

Roser Blasco  
Sprint 3  
3 Desembre 2024  
Corregit per Edoardo Brega

## Nivell 1

- Exercici 1: taula credit\_card
- Exercici 2: canvi registre
- Exercici 3: nou usuari
- Exercici 4: eliminar columna

## Nivell 2

- Exercici 1: eliminar registre
- Exercici 2: vista
- Exercici 3: filtrar vista

## Nivell 3

- Exercici 1: modificacions base dades
- Exercici 2: informe tècnic

# Nivell 1

## - Exercici 1: taula credit\_card

La teva tasca és dissenyar i crear una taula anomenada "credit\_card" que emmagatzemi detalls crucials sobre les targetes de crèdit. La nova taula ha de ser capaç d'identificar de manera única cada targeta i establir una relació adequada amb les altres dues taules ("transaction" i "company"). Després de crear la taula serà necessari que ingressis la informació del document denominat "dades\_introduir\_credit". Recorda mostrar el diagrama i realitzar una breu descripció d'aquest.

Comencem verificant que només tenim dues taules

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'credit\_card' schema structure, including tables 'company' and 'transaction'. The main pane shows a query editor with the following content:

```
1  ## NIVELL 1 ##
2  ## EXERCICI 1 ##
3
4 * SHOW TABLES;
```

The results of the 'SHOW TABLES' query are displayed in a grid:

| Tables_in_transaction |
|-----------------------|
| company               |
| transaction           |

At the bottom of the interface, the status bar indicates 'Query Completed'.

Afegim la taula, refresquem es schemas i els veiem a l'esquerra.  
He elegit VARCHART per a totes les variables

```

Local Instance 3306 - Warning - not supported
Administration Schemas Sprint2 Sprint 3* SQL File 12* estructura_datos_user estructura_introducir_credit estructura_dades
SCHEMAS
    > sakila
        < transactions
            > Tables
                company credit_card transaction
            > Views
            > Stored Procedures
            > Functions
        > world
    > Filter objects
    > Don't Limit
1  ### NIVELL 1 ####
2  ## EXERCICI 1 ##
3
4 • SHOW TABLES;
5
6 -- Cream la taula credit_card
7 • CREATE TABLE IF NOT EXISTS credit_card (
8     id VARCHAR(15) PRIMARY KEY,
9     iban VARCHAR(255),
10    pan VARCHAR(255),
11    pin VARCHAR(4),
12    cvv VARCHAR(3),
13    expiring_date VARCHAR(255)
14 );
15
Result Grid Filter Rows: Search Export:
Tables_in_transaction...
company
transaction
Object Info Session
No object selected
Result Grid
Form Editor
Result
Read Only
Result 23
Action Output Time Action Response Duration / Fetch Time
74 16:14:26 CREATE TABLE IF NOT EXISTS credit_card ( id VARCHAR(15) PRIMARY KEY, iban VARCHAR(255), pan VA... 0 row(s) affected 0.038 sec
Query Completed

```

Ara carregarem les dades de "dades\_introducir\_credit" que té unes 275 files

```

Local Instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint Sprint 3* SQL File 12* estructura_datos_user estructura_introducir_credit estructura_dades
SCHEMAS
    > sakila
        < transactions
            > Tables
                company credit_card transaction
            > Views
            > Stored Procedures
            > Functions
        > world
    > Filter objects
    > Don't Limit
252 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4681', 'GE38261236481561281317', '448 57826 38974 72
253 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4689', '1238032575674391189721982', '34763506232325
254 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4695', '17443277847843567318061288976739', '376558773435
255 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4702', 'DK77772024378841977', '34624676075332', '388
256 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4709', 'GE45504127369209169124', '452333 846716 4597
257 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4716', 'PL7542271928401553872610976', '546684 B3341
258 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4723', 'F1804879345436573', '3414 376437 295981'
259 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4730', 'EE541526644818872885', '37339676587539', '5
260 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4737', 'AT270617743839359721', '3426 558216 37521'
261 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4744', 'A2587518861748690276368222', '523625573595
262 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4751', 'PK83730469332398264694', '3436 372241 8814
263 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4758', 'GB5160W61469185263624', '378486693428441
264 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4765', 'SA28987137987822214361515', '448 51253 39347
265 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4772', 'ME5903201545414012127328', '455 63485 32288 61
266 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4779', 'F13109231010971761', '51 92416 26288 645'
267 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4786', 'S151783104171167515', '557 97688 75435 755'
268 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4793', 'HU959215627740276573565556322', '471662 76764
269 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4800', 'S197324334522161436', '5455 792 5528 3322
270 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4807', 'LB1929831871558901625676971', '4539 4326 82
271 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4814', 'MB4845282437847152280636374', '3744716193433
272 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4821', 'LT253147565684667684', '453987 7873842836'
273 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4828', 'B61111L138149367569464', '448525735942', '2
274 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4835', 'PT3459217113176328012583', '3723 67744 225
275 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4842', 'SA215670851957118181229', '3774 636724 8325
276 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4849', 'SE2813123487163628531121', '5223363813491514
277 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4856', 'TR37387255831354567124286', '3495282357136
278
100% C 95:40
Action Output Time Action Response Duration / Fetch Time
352 16:27:12 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccl-4856', 'TR373872558... 1 row(s) affected 0.00032 sec
Query Completed

```

Li donem un ull a la taula, per a veure que tingui aquest número d'entrades

Local instance 3306 - Warning - not supported MySQL Model\* EER Diagram

Administration Schemas

SCHEMAS  
Filter objects

sakila  
transactions

Tables  
company  
credit\_card  
transaction

Views

Stored Procedures

Functions

world

Sprint2 Sprint 3\* datos\_introducir\_credit estructura\_dades SQL File 16\*

Don't Limit

1 • SELECT \*  
2 FROM credit\_card;

Result Grid Filter Rows: Q Search Edit: Export/Import:

100% 18:2

| id       | iban                           | pan                  | pin  | cvv | expiring_date |
|----------|--------------------------------|----------------------|------|-----|---------------|
| Ccu-2945 | DO268547367485374521656869     | 5142428219498828     | 9080 | 887 | 08/24/23      |
| Ccu-2952 | DO459VQJL527745060005          | 4556 4353 5287       | 4986 | 438 | 06/29/21      |
| Ccu-2959 | DO459VQJL527745060005          | 3725 4353 5287       | 8820 | 887 | 06/29/21      |
| Ccu-2962 | KT01562705837745060005         | 545618867477565      | 4800 | 130 | 10/26/24      |
| Ccu-2973 | PW18062105837745060005         | 544 58564 5433 394   | 8760 | 887 | 01/03/25      |
| Ccu-2980 | DE302118186306277136           | 402400 7145845969    | 5075 | 596 | 07/24/22      |
| Ccu-2983 | DE302118186306277136           | 402400 7145845969    | 5075 | 596 | 07/24/22      |
| Ccu-2994 | BH62714423830805765294         | 3442837372525939     | 7745 | 595 | 02/28/22      |
| Ccu-3001 | CY400974466774158126983210     | 511722 926833 224    | 9658 | 887 | 09/16/22      |
| Ccu-3008 | DE302118186306277136           | 402400 7145845969    | 1865 | 740 | 04/06/22      |
| Ccu-3015 | PS11900161690316119258         | 448574466434330000   | 7789 | 595 | 01/31/22      |
| Ccu-3022 | GTH169516285055977423121857    | 5164 1379 478521 395 | 9610 | 342 | 04/25/22      |
| Ccu-3029 | AZ2323114139624414162123739749 | 3439 2730 7730 7709  | 9708 | 505 | 09/09/23      |
| Ccu-3036 | TM64814331051485717935         | 4484 7167 0100 5786  | 9708 | 505 | 09/07/23      |
| Ccu-3043 | TM64814331051485717935         | 455670 6474653535    | 5893 | 196 | 06/07/23      |
| Ccu-3050 | FF161774436917583861854477     | 402400 123732        | 4834 | 128 | 10/09/23      |
| Ccu-3057 | PP93182251469754521            | 3484 6170 7123 27    | 6805 | 848 | 09/14/25      |
| Ccu-3064 | PP93182251469754521            | 3484 6170 7123 27    | 6805 | 848 | 09/14/25      |
| Ccu-3071 | NP093811763512                 | 3464 79562 23592     | 6623 | 881 | 12/20/23      |
| Ccu-3078 | IS2051271458462379548733       | 4539 323 2 2377      | 9405 | 720 | 03/08/23      |
| Ccu-3085 | IS2051271458462379548733       | 4539 323 2 2377      | 9405 | 720 | 03/08/23      |
| Ccu-3092 | PT260521120536825121215447487  | 3448 74423 40259     | 9417 | 594 | 12/19/22      |
| Ccu-3099 | PT260521120536825121215475218  | 448 5518 98863 73    | 5612 | 564 | 01/22/23      |
| Ccu-3106 | AT68425135771136595            | 34947146295283       | 9733 | 209 | 01/27/24      |
| Ccu-3113 | AT68425135771136595            | 34183482877471       | 8011 | 287 | 06/11/21      |
| Ccu-3120 | ED100474644616517114           | 4774M 659157 ACT     | 9748 | 546 | 01/16/21      |

credit\_card\_1

Action Output: 0

Time Action

353 16:28:20 SELECT \* FROM credit\_card

Response: 275 row(s) returned

Duration / Fetch Time: 0.0014 sec / 0.00009...

Query Completed

Ara doncs, intentem afegir la relació amb codi.

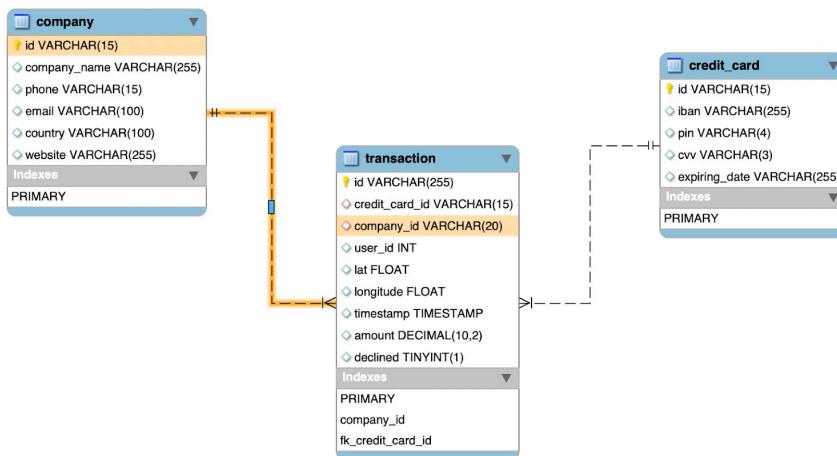
The screenshot shows the MySQL Workbench interface with the following details:

- Toolbar:** Administration, Schemas, Sprint 3, SQL File 17+, anilacambodi.
- Schemas:** Local instance 3306 - Warning - not supported.
- Object List:** Schemas (sakila, transactions, vistamarketing, world), Tables (company, credit\_card, transaction), Views (vistamarketing), Stored Procedures, Functions.
- Code Editor:** SQL pane with the following query:

```
1 alter table transaction add constraint fk_credit_card_id foreign key (credit_card_id)
2   references credit_card (id) on delete cascade on update cascade;
```
- Table Info:** Object Info tab selected for the credit\_card table.
- Table Structure:** Columns listed: id (varchar(15) PK), iban (varchar(255)), pin (varchar(4)), cvv (varchar(3)), expiring\_date (varchar(255)).
- Action Output:** Shows the execution of the ALTER TABLE command.
- Log:** Shows the execution log with the following details:

| Time     | Action  | Response   | Duration / Fetch Time |
|----------|---|--|-----------------------|
| 10:49:40 | alter table transaction add constraint fk_credit_card_id foreign key (credit_card_id) | 586 row(s) affected Records: 586 Duplicates: 0 Warnings: 0 | 0.056 sec             |

I comprovem que la relació està bé consultant el diagrama



## - Exercici 2: canvi registre

El departament de Recursos Humans ha identificat un error en el número de compte de l'usuari amb ID CcU-2938. La informació que ha de mostrar-se per a aquest registre és: R323456312213576817699999. Recorda mostrar que el canvi es va realitzar.

Busquem aquesta entrada en la taula 'credit\_card'

The screenshot shows the MySQL Workbench interface with the following details:

- SQL Editor:** Contains the following SQL query:

```
1 • SELECT *
2   from credit_card
3  WHERE id = 'CcU-2938';
```
- Result Grid:** Displays the results of the query. The table has columns: `id`, `iban`, `pan`, `pin`, `cvv`, and `expiring_date`. One row is shown:

| id       | iban                       | pan              | pin  | cvv | expiring_date |
|----------|----------------------------|------------------|------|-----|---------------|
| CcU-2938 | TR301950312213576817638661 | 5424465566813633 | 3257 | 984 | 10/30/22      |
- Object Info:** Shows the selected object is `credit_card`.
- Action Output:** Shows the query was executed at 16:46:14 and returned 1 row(s) in 0.00071 sec / 0.0000... ms.

Fem el canvi de registre i comprovem que el canvi s'ha realitzat

The screenshot shows the MySQL Workbench interface. In the top-left pane, the 'Schemas' tree is visible, showing 'sakila' and 'transactions' schemas. Under 'transactions', there are 'Tables' (company, credit\_card), 'Columns' (id, iban, pan, pin, cvv, expiring\_date), 'Indexes', 'Foreign Keys', and 'Triggers'. The 'credit\_card' table is selected. In the top-right pane, the SQL editor contains the following code:

```
1 UPDATE credit_card SET iban = 'R323456312213576817699999' WHERE id = 'CcU-2938';
2
3
4 • SELECT *
5   from credit_card
6   WHERE id = 'CcU-2938';
```

Below the SQL editor is the 'Result Grid' which displays the updated data for the 'credit\_card' table:

| id       | iban                      | pan             | pin  | cvv | expiring_date |
|----------|---------------------------|-----------------|------|-----|---------------|
| CcU-2938 | R323456312213576817699999 | 542446556819333 | 3257 | 984 | 10/30/22      |

At the bottom of the interface, the status bar shows 'Query Completed'.

