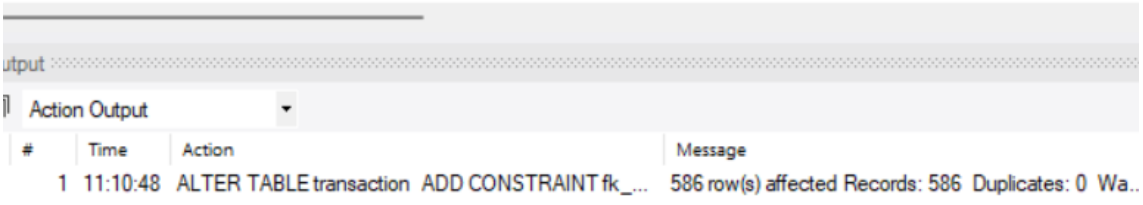
```
18 •  SELECT CONSTRAINT_NAME -- La fk esta mal creada en el código anterior, por lo q
19    FROM INFORMATION_SCHEMA.TABLE_CONSTRAINTS
20    WHERE TABLE_NAME = "data_user";
21
22 •  ALTER TABLE data_user
23    DROP CONSTRAINT data_user_ibfk_1;
24
```



Hecho eso creamos la nueva regla que llamaremos fk_user_id, esta vez con la relación 1:N adecuada siendo data_user el 1 y transaction la N.

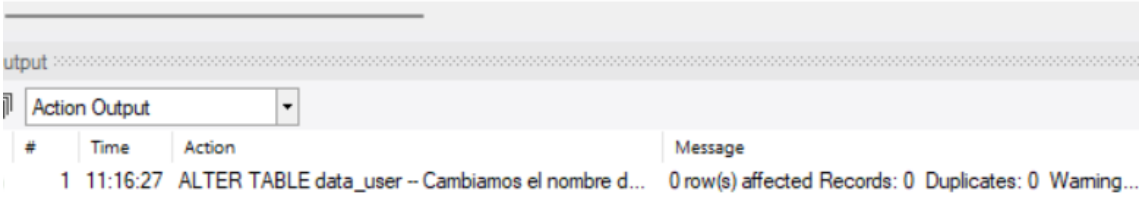
Esta relación es lógica ya que una transacción solo la puede hacer un usuario, mientras que un usuario puede hacer tantas transacciones como quiera.

```
29 •  ALTER TABLE transaction
30    ADD CONSTRAINT fk_user_id FOREIGN KEY (user_id) REFERENCES data_user(id);
```



También nos damos cuenta de que hay columnas distintas así que las editaremos:

```
29 •  ALTER TABLE data_user -- Cambiamos el nombre de la columna email
30    CHANGE email personal_email VARCHAR(150);
```



```
ALTER TABLE company -- Borramos la columna website
DROP COLUMN website;
```

Action Output

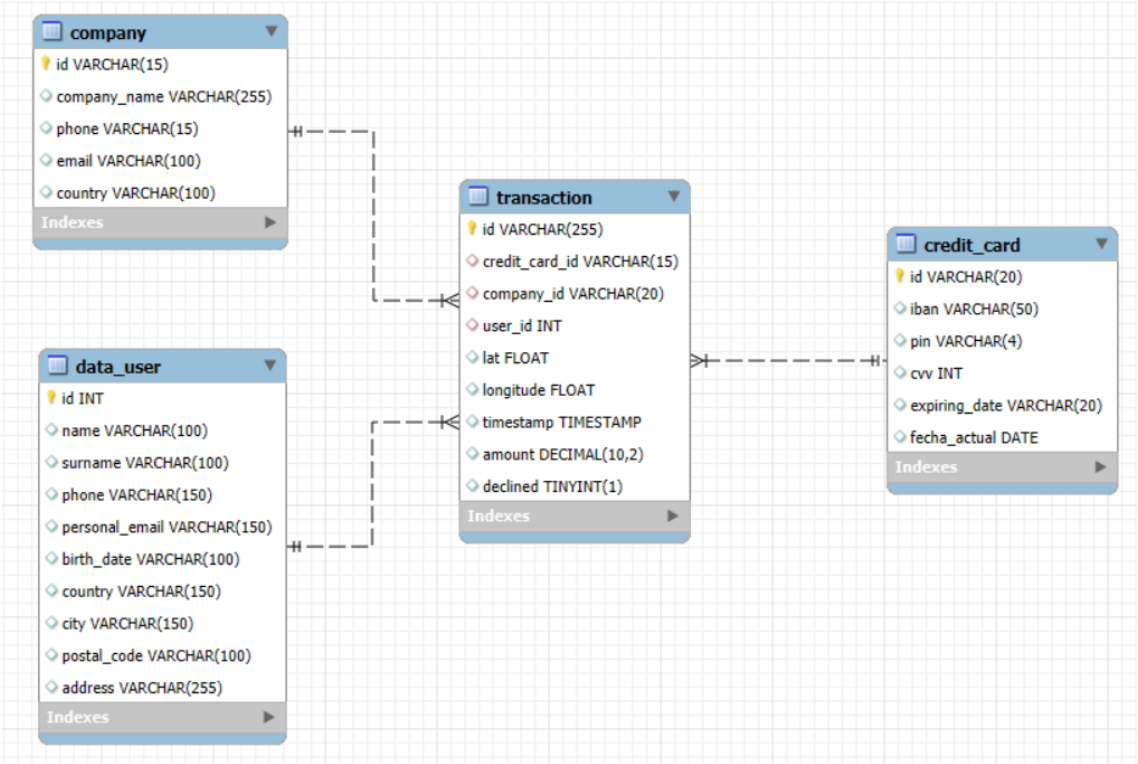
#	Time	Action	Message
1	11:18:38	ALTER TABLE company -- Borramos la columna web...	0 row(s) affected Records: 0 Duplicates: 0 Warning.

```
ALTER TABLE credit_card -- Añadimos la columna fecha_actual
ADD fecha_actual DATE;
```

Action Output

#	Time	Action	Message
1	11:20:05	ALTER TABLE credit_card -- Añadimos la columna f...	0 row(s) affected Records: 0 Duplicates: 0 Warning...

Hecho todo lo anterior, nos quedará un esquema muy parecido al del ejercicio:



N3E2

```sql
-- Exercici 2
CREATE VIEW `InformeTecnico` AS
SELECT transaction.id as transaction, name, surname, iban, company_name
FROM transaction
JOIN company
ON (company_id = company.id)
JOIN credit_card
ON (credit_card_id = credit_card.id)
JOIN data_user
ON (user_id = data_user.id)
ORDER BY transaction desc;

select * from informetecnico;
```

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

transaction	name	surname	iban	company_
FE96CE47-BD59-381C-4E18-E3CA3D44E8FF	Kenyon	Hartman	DO26854763748537475216568689	Magna A M
FE809ED4-2DB6-55AC-C915-929516E4646B	Molly	Gilliam	SE2813123487163628531121	Nunc Inter
FD9CBCCD-8E1E-8DA1-4606-7E3A6F3A5A65	Linus	Willis	KW9485332754781757886242955643	Nunc Inter
FD89D51B-AE8D-77DC-E450-B8083FBD3187	Hilda	Levy	LT053237077744561475	Malesuada

informetecnico 4

Output

Action Output

#	Time	Action	Message
1	11:45:29	CREATE VIEW `InformeTecnico` AS SELECT tran...	0 row(s) affected
2	11:46:12	select * from informetecnico LIMIT 0, 50000	586 row(s) returned