## - Exercici 3: nou usuari

En la taula "transaction" ingressa un nou usuari amb la següent informació:

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

Usem el codi per a afegir nova entrada però com imaginàvem, dóna error per dependències

The screenshot shows the MySQL Workbench interface with the 'transaction' table selected. A query window contains the following SQL code:

```

1
2
3 • INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined)
4 VALUES ('10881010-5B23-A76C-55EF-C568E49A90D0', 'CcU-9999', 'b-9999', '9999', '829.999', '-117.999', '111.11', '0');
5

```

The status bar at the bottom indicates "Query interrupted". Below the query window, the "Object Info" tab is active, showing the structure of the "credit\_card" table:

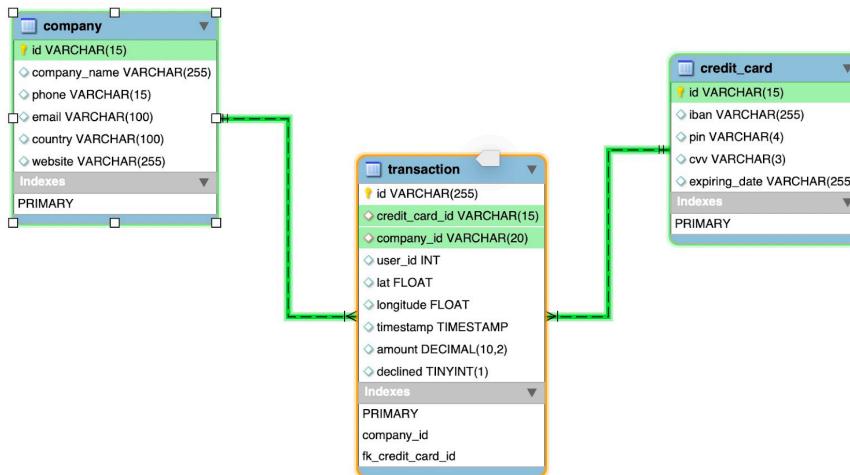
| Column        | Type           |
|---------------|----------------|
| <b>Id</b>     | varchar(15) PK |
| iban          | varchar(255)   |
| pin           | varchar(4)     |
| cvv           | varchar(3)     |
| expiring_date | varchar(255)   |

The "Action Output" pane shows a single row of results with the following details:

| Time     | Action  | Response   | Duration / Fetch Time |
|----------|---|--|-----------------------|
| 11:25:22 | INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) | Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails | 0.011 sec             |

Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails  
`(`transactions`.`transaction`, CONSTRAINT `transaction\_ibfk\_1` FOREIGN KEY (`company\_id`) REFERENCES `company`(`id`))

Ens fixem bé en les dependències de la taula de transaccions



Haurem d'afegir aquestes dues entrades primer en les taules de company i credit\_card

|                |          |
|----------------|----------|
| credit_card_id | CcU-9999 |
| company_id     | b-9999   |

Comencem per afegir en la taula "company" el id b-9999

The screenshot shows the MySQL Workbench interface. In the top navigation bar, the tabs 'Administration' and 'Schemas' are selected. Under 'Schemas', the 'credit\_card' table is highlighted. The main pane displays the following SQL code:

```
1 • INSERT into company (id)
2   VALUES ('b-9999');
3
```

Below the code, the 'Object Info' tab is active, showing details for the 'credit\_card' table. The 'Columns' section lists:

| Column                     | Type                        |
|----------------------------|-----------------------------|
| <code>id</code>            | <code>varchar(15) PK</code> |
| <code>iban</code>          | <code>varchar(255)</code>   |
| <code>pin</code>           | <code>varchar(4)</code>     |
| <code>cvv</code>           | <code>varchar(3)</code>     |
| <code>expiring_date</code> | <code>varchar(255)</code>   |

The 'Session' tab shows the execution results:

| Time     | Action                                     | Response          | Duration / Fetch Time |
|----------|--|-------------------|-----------------------|
| 11:38:18 | INSERT INTO company (id) VALUES ('b-9999') | 1 row(s) affected | 0.0095 sec            |

At the bottom, a message says 'Query Completed'.

Mirem que estigui ben afegit

The screenshot shows the MySQL Workbench interface. The 'Schemas' tab is selected, and the 'company' table is highlighted. The main pane displays the following SQL code:

```
1
2 • SELECT *
3   FROM company
4  WHERE id = 'b-9999';
5
```

The 'Result Grid' tab is active, showing the results of the query:

| id     | company_name | phone | email | country | website |
|--------|--------------|-------|-------|---------|---------|
| b-9999 | NULL         | NULL  | NULL  | NULL    | NULL    |
|        | NULL         | NULL  | NULL  | NULL    | NULL    |
|        | NULL         | NULL  | NULL  | NULL    | NULL    |

The 'Object Info' tab is active, showing details for the 'credit\_card' table. The 'Columns' section lists:

| Column                     | Type                        |
|----------------------------|-----------------------------|
| <code>id</code>            | <code>varchar(15) PK</code> |
| <code>iban</code>          | <code>varchar(255)</code>   |
| <code>pin</code>           | <code>varchar(4)</code>     |
| <code>cvv</code>           | <code>varchar(3)</code>     |
| <code>expiring_date</code> | <code>varchar(255)</code>   |

The 'Session' tab shows the execution results:

| Time     | Action                                    | Response          | Duration / Fetch Time   |
|----------|---|-------------------|-------------------------|
| 11:39:01 | SELECT * FROM company WHERE id = 'b-9999' | 1 row(s) returned | 0.0091 sec / 0.00053... |

At the bottom, a message says 'Query Completed'.

I després en la taula “credit\_card” afegim el id CcU-9999

The screenshot shows the MySQL Workbench interface. The top navigation bar includes tabs for Local Instance 3306 - Warning - not supported, MySQL Model\*, and EER Diagram. Below the navigation is a toolbar with various icons. The main workspace has a left sidebar titled 'Administration' and 'Schemas'. Under 'Schemas', the 'sakila' database is selected, showing tables like 'credit\_card', 'company', and 'transaction'. A search bar at the top right says 'Don't Limit'. The central area contains a query editor with the following SQL code:

```
1 • INSERT into credit_card (id)
2   VALUES ('CcU-9999');
3
```

Below the query editor is a table information panel for the 'credit\_card' table:

| Object Info        | Session |
|--------------------|---------|
| Table: credit_card |         |

The 'Columns:' section lists the table's columns:

| Columns:                          |
|-----------------------------------|
| <b>id</b> varchar(15) PK          |
| <b>iban</b> varchar(255)          |
| <b>pin</b> varchar(4)             |
| <b>cvv</b> varchar(3)             |
| <b>expiring_date</b> varchar(255) |

At the bottom, there is a status bar showing '100%' zoom, '1:3' ratio, and a timeline with a selected point at '11:41:01'.

Mirem que estigui bé

The screenshot shows the MySQL Workbench interface. The left sidebar displays the administration panel, schemas (including sakila, transactions, and credit\_card), and various objects like tables, views, stored procedures, and functions. The main area shows a query editor with the following SQL code:

```
1 • SELECT *
2 FROM credit_card
3 WHERE id = 'CcU-9999';
4
```

The result grid shows one row of data from the credit\_card table:

| id       | iban | pin  | cvv  | expiring_date |
|----------|------|------|------|---------------|
| CcU-9999 | XXXX | XXXX | XXXX | XXXX          |

Below the result grid, the object info panel shows details for the credit\_card table, including columns: id, iban, pin, cvv, expiring\_date, and their data types: varchar(15) PK, varchar(255), varchar(4), varchar(3), and varchar(255). The execution plan panel is also visible on the right.

I ara és quan tornem a intentar insertar el registre a transactions i ens diu que ha anat bé

The screenshot shows the MySQL Workbench interface. In the top navigation bar, it says "Local Instance 3306 - Warning - not supported" and "MySQL Model\*". Below the navigation bar, there are tabs for "Administration", "Schemas", "Sprint 3\*", and "SQL File 19\*". The "SQL File 19\*" tab is active, displaying the following SQL code:

```
1
2
3 • INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined)
4 VALUES ('10881D1D-5B23-A76C-55EF-C568E49A9900', 'CcU-9999', 'b-9999', '9999', '829.999', '-117.999', '111.11', '0');
5
```

The left sidebar shows the database schema with the "credit\_card" table selected. The "Object Info" tab is active, showing the structure of the "credit\_card" table with columns: id (varchar(15) PK), iban (varchar(255)), pin (varchar(4)), cvv (varchar(3)), and expiring\_date (varchar(255)).

The "Action Output" section at the bottom shows the result of the insert operation:

| Time        | Action  | Response          | Duration / Fetch Time |
|-------------|---|-------------------|-----------------------|
| 43 11:45:51 | INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) | 1 row(s) affected | 0.0041 sec            |

Query Completed

Comprovem. Ara si.

The screenshot shows the MySQL Workbench interface again. The "SQL File 22\*" tab is active, displaying the following SQL code:

```
1 • SELECT *
2   FROM transaction
3 WHERE id = '10881D1D-5B23-A76C-55EF-C568E49A9900';
```

The left sidebar shows the database schema with the "credit\_card" table selected. The "Object Info" tab is active, showing the structure of the "credit\_card" table with columns: id (varchar(15) PK), iban (varchar(255)), pin (varchar(4)), cvv (varchar(3)), and expiring\_date (varchar(255)).

The "Result Grid" section shows the results of the query:

| id                                 | credit_card_id | company_id | user_id | lat     | longitude | timestamp | amount | declined |
|------------------------------------|----------------|------------|---------|---------|-----------|-----------|--------|----------|
| 10881D1D-5B23-A76C-55EF-C568E49... | CcU-9999       | b-9999     | 9999    | 829.999 | -117.999  | NULL      | 111.11 | 0        |

The "Action Output" section at the bottom shows the result of the select operation:

| Time        | Action  | Response          | Duration / Fetch Time   |
|-------------|---|-------------------|-------------------------|
| 45 11:47:41 | SELECT * FROM transaction WHERE id = '10881D1D-5B23-A76C-55EF-C568E49...' | 1 row(s) returned | 0.0011 sec / 0.00001... |

Query Completed

## - Exercici 4: eliminar columna

Des de recursos humans et sol·liciten eliminar la columna "pan" de la taula credit\_card. Recorda mostrar el canvi realitzat.

Comencem donant un ull a la taula credit\_card

The screenshot shows the MySQL Workbench interface with the 'credit\_card' table selected. The table has columns: id (PK), iban, pan, pin, cvv, and expiring\_date. A query window at the top shows a SELECT \* from credit\_card query. The results grid displays numerous rows of data. The bottom status bar indicates the query completed successfully.

```
2
3  ### NIVELL 1 ###
4  ## EXERCICI 4 ##
5  # - Eliminar la columna "pan" de la taula credit_card
6
7 • SELECT *
8 FROM credit_card;
```

| id      | iban                         | pan                 | pin  | cvv  | expiring_date |
|---------|------------------------------|---------------------|------|------|---------------|
| Cu-2958 | R03048512513579817996999     | 54744565059811853   | 257  | 984  | 10/03/22      |
| Cu-2941 | D02985478374857475156568899  | 514293801948899     | 898  | 887  | 08/04/24      |
| Cu-2953 | BG454VOL52710526072516568899 | 4556 435 5 5287     | 498  | 438  | 09/29/21      |
| Cu-2959 | CR724247724383841555         | 372461377349657     | 3983 | 687  | 02/24/23      |
| Cu-2960 | DE390418168308271308         | 44860524205456394   | 7055 | 7055 | 01/03/24      |
| Cu-2973 | PT87805281150524245456346    | 544 58654 54343 394 | 8760 | 887  | 01/03/25      |
| Cu-2988 | DE390418168308271308         | 402400 7145845969   | 5075 | 598  | 07/24/22      |
| Cu-2987 | DE89881434637748781815       | 3703 62007 76666    | 2998 | 797  | 10/03/23      |
| Cu-2990 | DE89881434637748781815       | 24430373273724549   | 7454 | 7454 | 03/08/22      |
| Cu-3001 | CY4908742665477488126683510  | 511722 924833 2244  | 9655 | 887  | 09/16/22      |
| Cu-3008 | LU057211690301611923         | 4485744464433884    | 1856 | 740  | 04/05/25      |
| Cu-3010 | LU057211690301611923         | 240400 7145845969   | 5075 | 598  | 07/24/22      |
| Cu-3022 | GT916951628505699747231987   | 5164 1379 4842 399  | 9610 | 942  | 04/25/25      |
| Cu-3029 | AZ2631741396344141812373948  | 3429 27596 77631    | 7078 | 505  | 09/03/23      |
| Cu-3030 | DE390418168308271308         | 402400 7145845969   | 5075 | 598  | 07/24/22      |
| Cu-3045 | TN468814331051455379353      | 455678 64374659303  | 5935 | 198  | 06/07/25      |
| Cu-3059 | FR6167744398017583638155477  | 402400712372        | 4834 | 126  | 10/03/23      |
| Cu-3061 | LU9318225749974527           | 3464 621707 21237   | 8905 | 848  | 09/14/23      |
| Cu-3071 | N08923814763512              | 3464 621707 21237   | 8905 | 848  | 09/14/23      |
| Cu-3074 | IS925127145846423279546733   | 4539 322 71 2377    | 9405 | 661  | 12/20/23      |
| Cu-3085 | BE83114723972437             | 5266 5346 1195 1687 | 7241 | 413  | 05/10/23      |

Treiem la columna pan

The screenshot shows the MySQL Workbench interface with the 'credit\_card' table selected. The table has columns: id (PK), iban, pan, pin, cvv, and expiring\_date. A query window at the top shows an ALTER TABLE query dropping the pan column. The results grid shows the execution of the query. The bottom status bar indicates the query completed successfully.

```
1
2
3  ### NIVELL 1 ###
4  ## EXERCICI 4 ##
5  # - Eliminar la columna "pan" de la taula credit_card
6
7 • ALTER TABLE credit_card
8   DROP COLUMN pan;
```

| id      | iban                         | pan | pin | cvv | expiring_date |
|---------|------------------------------|-----|-----|-----|---------------|
| Cu-2958 | R03048512513579817996999     |     |     |     | 10/03/22      |
| Cu-2941 | D02985478374857475156568899  |     |     |     | 08/04/24      |
| Cu-2953 | BG454VOL52710526072516568899 |     |     |     | 09/29/21      |
| Cu-2959 | CR724247724383841555         |     |     |     | 02/24/23      |
| Cu-2960 | DE390418168308271308         |     |     |     | 01/03/24      |
| Cu-2973 | PT87805281150524245456346    |     |     |     | 01/03/25      |
| Cu-2988 | DE390418168308271308         |     |     |     | 07/24/22      |
| Cu-2987 | DE89881434637748781815       |     |     |     | 10/03/23      |
| Cu-2990 | DE89881434637748781815       |     |     |     | 03/08/22      |
| Cu-3001 | CY4908742665477488126683510  |     |     |     | 09/16/22      |
| Cu-3008 | LU057211690301611923         |     |     |     | 04/05/25      |
| Cu-3010 | LU057211690301611923         |     |     |     | 07/24/22      |
| Cu-3022 | GT916951628505699747231987   |     |     |     | 04/25/25      |
| Cu-3029 | AZ2631741396344141812373948  |     |     |     | 09/03/23      |
| Cu-3030 | DE390418168308271308         |     |     |     | 07/24/22      |
| Cu-3045 | TN468814331051455379353      |     |     |     | 06/07/25      |
| Cu-3059 | FR6167744398017583638155477  |     |     |     | 10/03/23      |
| Cu-3061 | LU9318225749974527           |     |     |     | 09/14/23      |
| Cu-3071 | N08923814763512              |     |     |     | 09/14/23      |
| Cu-3074 | IS925127145846423279546733   |     |     |     | 12/20/23      |
| Cu-3085 | BE83114723972437             |     |     |     | 05/10/23      |

I comprovem que la columna ja no està

# Nivell 2

## - Exercici 1: eliminar registre

Elimina de la taula transaction el registre amb ID 02C6201E-D90A-1859-B4EE-88D2986D3B02 de la base de dades.

Comencem localitzant aquest registra a la taula

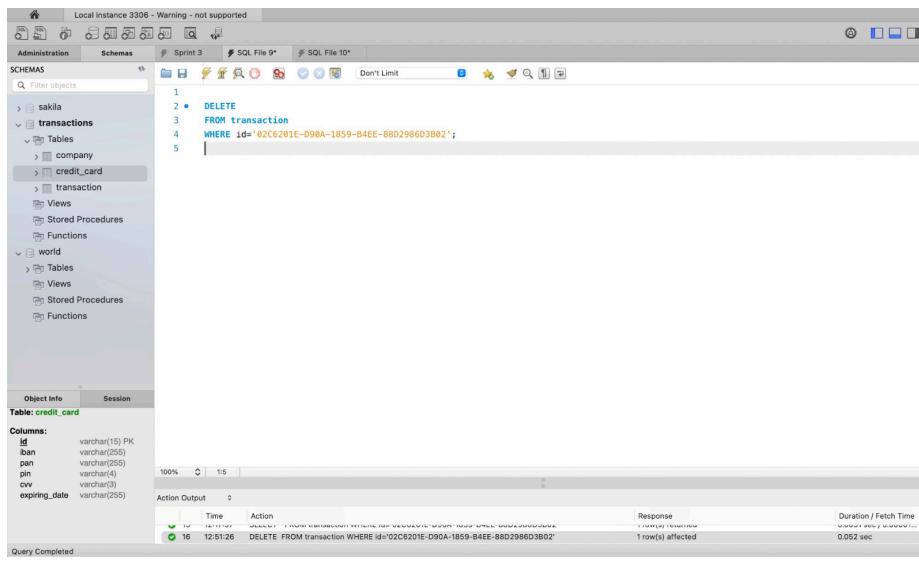
The screenshot shows the MySQL Workbench interface with the following details:

- Administration** tab selected.
- Schemas** pane: Local instance 3306 - Warning - not supported. Shows the **sakila** schema with tables **credit\_card**, **company**, **transaction**, and **user**.
- Query Editor**:
  - Text area:

```
1 • SELECT *
2   FROM `transaction`
3 WHERE id='02C6201E-D90A-1859-B4EE-880298603B02';
```
  - Result Grid:

| id                                   | credit_card_id | company_id | user_id | lat     | longitude | timestamp           | amount | declined |
|--------------------------------------|----------------|------------|---------|---------|-----------|---------------------|--------|----------|
| 02C6201E-D90A-1859-B4EE-880298603B02 | Cct-2938       | b-2362     | 92      | 81.9185 | -12.5276  | 2021-08-28 23:42:24 | 466.92 | 0        |
  - Object Info pane: Table: **credit\_card**. Shows columns: **id**, **iban**, **pan**, **pin**, **cvv**, **expiring\_date**.
  - Session pane: Action Output table showing the executed query and its results.

## L'esborrem

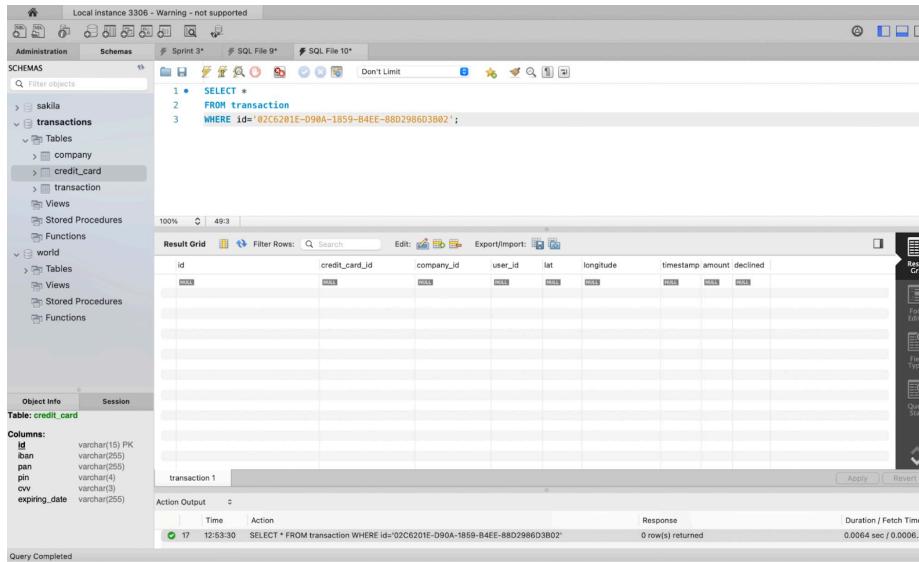


A screenshot of the MySQL Workbench interface. The left sidebar shows the schema 'credit\_card' selected under the 'transactions' table. The main pane displays a SQL query:

```
1 • DELETE
2   FROM transaction
3   WHERE id='02C6201E-D90A-1859-B4EE-88D2986D3B02';
```

The results pane shows the query was executed at 12:51:26, affected 1 row(s), and took 0.052 sec.

I comprovem que ja no està



A screenshot of the MySQL Workbench interface. The left sidebar shows the schema 'credit\_card' selected under the 'transactions' table. The main pane displays a SQL query:

```
1 • SELECT *
2   FROM transaction
3   WHERE id='02C6201E-D90A-1859-B4EE-88D2986D3B02';
```

The results pane shows the query was executed at 12:53:30, returned 0 row(s), and took 0.0064 sec / 0.0006...

## - Exercici 2: vista

La secció de màrqueting desitja tenir accés a informació específica per a realitzar anàlisi i estratègies efectives. S'ha sol·licitat crear una vista que proporcioni detalls clau sobre les companyies i les seves transaccions. Serà necessària que creïs una vista anomenada VistaMarketing que contingui la següent informació: Nom de la companyia. Telèfon de contacte. País de residència. Mitjana de compra realitzat per cada companyia. Presenta la vista creada, ordenant les dades de major a menor mitjana de compra.

Comencem fent la consulta amb el join

The screenshot shows the SQL Server Management Studio interface. In the Object Explorer, under the 'Schemas' node, the 'company' table is selected. In the 'Script' tab of the ribbon, a T-SQL script is displayed:

```
1 • SELECT company.company_name, company.phone, company.country, avg(amount)
2   FROM transaction
3     LEFT JOIN company
4       ON company.id = transaction.company_id
5       WHERE declined = 0
6     GROUP BY company.id
7     ORDER BY avg(amount) DESC;
```

The 'Result Grid' tab is selected, showing the results of the query:

| company_name                 | phone          | country        | avg(amount) |
|------------------------------|----------------|----------------|-------------|
| Eget Iosum Ltd               | 03 67 44 56 72 | United States  | 481.86000   |
| Sed Id Sit                   | 07 28 19 34 13 | United States  | 477.51000   |
| Nunc Tellus Incorporated     | 04 18 39 20 20 | Ireland        | 473.20000   |
| Nunc Sit Incorporated        | 07 28 42 63 63 | Norway         | 461.83000   |
| Non Magna LLC                | 06 71 73 13 17 | United Kingdom | 458.74000   |
| Malesuada Fringilla Inc.     | 06 71 73 13 17 | United Kingdom | 458.74000   |
| Erat LLP                     | 03 18 86 77 79 | Netherlands    | 448.44000   |
| Tortor Nunc Commodo Company  | 05 35 90 77 16 | United States  | 447.11000   |
| Justo Eu Arci Ltd            | 08 42 50 71 52 | Italy          | 444.19000   |
| Pellentesque Ltd             | 07 18 39 20 20 | Norway         | 443.20000   |
| Vestibulum Lorem PC          | 02 02 87 33 40 | Belgium        | 428.40000   |
| Mauris Estimata              | 05 29 40 36 87 | Sweden         | 427.71000   |
| Aliquipsum Limited           | 02 01 02 70 47 | United Kingdom | 426.41000   |
| Mul-Kennan Egit Foundation   | 06 25 15 52 43 | Sweden         | 419.97000   |
| Sed LLC                      | 01 63 19 26 52 | Belgium        | 416.66000   |
| Aliquam Foundation           | 03 18 86 77 79 | United Kingdom | 414.44000   |
| Eget Tincidunt Ali Institute | 05 35 93 32 44 | Netherlands    | 413.50000   |
| Amet Institute               | 06 33 40 21 33 | Australia      | 412.48000   |
| Egestas Nunc Sed Limited     | 06 01 02 70 47 | Italy          | 406.11000   |
| Eros Elementum Accumsan      | 07 20 14 47 44 | Portugal       | 406.11000   |

The status bar at the bottom indicates 'Query Completed'.

Ara creem la vista i refresquem els schemas per a veure-la

The screenshot shows the SQL Server Management Studio interface. In the Object Explorer, under the 'Views' node, the 'vistamarketing' view is selected. In the 'Script' tab of the ribbon, a T-SQL script is displayed:

```
1 • CREATE VIEW VistaMarketing AS
2   SELECT company.company_name, company.phone, company.country, avg(amount)
3     FROM transaction
4       LEFT JOIN company
5         ON company.id = transaction.company_id
6         WHERE declined = 0
7       GROUP BY company.id
8       ORDER BY avg(amount) DESC;
```

The 'Result Grid' tab is selected, showing the results of the query:

| company_name                 | phone          | country        | avg(amount) |
|------------------------------|----------------|----------------|-------------|
| Eget Iosum Ltd               | 03 67 44 56 72 | United States  | 481.86000   |
| Sed Id Sit                   | 07 28 19 34 13 | United States  | 477.51000   |
| Nunc Tellus Incorporated     | 04 18 39 20 20 | Ireland        | 473.20000   |
| Nunc Sit Incorporated        | 07 28 42 63 63 | Norway         | 461.83000   |
| Non Magna LLC                | 06 71 73 13 17 | United Kingdom | 458.74000   |
| Malesuada Fringilla Inc.     | 06 71 73 13 17 | United Kingdom | 458.74000   |
| Erat LLP                     | 03 18 86 77 79 | Netherlands    | 448.44000   |
| Tortor Nunc Commodo Company  | 05 35 90 77 16 | United States  | 447.11000   |
| Justo Eu Arci Ltd            | 08 42 50 71 52 | Italy          | 444.19000   |
| Pellentesque Ltd             | 07 18 39 20 20 | Norway         | 443.20000   |
| Vestibulum Lorem PC          | 02 02 87 33 40 | Belgium        | 428.40000   |
| Mauris Estimata              | 05 29 40 36 87 | Sweden         | 427.71000   |
| Aliquipsum Limited           | 02 01 02 70 47 | United Kingdom | 426.41000   |
| Mul-Kennan Egit Foundation   | 06 25 15 52 43 | Sweden         | 419.97000   |
| Sed LLC                      | 01 63 19 26 52 | Belgium        | 416.66000   |
| Aliquam Foundation           | 03 18 86 77 79 | United Kingdom | 414.44000   |
| Eget Tincidunt Ali Institute | 05 35 93 32 44 | Netherlands    | 413.50000   |
| Amet Institute               | 06 33 40 21 33 | Australia      | 412.48000   |
| Egestas Nunc Sed Limited     | 06 01 02 70 47 | Italy          | 406.11000   |
| Eros Elementum Accumsan      | 07 20 14 47 44 | Portugal       | 406.11000   |

The status bar at the bottom indicates 'Query Completed'.

## Comprovem cridant la vista

The screenshot shows the MySQL Workbench interface with the following details:

- SQL Editor:** Contains the query: `SELECT * FROM vistamarketing;`
- Result Grid:** Displays the results of the query, showing company information from various countries. The columns are: company\_name, phone, country, and avg(amount).
- Table Headers:** Shows the columns: company\_name, phone, country, and avg(amount).
- Table Data:** The result grid contains approximately 20 rows of data, including companies like Egret Inn Limited, Nunc Telus Incorporated, and Mauris Institute.
- Session Tab:** Shows the view: `vistamarketing`.
- Object Info Tab:** Shows the columns: company\_name (varchar(255)), phone (varchar(15)), country (varchar(100)), and avg(amount) (decimal(14,6)).
- Action Output:** Shows the query was executed at 13:42:31 and returned 101 row(s) in 0.0043 sec / 0.00000...

## - Exercici 3: filtrar vista

Filtra la vista VistaMarketing per a mostrar només les companyies que tenen el seu país de residència en "Germany"

Cridem la vista i li apliquem el filtre WHERE com si fos una taula qualsevol

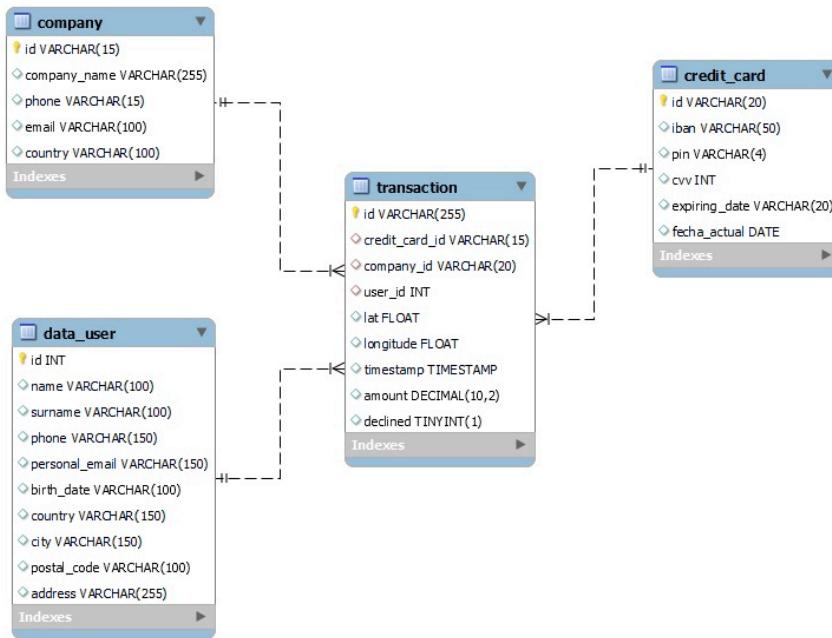
The screenshot shows the MySQL Workbench interface with the following details:

- SQL Editor:** Contains the query: `SELECT * FROM vistamarketing WHERE country = 'Germany';`
- Result Grid:** Displays the results of the query, showing company information from Germany. The columns are: company\_name, phone, country, and avg(amount).
- Table Headers:** Shows the columns: company\_name, phone, country, and avg(amount).
- Table Data:** The result grid contains 8 rows of data, including companies like Ac Fermentum Incorporated, Aliquam PC, and Augie Foundation.
- Session Tab:** Shows the view: `vistamarketing`.
- Action Output:** Shows the query was executed at 12:39:45 and returned 8 row(s) in 0.010 sec / 0.000007...

# Nivell 3

## - Exercici 1: modificacions base dades

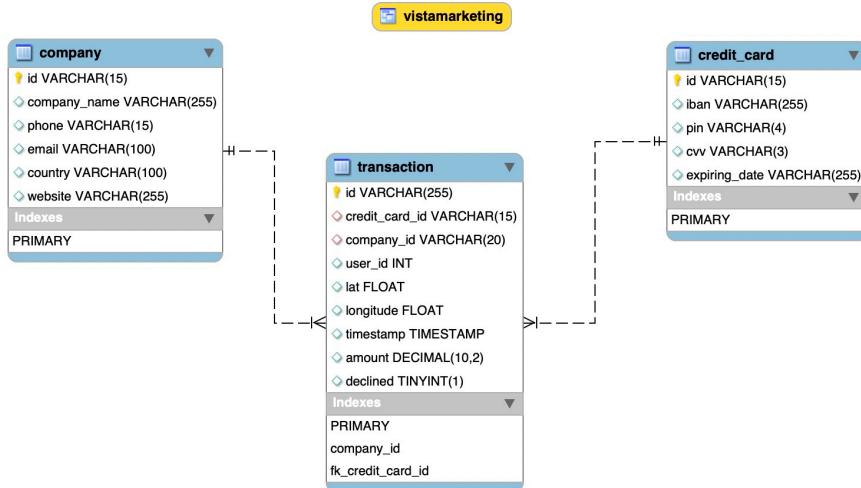
La setmana vinent tindràs una nova reunió amb els gerents de màrqueting. Un company del teu equip va realitzar modificacions en la base de dades, però no recorda com les va realitzar. Et demana que l'ajudis a deixar els comandos executats per a obtenir el següent diagrama:



### Recordatori

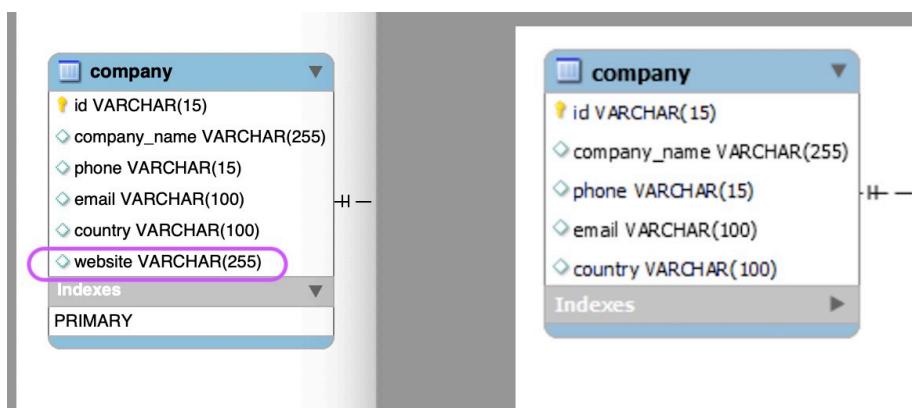
En aquesta activitat, és necessari que descriguis el "pas a pas" de les tasques realitzades. És important realitzar descripcions senzilles, simples i fàcils de comprendre. Per a realitzar aquesta activitat hauràs de treballar amb els arxius denominats "estructura\_dades\_user" i "dades\_introduir\_user"

Mirem el diagrama que tenim abans que el company realitzés les modificacions en la base de dades.



## Eliminar web

El primer que ha fet ha seguit eliminar la columna web de la taula company



Els passos per a treure la columna website són els següents. Li diguem que tregui la columna website

```

Local instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 26* SQL File 32* SQL File 35* SQL File 36*
SCHEMAS Filter objects
1
2 • ALTER TABLE company
3 DROP COLUMN website;
4
5
100% 21:3
Action Output
Time Action Response Duration / Fetch Time
361 12:09:35 ALTER TABLE company DROP COLUMN website 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.023 sec
Query Completed

```

I comprovem que la columna ja no està

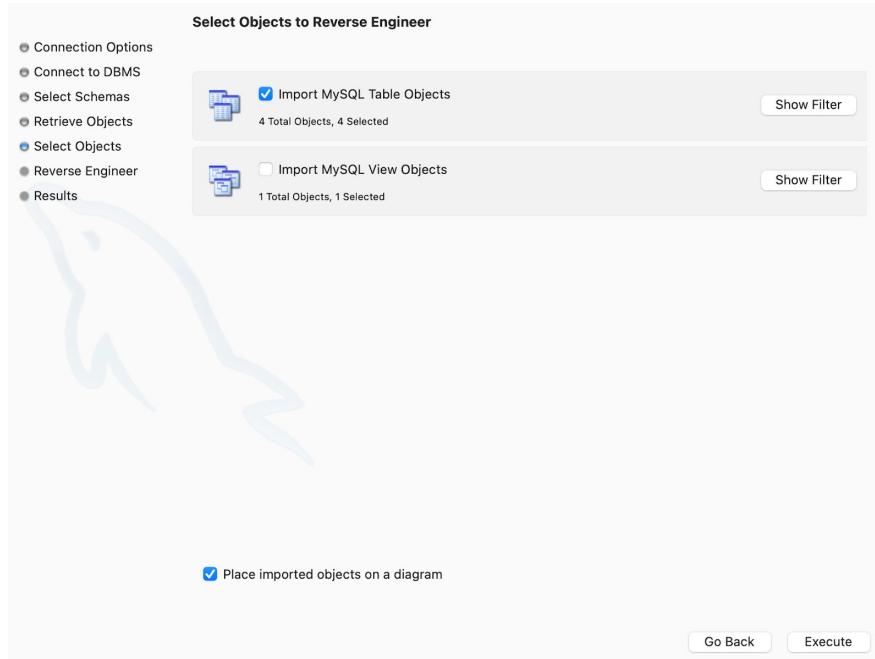
```

Local instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 26* SQL File 32* SQL File 35* SQL File 36*
SCHEMAS Filter objects
1
2 • SELECT *
3 FROM company;
4
100% 14:3
Result Grid Filter Rows: Search Edit: Export/Import: 
id company_name phone email country
b-2222 Ac Fermentum Incorporated 06 85 56 52 33 donec.portitor.tellus@yahoo.net Germany
b-2226 Magna A Neque Industries 04 14 44 64 62 risus.don nec.nibh@icloud.org Australia
b-2230 Fusce Convallis Incorporated 09 48 97 58 85 nisl.sed.sed@ad.edu United States
b-2234 Donec Ltd 08 69 25 11 74 mauris.uull@ad.co.uk Germany
b-2238 Ante Iaculis Nec Foundation 08 23 04 99 53 sed dictum.pron@outlook.ca New Zealand
b-2242 Sed 25 51 37 37 at.iaculis@hotmail.co.uk Norway
b-2246 Sed Nunc Ltd 02 62 64 73 48 nibh@yahoo.org United Kingdom
b-2250 Aenean Nonummy Corporation 07 25 25 74 74 mattis.integre@protonmail.net Italy
b-2254 Nullam Ridiculus Mus Inc. 07 25 25 61 74 mattis.integre@protonmail.net United States
b-2258 Vestibulum Lorem PC 02 02 87 33 40 aenean.massa.integre@ad.net Belgium
b-2262 Gravida Sagittis LLP 03 81 28 33 97 turpis.vitae@google.ca Sweden
b-2266 Mus Aenean Eget Foundation 06 25 15 52 43 mi.duis@hotmai.l net Sweden
b-2270 Sed Ateneum Institute 07 25 25 61 74 mattis.integre@protonmail.org Norway
b-2274 Sed LLC 01 03 16 26 62 aril@outlook.com Belgium
b-2278 Arcu LLP 06 46 04 41 45 dul@ad.ca Norway
b-2282 Pretium Neque Corp. 07 77 48 55 28 eleifend.nec.sed@ad.proto... Australia
b-2286 Fringilla Llc 08 29 15 93 57 gravida@outlook.co.uk New Zealand
b-2290 Libero Libero LLC 04 04 25 11 74 sapien.malesuada.orci@hotmail.ca China
b-2294 Auctor Mauris Vel LLP 08 09 28 74 14 nec.tempus@icloud.co.uk United States
b-2298 Etiam Lacert Associates 07 69 74 17 45 ut@cooh.co.uk Canada
company 6
100% 14:3
Action Output
Time Action Response Duration / Fetch Time
366 12:36:25 SELECT * FROM company 101 row(s) returned 0.0012 sec / 0.00002...
Query Completed

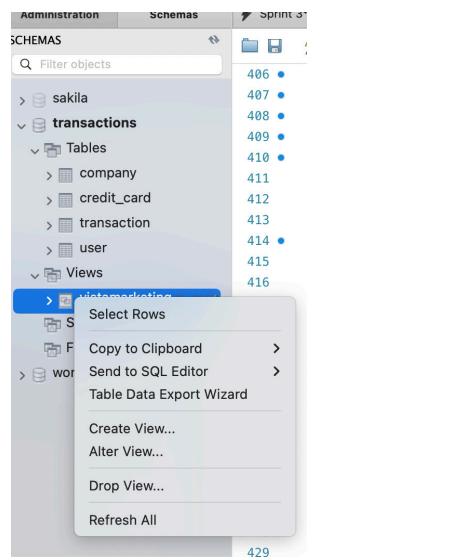
```

Esborrar vista

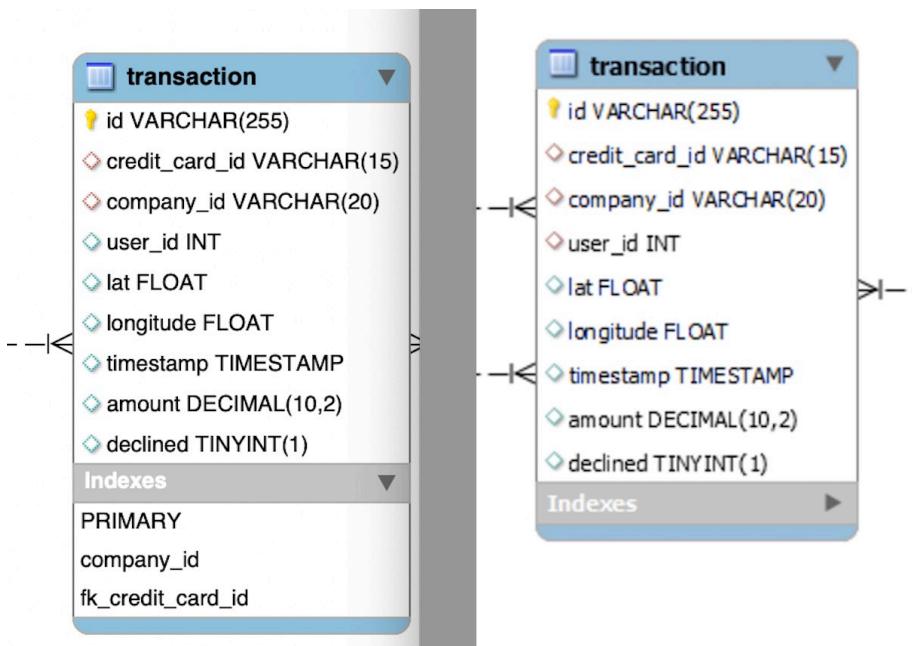
Les relacions entre taules sembla que no s'han tocat. Però no apareix la vista de màrqueting. Entenem que s'ha amagat al diagrama i per això no surt



Si s'hagués borrat la vista, es podria haver fet clicant sobre la vista i seleccionant "Drop view"

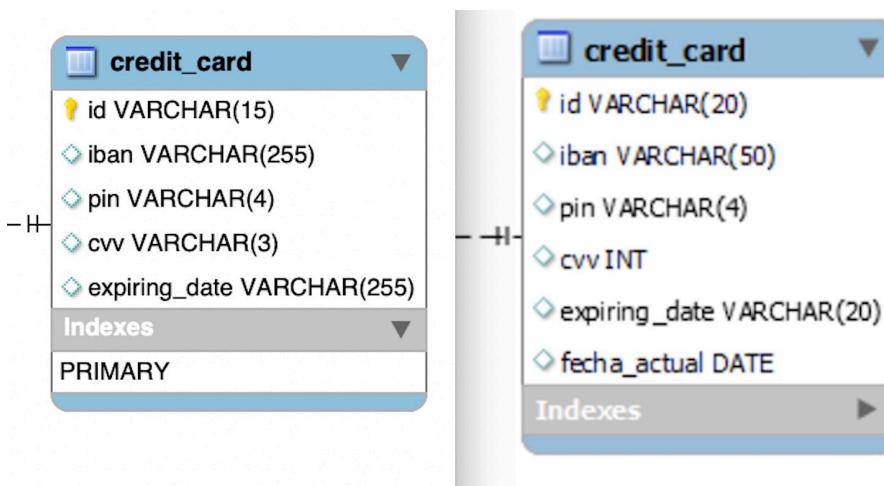


La taula transaction no sembla que l'hagin tocat

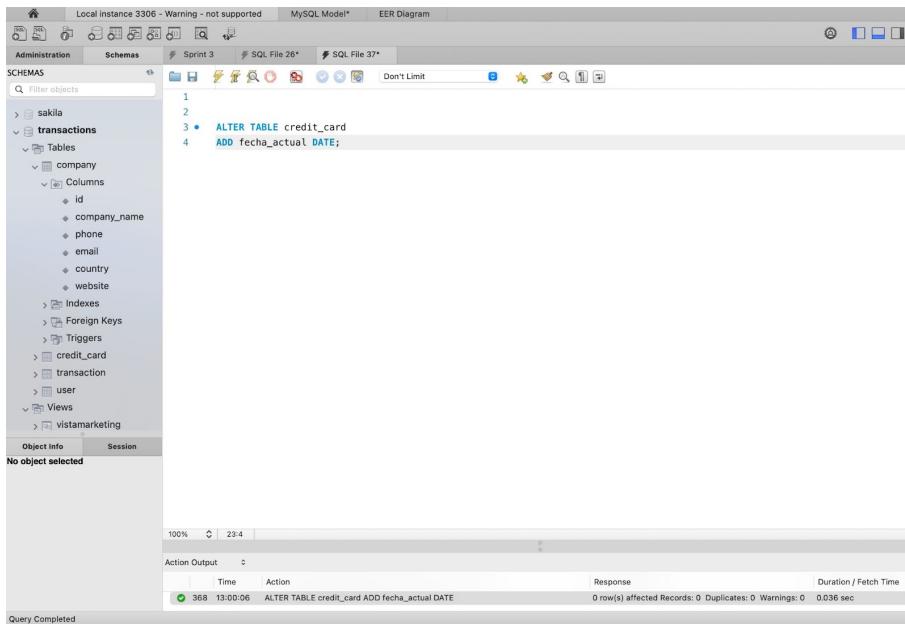


Credit card

En la taula credit card: L'id és de 20 caracters en comptes de 15. L'iban de 50 caracters en comptes de 255. El CVV és una variable INT en comptes de VARCHAR(3). Data de caducitat és de 20 caracters en comptes de 255. Ha aparegut una columna nova: fecha actual amb format DATE (sols columna)



## Afegim la nova columna fecha actual

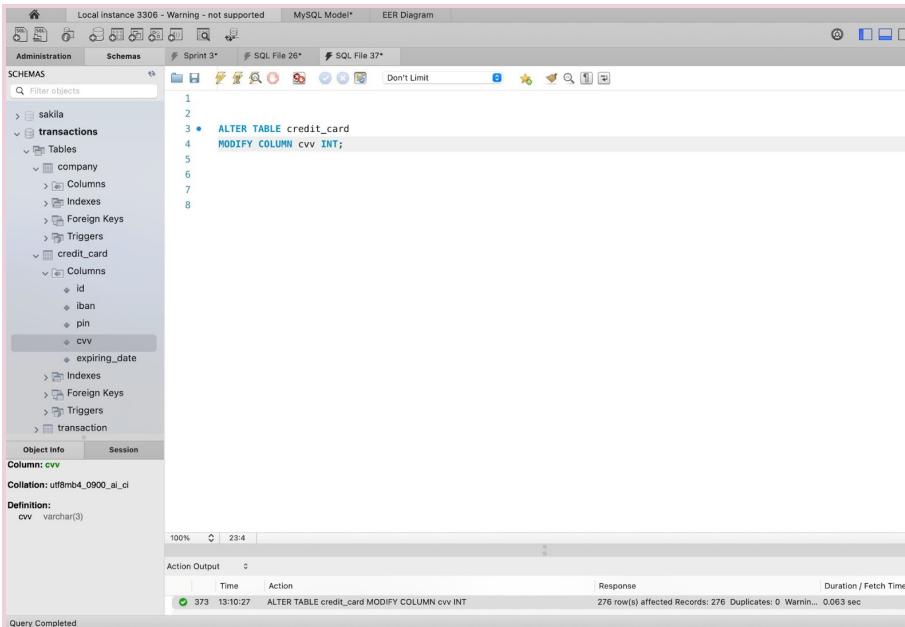


The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' tab, the 'sakila' database is selected. Within 'sakila', the 'transactions' schema is expanded, and its 'Tables' section is shown. The 'credit\_card' table is selected. In the main pane, the SQL editor contains the following code:

```
1
2
3 • ALTER TABLE credit_card
4   ADD fecha_actual DATE;
```

The status bar at the bottom indicates 'Query Completed'.

## Canviem el csv a INT

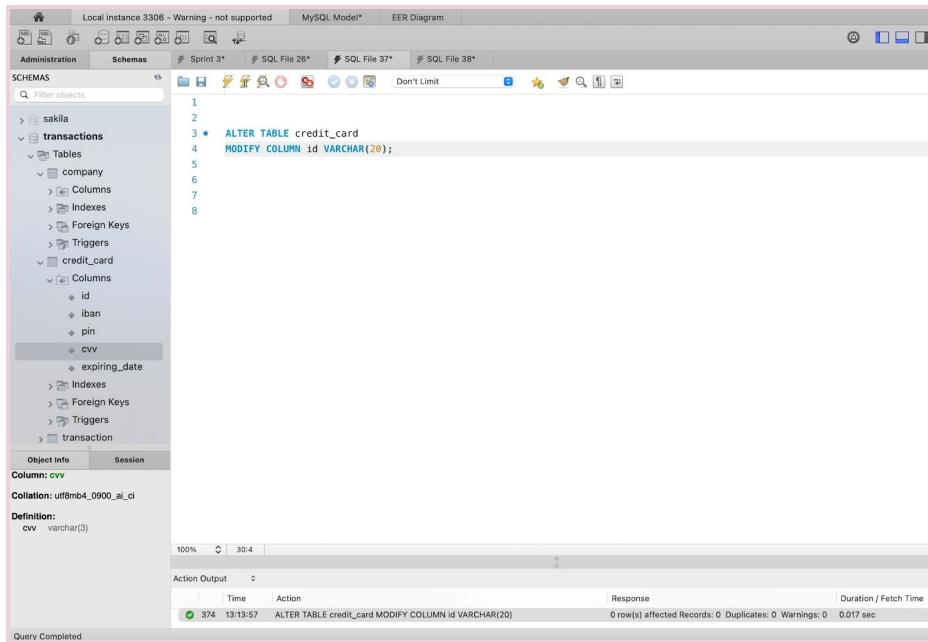


The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' tab, the 'sakila' database is selected. Within 'sakila', the 'transactions' schema is expanded, and its 'Tables' section is shown. The 'credit\_card' table is selected. In the main pane, the SQL editor contains the following code:

```
1
2
3 • ALTER TABLE credit_card
4   MODIFY COLUMN cvv INT;
```

The status bar at the bottom indicates 'Query Completed'.

## Canviem id a 20 caracters



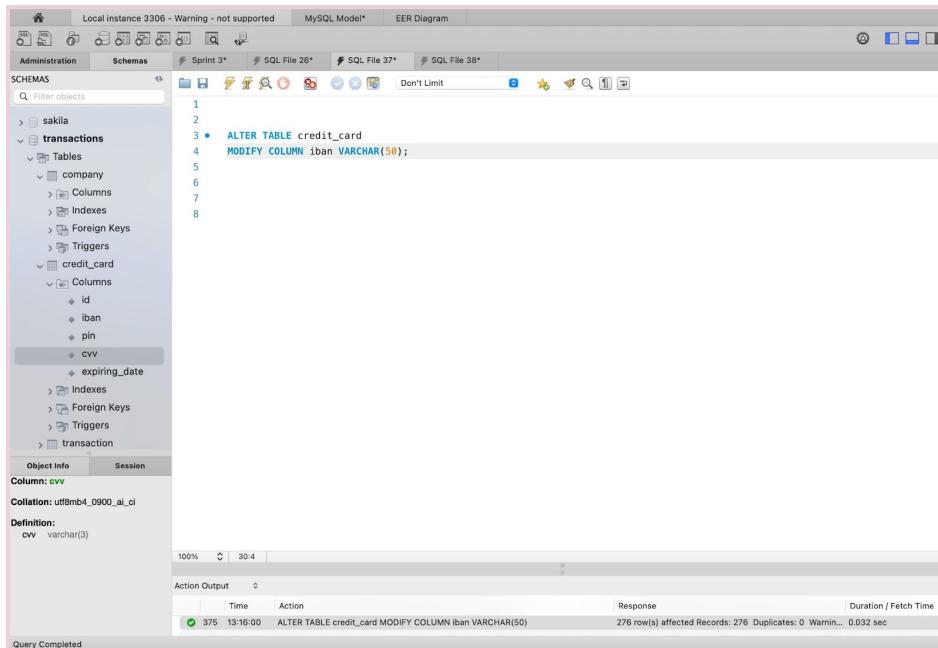
```
Local instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 26* SQL File 37* SQL File 38*
SCHEMAS Filter objects
1
2
3 • ALTER TABLE credit_card
4 MODIFY COLUMN id VARCHAR(20);
5
6
7
8

Object Info Session
Column: cvv
Collation: utf8mb4_0900_ai_ci
Definition:
cvv    varchar(3)

Action Output
Time Action Response Duration / Fetch Time
374 13:13:57 ALTER TABLE credit_card MODIFY COLUMN id VARCHAR(20) 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.017 sec

Query Completed
```

## Canviem iban a 50



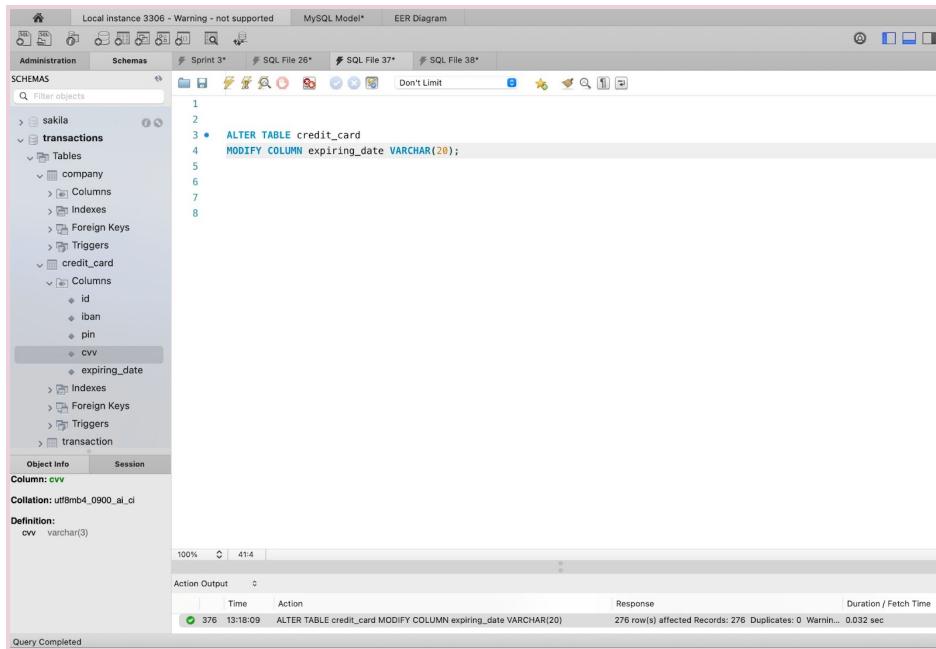
```
Local instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 26* SQL File 37* SQL File 38*
SCHEMAS Filter objects
1
2
3 • ALTER TABLE credit_card
4 MODIFY COLUMN iban VARCHAR(50);
5
6
7
8

Object Info Session
Column: cvv
Collation: utf8mb4_0900_ai_ci
Definition:
cvv    varchar(3)

Action Output
Time Action Response Duration / Fetch Time
375 13:16:00 ALTER TABLE credit_card MODIFY COLUMN iban VARCHAR(50) 276 row(s) affected Records: 276 Duplicates: 0 Warnings: 0 0.032 sec

Query Completed
```

## Canviem la data de caducitat a 20 caracters

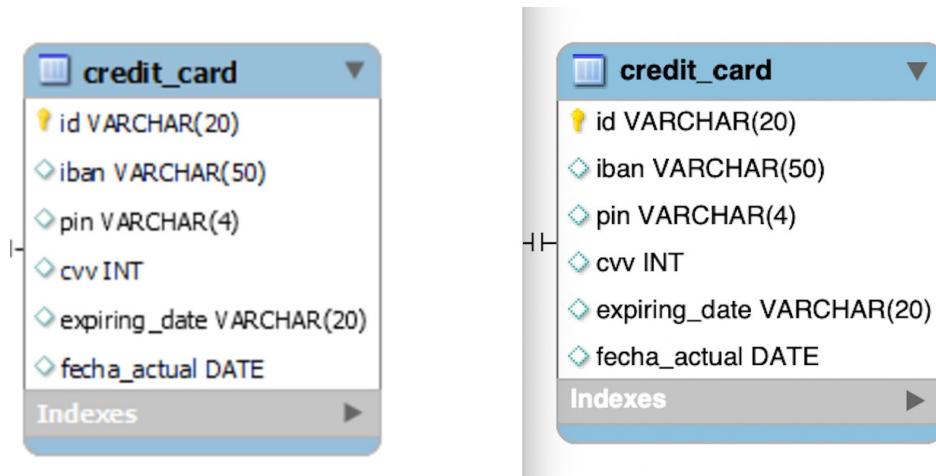


The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit\_card' table is selected. In the main pane, a SQL editor window displays the following query:

```
ALTER TABLE credit_card
MODIFY COLUMN expiring_date VARCHAR(20);
```

The status bar at the bottom indicates 'Query Completed'.

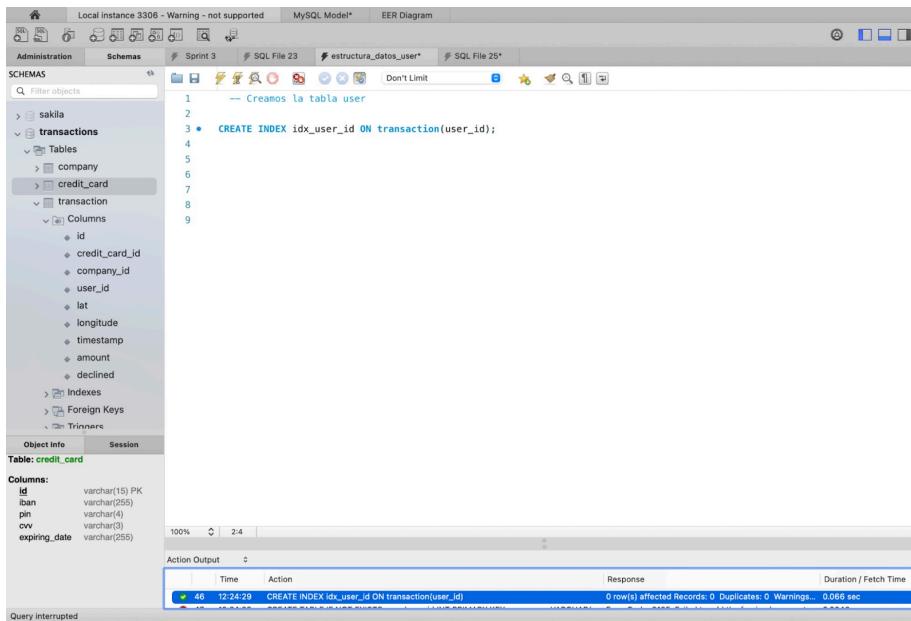
I comprovem amb el diagrama que ara si que surten iguals



## Taula user

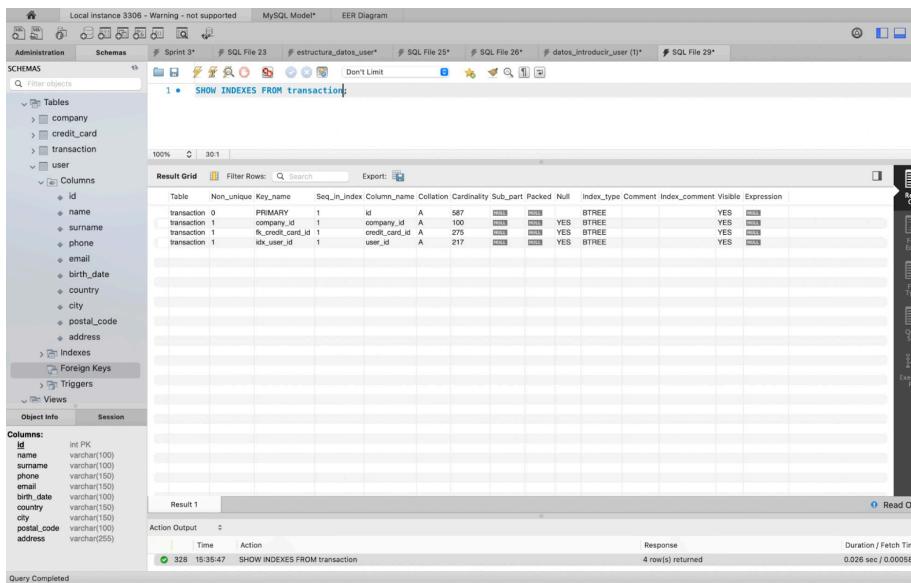
Ara anem a carregar la taula 'user' amb el codi que ens han passat.

L'índex a la taula transactions sí que ens l'ha creat



The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'transactions' schema is selected. Within it, the 'credit\_card' table is chosen. The 'Object Info' tab is active, displaying the table's columns: id (varchar(15) PK), iban, pin, cvv, and expiring\_date (all varchar). A query editor at the top contains the SQL command: `CREATE INDEX idx_user_id ON transaction(user_id);`. Below the editor, the 'Action Output' pane shows the execution results: a single row with a green checkmark, the time (12:24:20), the action (CREATE INDEX idx\_user\_id ON transaction(user\_id)), 0 rows affected, 0 duplicates, 0 warnings, and a duration of 0.008 sec.

Mirem quants índex hi ha



The screenshot shows the MySQL Workbench interface again. The 'Tables' section of the left sidebar has the 'user' table selected. The 'Indexes' section is expanded. A query editor at the top contains the command: `SHOW INDEXES FROM transaction;`. The results are displayed in a 'Result Grid' table. The table has 4 rows and 14 columns. The columns are: Table, Non\_Unique, Key\_name, Seq\_in\_Index, Column\_name, Collation, Cardinality, Sub\_part, Packed, Null, Index\_type, Comment, Index\_comment, Visible, Expression. The data is as follows:

| Table       | Non_Unique | Key_name          | Seq_in_Index | Column_name    | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment | Visible | Expression |
|-------------|------------|-------------------|--------------|----------------|-----------|-------------|----------|--------|------|------------|---------|---------------|---------|------------|
| transaction | 0          | PRIMARY           | 1            | id             | A         | 587         |          |        |      | BTREE      |         |               | YES     |            |
| transaction | 1          | company_id        | 1            | company_id     | A         | 100         |          |        |      | BTREE      |         |               | YES     |            |
| transaction | 1          | fk_credit_card_id | 1            | credit_card_id | A         | 275         |          |        |      | BTREE      |         |               | YES     |            |
| transaction | 1          | idx_user_id       | 1            | user_id        | A         | 217         |          |        |      | BTREE      |         |               | YES     |            |

Però a la creació de la taula ens dóna error

Error Code: 6125. Failed to add the foreign key constraint. Missing unique key for constraint 'user\_ibfk\_1' in the referenced table 'transaction'

The screenshot shows the MySQL Workbench interface with the SQL editor tab active. The code being run is:

```
CREATE TABLE IF NOT EXISTS user (
    id INT PRIMARY KEY,
    name VARCHAR(100),
    surname VARCHAR(100),
    phone VARCHAR(150),
    email VARCHAR(150),
    birth_date VARCHAR(100),
    country VARCHAR(150),
    city VARCHAR(150),
    postal_code VARCHAR(100),
    address VARCHAR(255),
    FOREIGN KEY(id) REFERENCES transaction(user_id)
);
```

The 'Object Info' tab is selected, showing details for the 'credit\_card' table. The 'Foreign Keys' section is visible. The 'Session' tab shows the query was interrupted. The 'Action Output' pane displays the error message:

| Action   | Time        | Response  | Duration / Fetch Time |
|--|-------------|---|-----------------------|
| CREATE TABLE IF NOT EXISTS user ( id INT PRIMARY KEY, name VARCHAR(100), surname VARCHAR(100), phone VARCHAR(150), email VARCHAR(150), birth_date VARCHAR(100), country VARCHAR(150), city VARCHAR(150), postal_code VARCHAR(100), address VARCHAR(255), FOREIGN KEY(id) REFERENCES transaction(user_id) ) | 49 12:32:08 | Error Code: 6125. Failed to add the foreign key constraint. Missing unique key for constraint 'user_ibfk_1' in the referenced table 'transaction' | 0.0031 sec            |

Així doncs deixem la referència per a després i la creem sense la referència

The screenshot shows the MySQL Workbench interface with the SQL editor tab active. The code being run is identical to the previous one but lacks the foreign key constraint:

```
CREATE TABLE IF NOT EXISTS user (
    id INT PRIMARY KEY,
    name VARCHAR(100),
    surname VARCHAR(100),
    phone VARCHAR(150),
    email VARCHAR(150),
    birth_date VARCHAR(100),
    country VARCHAR(150),
    city VARCHAR(150),
    postal_code VARCHAR(100),
    address VARCHAR(255)
);
```

The 'Object Info' tab is selected, showing details for the 'user' table. The 'Foreign Keys' section is highlighted. The 'Session' tab shows the query completed successfully. The 'Action Output' pane displays the success message:

| Action  | Time        | Response          | Duration / Fetch Time |
|---|-------------|-------------------|-----------------------|
| CREATE TABLE IF NOT EXISTS user ( id INT PRIMARY KEY, name VARCHAR(100), surname VARCHAR(100), phone VARCHAR(150), email VARCHAR(150), birth_date VARCHAR(100), country VARCHAR(150), city VARCHAR(150), postal_code VARCHAR(100), address VARCHAR(255) ) | 51 15:15:15 | 0 row(s) affected | 0.048 sec             |

Ara afegim les dades de la taula. Veiem que l'arxiu que ens han passat desactiva i activa les foreign keys abans i després de les dades, i tenim clar que això no hi hauriem de fer. Comentarem aquests comandaments i li donem a executar

```

Local Instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 23 estructura_datos_user* SQL File 25* SQL File 26* datos_introducir_user (1)*
schemas
transaction
user
Columns
Indexes
Foreign Keys
Triggers
Views
vistamarketing
Stored Procedures
Functions
Object Info Session
Columns:
id int PK
name varchar(100)
surname varchar(100)
phone varchar(100)
email varchar(150)
birth_date date
country varchar(100)
city varchar(100)
postal_code varchar(100)
address varchar(255)
1 # SET foreign_key_checks = 0;
2
3 -- Insertamos datos de user
4 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('1', 'Zeus', 'Gamble', '1-282-581-0551', 'integer.ani@protonmail.edu', 'Nov 17, 1986', 'United States', 'Lowell', '73544', '346-7818 Sagittis St.', '81');
5 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('2', 'Garrett', 'Mcconnell', '(718) 257-2412', 'integer.vita@nihil@protonmail.org', 'Aug 23, 1990', 'United States', 'Des Moines', '50464', '903 St Hill', '22');
6 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('3', 'Caran', 'Hanson', '(522) 598-1365', 'integer.fugiat@eum@protonmail.org', 'Apr 29, 1998', 'United States', 'Columbus', '56018', '739-2063 Natura St.', '33');
7 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('4', 'Helen', 'Perez', '(800) 123-4567', 'integer.veniam@tempor@protonmail.com', 'Feb 28, 1994', 'United States', 'Phoenix', '85014', 'Ap #920-123456789 Rd.', '41');
8 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('5', 'Hayla', 'Pierce', '1-564-541-2077', 'et.malesuada.tame@@hotmail.ca', 'Sep 26, 1999', 'United States', 'Sandy', '31164', '341-2821 Utroos Av', '52');
9 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('6', 'Joel', 'Tyson', '(718) 288-8020', 'gravidia.nunc.sed@yahoo.ca', 'Oct 15, 1989', 'United States', 'Nashville', '99638', '889-2799 Amret Street', '61');
10 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('7', 'Riley', 'Hernandez', '(609) 137-5478', 'egestas@luctus@outlook.com', 'Dec 1, 1993', 'United States', 'Jackson', '61720', 'Ap #201-123456789', '70');
11 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('8', 'Neasa', 'Franks', '(609) 137-5478', 'aliquam.nisi@outlook.com', 'Jan 24, 1987', 'United States', 'Richmond', '35987', '647-3080 Lacus St.', '79');
12 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('9', 'Mannie', 'Fitzgerald', '(562) 883-2184', 'aliquam.nisi@outlook.ca', 'Apr 19, 1984', 'United States', 'Eugene', '85526', 'P.O. Box 773, 2554 Omnia St.', '88');
13 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('10', 'Robert', 'McCarty', '(324) 746-8771', 'fermentum@lypsum@outlook.com', 'Feb 28, 1994', 'United States', 'Seattle', '98101', '301-123456789 Lipsum St.', '97');
14 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('11', 'Kelsey', 'Wheeler', '1-151-204-2855', 'tristique@donec@vitae@@hotmail.co.uk', 'Aug 6, 1999', 'United States', 'Lewiston', '92393', '748-8694 Portier Avenue', '106');
15 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('12', 'Alliegra', 'Stanley', '1-927-753-6488', 'pron.eget@protonmail.ca', 'May 19, 1990', 'United States', 'Keene', '14047', '4457 Ante. Av.', '115');
16 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('13', 'Arielle', 'Homes', '1-800-123-4567', 'dolor@semper@tempor@protonmail.com', 'Dec 1, 1993', 'United States', 'Orlando', '47987', 'P.O. Box 541, 1307 Ante St.', '124');
17 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('14', 'Noeann', 'Patrick', '1-723-488-5894', 'sem.magna@google.com', 'Sep 17, 1991', 'United States', 'Orlando', '47987', '598-5044 Sapient, Street', '133');
18 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('15', 'Eric', 'Roth', '1-218-549-8230', 'lorem@semper@tempor@protonmail.com', 'Sep 7, 1988', 'United States', 'Reading', '99697', 'P.O. Box 541, 5137 Non Road', '142');
19 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('16', 'Russell', 'Jimenez', '(657) 779-2438', 'onc@outlook.edu', 'Mar 1, 1990', 'United States', 'Portland', '97201', 'Ap #920-123456789 Viles, Ave', '151');
20 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('17', 'Nicholas', 'Travis', '1-330-223-9650', 'libero.dull@hotmail.com', 'Jul 15, 1981', 'United States', 'Jacksonville', '71727', 'Ap #459-539 Lectura Avenue', '160');
21 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('18', 'Kelsey', 'Bates', '(620) 724-4754', 'ullamcorper.nisi@nisi@com', 'Jul 1, 1991', 'United States', 'Gulfport', '50421', '850-123456789 Lacinia Avenue', '169');
22 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('19', 'Alistair', 'Homes', '1-265-323-0810', 'donec.tempor.est@protonmail.com', 'Nov 5, 1990', 'United States', 'Montpelier', '85914', 'Ap #740-123456789 Rd.', '178');
23 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('20', 'Keleiv', 'Bass', '1-837-432-5631', 'consequat@ligula@google.ca', 'Apr 2, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '187');
24 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('21', 'Dawn', 'Sharp', '(702) 823-5353', 'sagittis@google.co.uk', 'Sep 1, 1990', 'United States', 'Montgomery', '85021', 'Ap #740-123456789 Rd.', '196');
25 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('22', 'Wanda', 'Campbell', '1-246-231-5495', 'enim@et@icloud.com', 'Sep 28, 1982', 'United States', 'Colchester', '29637', 'Ap #260-412 Massa Road', '205');
26 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('23', 'Agilla', 'Strickland', '(312) 529-1643', 'non.cras@facilis@google.org', 'Dec 10, 1980', 'United States', 'Columbus', '29252', 'P.O. Box 595, 4446 Suspend...', '214');
27 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('24', 'Elmo', 'Cain', '1-663-583-6021', 'hendrerit@icloud.net', 'Sep 19, 1979', 'United States', 'Naperville', '63097', '677-9145 Ullamcorper, Ave', '223');
28 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('25', 'Deacon', 'Sharp', '(312) 529-1643', 'et@tempor@tempor@protonmail.com', 'Oct 21, 1981', 'United States', 'Oshkosh', '54901', 'Ap #740-123456789 Rd.', '232');
29 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('26', 'Loreen', 'Homes', '1-837-432-5631', 'consequat@ligula@google.ca', 'Sep 1, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '241');
30 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('27', 'Loreen', 'Homes', '1-837-432-5631', 'consequat@ligula@google.ca', 'Sep 1, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '250');
31 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('28', 'Elmo', 'Cain', '1-663-583-6021', 'non.cras@facilis@google.org', 'Dec 10, 1980', 'United States', 'Columbus', '29252', 'P.O. Box 595, 4446 Suspend...', '259');
32 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('29', 'Deacon', 'Sharp', '(312) 529-1643', 'hendrerit@icloud.net', 'Sep 19, 1979', 'United States', 'Naperville', '63097', '677-9145 Ullamcorper, Ave', '268');
33 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('30', 'Loreen', 'Homes', '1-837-432-5631', 'consequat@ligula@google.ca', 'Sep 1, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '277');
34 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('31', 'Loreen', 'Homes', '1-837-432-5631', 'consequat@ligula@google.ca', 'Sep 1, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '286');
35 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('32', 'Elmo', 'Cain', '1-663-583-6021', 'non.cras@facilis@google.org', 'Dec 10, 1980', 'United States', 'Columbus', '29252', 'P.O. Box 595, 4446 Suspend...', '295');
36 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('33', 'Deacon', 'Sharp', '(312) 529-1643', 'hendrerit@icloud.net', 'Sep 19, 1979', 'United States', 'Naperville', '63097', '677-9145 Ullamcorper, Ave', '304');
37 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('34', 'Loreen', 'Homes', '1-837-432-5631', 'consequat@ligula@google.ca', 'Sep 1, 1990', 'United States', 'Jefferson...', '97237', '407-7662 A, Roma', '313');
38 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ('35', 'Elmo', 'Cain', '1-663-583-6021', 'non.cras@facilis@google.org', 'Dec 10, 1980', 'United States', 'Columbus', '29252', 'P.O. Box 595, 4446 Suspend...', '322');
36 15:26:17 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (...) 1 rows affected 0.00001 sec
Query Completed

```

I mirem a veure quina forma té la taula que ens ha quedat

```

Local Instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 23 estructura_datos_user* SQL File 25* SQL File 26* datos_introducir_user (1)*
schemas
Tables
transaction
user
Columns
Indexes
Foreign Keys
Triggers
Views
vistamarketing
Stored Procedures
Functions
Object Info Session
Columns:
id int PK
name varchar(100)
surname varchar(100)
phone varchar(100)
email varchar(150)
birth_date date
country varchar(100)
city varchar(100)
postal_code varchar(100)
address varchar(255)
1 * SELECT *
2 FROM user;
Result Grid Filter Rows Search Export/Import
1 • SELECT *
2 FROM user;
1 id name surname phone email birth_date country city postal_code address
2 1 Zeus Gamble 1-282-581-0551 integer.ani@protonmail.edu Nov 17, 1986 United States Lowell 73544 346-7818 Sagittis St.
3 2 Garrett McConnell (718) 257-2412 integer.vita@nihil@protonmail.org Aug 23, 1990 United States Des Moines 50464 903 St Hill
4 3 Caran Hanson (522) 598-1365 integer.fugiat@eum@protonmail.org Apr 29, 1998 United States Columbus 56018 739-2063 Natura St.
5 4 Helen Perez (800) 123-4567 integer.veniam@tempor@protonmail.com Feb 28, 1994 United States Phoenix 85014 Ap #920-123456789 Rd.
6 5 Hayla Pierce 1-564-541-2077 et.malesuada.tame@@hotmail.ca Sep 26, 1999 United States Sandy 31164 341-2821 Utroos Av.
7 6 Joel Tyson (718) 288-8020 gravidia.nunc.sed@yahoo.ca Oct 15, 1989 United States Nashville 99638 889-2799 Amret Street
8 7 Riley Hernandez (609) 137-5478 egestas@luctus@outlook.com Dec 1, 1993 United States Jackson 61720 Ap #201-123456789
9 8 Neasa Franks (609) 137-5478 aliquam.nisi@outlook.com Jan 24, 1987 United States Richmond 35987 647-3080 Lacus St.
10 9 Mannie Fitzgerald (562) 883-2184 aliquam.nisi@outlook.ca Apr 19, 1984 United States Eugene 85526 P.O. Box 773, 2554 Omnia St.
11 10 Robert McCarty (324) 746-8771 fermentum@lypsum@outlook.com Feb 28, 1994 United States Seattle 98101 301-123456789 Lipsum St.
12 11 Kelsey Wheeler 1-151-204-2855 tristique@donec@vitae@@hotmail.co.uk Aug 6, 1999 United States Lewiston 92393 748-8694 Portier Avenue
13 12 Alliegra Stanley 1-927-753-6488 pron.eget@protonmail.ca May 19, 1990 United States Keene 14047 4457 Ante. Av.
14 13 Arialette Homes 1-800-123-4567 dolor@semper@tempor@protonmail.com Dec 1, 1993 United States Orlando 47987 P.O. Box 541, 1307 Ante St.
15 14 Noeann Patrick 1-723-488-5894 sem.magna@google.com Sep 17, 1991 United States Orlando 47987 598-5044 Sapient, Street
16 15 Eric Roth 1-218-549-8230 lorem@semper@tempor@protonmail.com Sep 7, 1988 United States Reading 99697 P.O. Box 541, 5137 Non Road
17 16 Russell Jimenez (657) 779-2438 onc@outlook.edu Mar 1, 1990 United States Portland 97201 Ap #920-123456789 Viles, Ave
18 17 Nicholas Travis 1-330-223-9650 libero.dull@hotmail.com Jul 15, 1981 United States Jacksonville 71727 Ap #459-539 Lectura Avenue
19 18 Kelsey Bates (620) 724-4754 ullamcorper.nisi@nisi@com Jul 1, 1991 United States Gulfport 50421 850-123456789 Lacinia Avenue
20 19 Alistair Homes 1-265-323-0810 donec.tempor.est@protonmail.com Nov 5, 1990 United States Montpelier 85914 Ap #740-123456789 Rd.
21 20 Keleiv Bass 1-837-432-5631 consequat@ligula@google.ca Apr 2, 1990 United States Jefferson... 97237 407-7662 A, Roma
22 21 Dawn Sharp (702) 823-5353 sagittis@google.co.uk Sep 1, 1990 United States Montgomery 85021 Ap #740-123456789 Rd.
23 22 Agilla Strickland 1-246-231-5495 enim@et@icloud.com Sep 28, 1982 United States Colchester 29637 Ap #260-412 Massa Road
24 23 Loreen Homes (312) 529-1643 non.cras@facilis@google.org Dec 10, 1980 United States Columbus 29252 363-123456789
25 24 Elmo Cain (312) 529-1643 hendrerit@icloud.net Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
26 25 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
27 26 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Sep 1, 1990 United States Jefferson... 97237 407-7662 A, Roma
28 27 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
29 28 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
30 29 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
31 30 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
32 31 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
33 32 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
34 33 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
35 34 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
36 35 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
37 36 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
38 37 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
39 38 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
40 39 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
41 40 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
42 41 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
43 42 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
44 43 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
45 44 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
46 45 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
47 46 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
48 47 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
49 48 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
50 49 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
51 50 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
52 51 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
53 52 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
54 53 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
55 54 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
56 55 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
57 56 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
58 57 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
59 58 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
60 59 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
61 60 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
62 61 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
63 62 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
64 63 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
65 64 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
66 65 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
67 66 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
68 67 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
69 68 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
70 69 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
71 70 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
72 71 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
73 72 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
74 73 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
75 74 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
76 75 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
77 76 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
78 77 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
79 78 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
80 79 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
81 80 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
82 81 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
83 82 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
84 83 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
85 84 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
86 85 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
87 86 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
88 87 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
89 88 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
90 89 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
91 90 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
92 91 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
93 92 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
94 93 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
95 94 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
96 95 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-7662 A, Roma
97 96 Elmo Cain (312) 529-1643 hendrerit@icloud.net Dec 10, 1980 United States Columbus 29637 363-123456789
98 97 Deacon Sharp (312) 529-1643 et@tempor@tempor@protonmail.com Sep 19, 1979 United States Naperville 63097 677-9145 Ullamcorper, Ave
99 98 Loreen Homes 1-837-432-5631 consequat@ligula@google.ca Oct 21, 1981 United States Oshkosh 54901 Ap #740-123456789 Rd.
100 99 Loretta Morrison (312) 529-1643 congue@ut@tempor@protonmail.com Nov 5, 1990 United States Jefferson... 97237 407-
```

## Ara intentem enllaçar les taules i ens continua donant error

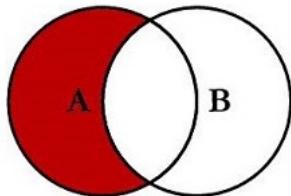
Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails (`transactions`.`#sql-3ed\_9`, CONSTRAINT `fk\_user\_id` FOREIGN KEY (`user\_id`) REFERENCES `user` (`id`) ON DELETE CASCADE ON UPDATE CASCADE) 0.085 sec

The screenshot shows the MySQL Workbench interface. In the top navigation bar, it says "Local Instance 3306 - Warning - not supported". Below the bar, there are tabs for "MySQL Model\*", "EER Diagram", and several SQL files. The left sidebar shows the "SCHEMAS" tree with "sakila" and "transactions" selected. Under "transactions", "Tables" are listed: "company", "credit\_card", and "transaction". "transaction" is expanded, showing columns: "id", "credit\_card\_id", "company\_id", "user\_id", "lat", "longitude", "timestamp", "amount", and "declined". The "user\_id" column is currently selected. Below the tree, there are sections for "Indexes", "Foreign Keys", and "Triggers". The "Object Info" tab is selected, showing the definition for "user\_id": "user\_id int". At the bottom, the status bar says "Query interrupted".

```
1
2 • alter table transaction add constraint fk_user_id foreign key (user_id)
3   references user (id) on delete cascade on update cascade;
```

| Action | Output   | Time  | Action   | Response  | Duration / Fetch Time |
|--------|----------|---|--|-----------|-----------------------|
| 355    | 11:09:27 | alter table transaction add constraint fk_user_id foreign key (user_id) references u... | Error Code: 1452. Cannot add or update a child row: a f... | 0.085 sec |                       |

Mirarem quants registres de transaction no estan en user



```
SELECT <select_list>
FROM TableA A
LEFT JOIN TableB B
ON A.Key = B.Key
WHERE B.Key IS NULL.
```

i sembla que hi ha un

The screenshot shows the MySQL Workbench interface. The left pane displays the database schema, specifically the 'transactions' table under the 'sakila' database. The 'Columns' section is expanded, showing fields like id, credit\_card\_id, company\_id, user\_id, lat, longitude, timestamp, amount, and declined. The main pane shows the execution of the following SQL query:

```
1 • SELECT transaction.user_id AS Taula_transaction, user.id AS taula_user
2   FROM transaction
3   LEFT JOIN user
4     ON transaction.user_id = user.id
5
6 WHERE user.id IS NULL;
7
8
```

The result grid shows one row with the value 9999 in the Taula\_transaction column. The bottom pane shows the query history with the following entry:

| Action Output | Time     | Action  | Response          | Duration / Fetch Time  |
|---------------|----------|---|-------------------|------------------------|
| 354           | 10:36:51 | SELECT transaction.user_id AS Taula_transaction, user.id AS taula_user FROM tran... | 1 row(s) returned | 0.0030 sec / 0.0000... |

L'afegirem doncs en la taula users, on han d'estar tots els ids de usuari.

The screenshot shows the MySQL Workbench interface. In the top navigation bar, it says "Local Instance 3306 - Warning - not supported" and has tabs for "Administration", "Schemas", and "EER Diagram". Below the navigation is a toolbar with various icons. The main area has a tree view of "SCHEMAS" (sakila, transactions) and "Tables" (company, credit\_card, transaction, user). Under the user table, columns are listed: id, name, surname, phone, email, birth\_date, country, city, postal\_code, address. The "Indexes" section is also visible. At the bottom, there are "Object Info" and "Session" tabs, and a message "No object selected".

The SQL Editor pane contains the following code:

```
1
2 • INSERT into user (id)
3 VALUES ('9999');
```

The Results pane shows the execution log:

| Action Output | Time                                  | Action            | Response  | Duration / Fetch Time |
|---------------|---------------------------------------|-------------------|-----------|-----------------------|
| 357 11:42:18  | INSERT into user (id) VALUES ('9999') | 1 row(s) affected | 0.014 sec |                       |

At the bottom, it says "Query Completed".

I comprovem que ara no hi ha res que no estigui a la taula user

The screenshot shows the MySQL Workbench interface. The schema tree is identical to the previous screenshot. The SQL Editor pane contains the following code:

```
1
2 • SELECT transaction.user_id AS Taula_transaction, user.id AS taula_user
3   FROM transaction
4     LEFT JOIN user
5       ON transaction.user_id = user.id
6      WHERE user.id IS NULL;|
```

The Results pane displays the query results in a grid:

| Taula_transaction | taula_user |
|-------------------|------------|
|                   |            |

On the right side of the results pane, there is a sidebar with icons for "Result Grid", "Form Editor", "Field Types", "Query Stats", and "Execution Plan". The status bar at the bottom indicates "Read Only".

The execution log in the Results pane is as follows:

| Action Output | Time   | Action            | Response               | Duration / Fetch Time |
|---------------|--|-------------------|------------------------|-----------------------|
| 363 12:31:32  | SELECT transaction.user_id AS Taula_transaction, user.id AS taula_user FROM trans... | 0 row(s) returned | 0.060 sec / 0.00025... |                       |

At the bottom, it says "Query Completed".

I tornem a intentar enllaçar les taules, ara si que ens deixa

```

Local Instance 3306 - Warning - not supported MySQL Model* EER Diagram
Administration Schemas Sprint 3* SQL File 28* SQL File 32* SQL File 35*
1
2 • alter table transaction add constraint fk_user_id foreign key (user_id)
3 references user (id) on delete cascade on update cascade;
4

```

The screenshot shows the MySQL Workbench interface. In the top menu, 'MySQL Model\*' is selected. The left sidebar shows the 'schemas' tree with 'sakila' expanded, and 'transactions' selected. Under 'Tables', 'user' is selected. The 'Columns' section lists fields: id, name, surname, phone, email, birth\_date, country, city, postal\_code, address. The 'Indexes' section is collapsed. The bottom pane shows the results of a query to add a foreign key constraint:

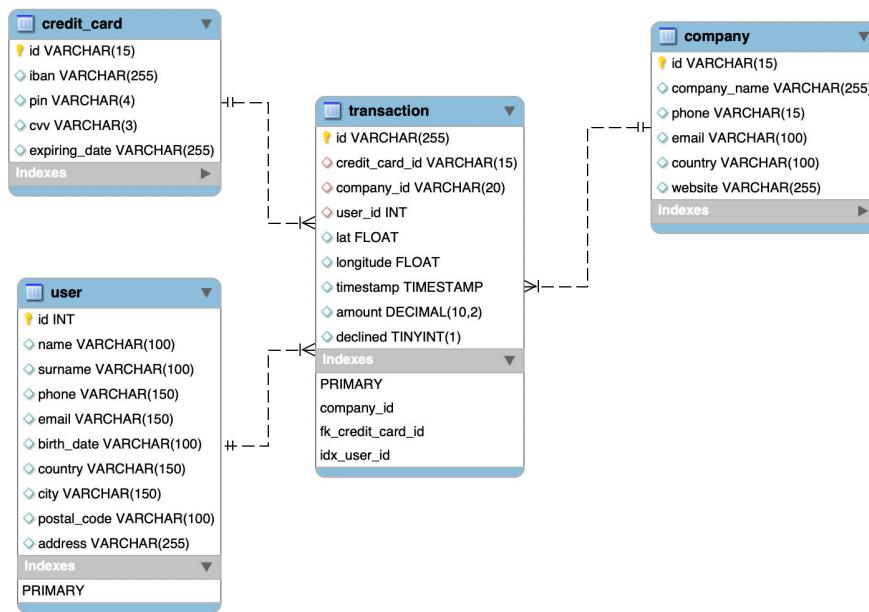
```

Action Output
Time Action Response Duration / Fetch Time
359 11:48:35 alter table transaction add constraint fk_user_id foreign key (user_id) references u... 587 row(s) affected Records: 587 Duplicates: 0 Warnings: 0 0.076 sec

```

Query Completed

Fem una ullada al diagrama per a comprovar que s'ha afegit la relació



## - Exercici 2: informe tècnic

L'empresa també et sol·licita crear una vista anomenada "InformeTecnico" que contingui la següent informació:

- ID de la transacció
- Nom de l'usuari/ària
- Cognom de l'usuari/ària
- IBAN de la targeta de crèdit usada.
- Nom de la companyia de la transacció realitzada.
- Assegura't d'incloure informació rellevant de totes dues taules i utilitza àlies per a canviar de nom columnes segons sigui necessari.

Mostra els resultats de la vista, ordena els resultats de manera descendente en funció de la variable ID de transaction.

```
SELECT *
transaction.id
JOIN transaction.user_id per a nom i cognom
JOIN transaction.credit_card_id per a IBAN
JOIN company per a company.company_name
```

```
ORDER BY transaction.id DESC
```

Comencem la consulta de transaction i de user

```
Local instance 3306 - Warning - not supported
Administration Schemas Sprint 3* SQL File 38* SQL File 39*
SCHEMAS
Q Filter objects
sakila
transactions
Tables
company
Columns
id
iban
pin
cvv
expiring_date
Indexes
Foreign Keys
Triggers
credit_card
Columns
id
iban
pin
cvv
expiring_date
Indexes
Foreign Keys
Triggers
transaction
Object Info Session
View: Vistamarketing
Columns:
company_name varchar(255)
phone varchar(15)
country varchar(100)
avg(amount) decimal(14,6)
Result 4
Action Output
Time Action Response Duration / Fetch Time
381 13:43:06 SELECT transaction.id, user.name, user.surname FROM transaction JOIN user ON ... 587 row(s) returned 0.0021 sec / 0.0013 s...
Query Completed
```

## Li afegim les columnes de credit card

```

SELECT transaction.id, user.name, user.surname, credit_card.iban
FROM transaction
JOIN user
    ON transaction.user_id = user.id
JOIN credit_card
    ON transaction.credit_card_id = credit_card.id
ORDER BY transaction.id DESC;

```

The screenshot shows the SQL developer interface with the query executed. The results grid displays the following data:

|    | id                                  | name      | surname  | iban                          |
|----|-------------------------------------|-----------|----------|-------------------------------|
| 1  | FE96CE47-0096-941C-4E18-E3CA3D...   | Kenyon    | Hartman  | DO26854763748537475216568689  |
| 2  | FE809ED4-2DB8-55AC-9C19-92951E...   | Molly     | Gilliam  | SE281312348716382631121       |
| 3  | FDF9CC0C-BE1E-8D8A-4809-7E3A9F...   | Wendy     | Wong     | CF984830375479175986242955643 |
| 4  | FD80951B-AE8D-77D2-C450-8803E...    | Hilda     | Levy     | LT05323707744561478           |
| 5  | FDE2E957-414B-BECC-E3AD-59AA7A...   | Hedwig    | Gilbert  | GE844845198210541526          |
| 6  | FBD7E0D0-B4B8-F5B9-CA05-EA8B76D0... | Alexander | Alford   | MD123411952514501270466       |
| 7  | F8D97059-75D8-5F5A-9400-9862E1...   | Sophia    | Georgina | YV146808798417465729577       |
| 8  | FAAD0FFC-1A17-E141-4D3-395A5B...    | Hedwig    | Gilbert  | GE01572384333134463           |
| 9  | FA033936-75D8-5F5A-9400-9862E1...   | Sarah     | Beck     | VG146808798417465729577       |
| 10 | F59FC4AA-0039-F0F4-7376-56332B91... | Jasper    | Landy    | MD123411952514501270466       |
| 11 | F59FC4AA-0039-F0F4-7376-56332B91... | Lynn      | Riddle   | CR72427744335841535           |
| 12 | F4BCAE41-3B8E-EA8D-C42-466F7C...    | Chester   | Haynes   | CY9426537344534254134486576   |
| 13 | F28E106B-5418-4667-9514-23A232E...  | Heather   | Burks    | SM00275104971547705082056     |
| 14 | F23E388E-5A74-6383-8111-09FC09A3... | Nero      | Mills    | HU95215627749276573566556322  |

Action Output: Time: 13:45:02 Action: Response: Duration / Fetch Time: 0.0084 sec / 0.00013...

## I ara les de company

```

SELECT transaction.id, user.name, user.surname, credit_card.iban, company.company_name
FROM transaction
JOIN user
    ON transaction.user_id = user.id
JOIN credit_card
    ON transaction.credit_card_id = credit_card.id
JOIN company
    ON transaction.company_id = company.id
ORDER BY transaction.id DESC;

```

The screenshot shows the SQL developer interface with the query executed. The results grid displays the following data:

|    | id                                  | name      | surname  | iban                          | company_name               |
|----|-------------------------------------|-----------|----------|-------------------------------|----------------------------|
| 1  | FE96CE47-BD59-381C-18-E3CA3D...     | Kenyon    | Hartman  | DO26854763748537475216568689  | Magna A Nqua Industries    |
| 2  | FE809ED4-2DB8-55AC-9C19-92951E...   | Molly     | Gilliam  | SE281312348716382631121       | Nunc Interdum Incorporated |
| 3  | FDF9CC0C-BE1E-8D8A-4809-7E3A9F...   | Wendy     | Wong     | CF984830375479175986242955643 | Nunc Interdum Incorporated |
| 4  | FD80951B-AE8D-77D2-C450-8803E...    | Hilda     | Levy     | LT05323707744561478           | Necque Telus Impedit Corp. |
| 5  | FDE2E957-414B-BECC-E3AD-59AA7A...   | Hedwig    | Gilbert  | GE844845198210541526          | Nunc Interdum Incorporated |
| 6  | FBD7E0D0-B4B8-F5B9-CA05-EA8B76D0... | Alexander | Alford   | MD123411952514501270466       | Mauris Id Inc.             |
| 7  | F8D97059-75D8-5F5A-9400-9862E1...   | Sophia    | Georgina | YV146808798417465729577       | Acrua LLP                  |
| 8  | FAAD0FFC-1A17-E141-4D3-395A5B...    | Hedwig    | Gilbert  | GE01572384333134463           | Non Justo Corp.            |
| 9  | FA033936-75D8-5F5A-9400-9862E1...   | Sarah     | Beck     | VG146808798417465729577       | Ut Semper Foundation       |
| 10 | F59FC4AA-0039-F0F4-7376-56332B91... | Jasper    | Landy    | MD123411952514501270466       | Ut Semper Foundation       |
| 11 | F59FC4AA-0039-F0F4-7376-56332B91... | Lynn      | Riddle   | CR72427744335841535           | Ut Semper Foundation       |
| 12 | F4BCAE41-3B8E-EA8D-C42-466F7C...    | Chester   | Haynes   | CY9426537344534254134486576   | Maleseuda PC               |
| 13 | F28E106B-5418-4667-9514-23A232E...  | Heather   | Burks    | SM00275104971547705082056     | Maleseuda PC               |
| 14 | F23E388E-5A74-6383-8111-09FC09A3... | Nero      | Mills    | HU95215627749276573566556322  | Pede Uttrices Ltd          |

Action Output: Time: 13:46:37 Action: Response: Duration / Fetch Time: 0.012 sec / 0.00033...

Ara creem la vista i refresquem els schemas per a veure-la

```

CREATE VIEW InformeTecnico AS
SELECT transaction.id AS id_transaccio, user.name AS nom_usuari, user.surname AS cognom_usuari, credit_card.iban AS iban, company.compa
FROM transaction
JOIN user
ON transaction.user_id = user.id
JOIN credit_card
ON transaction.credit_card_id = credit_card.id
JOIN company
ON transaction.company_id = company.id
ORDER BY transaction.id DESC
  
```

Action Output

| Time     | Action  | Response          | Duration / Fetch Time |
|----------|---|-------------------|-----------------------|
| 12:50:22 | CREATE VIEW informeTecnico AS SELECT transaction.id AS id_transaccio, user.name AS nom_usuari, u... | 0 row(s) affected | 0.0056 sec            |

Comprovem cridant la vista

```

SELECT *
FROM informetecnico;
  
```

Result Grid

| id_transaccio                        | nom_usuari | cognom_usuari                 | iban                              | nom_empresa                       |
|--------------------------------------|------------|-------------------------------|-----------------------------------|-----------------------------------|
| FEB96CE47-BD59-381C-E1B-E3CA3D44E8FF | Kenyon     | Hartman                       | D026854763748537475215568689      | Magnia A Neque Industries         |
| FE809FD4-D2B8-55AC-C915-929616E46A8F | Molly      | Gilliam                       | SE2810125487163828531121          | Nunc Intendum Incorporated        |
| F0DCBCCD-BE1E-AD41-4629-2EAF3FA5A465 | Walter     | KW949333275478175778624295064 | Nunc Intendum Incorporated        |                                   |
| F0B98030-9A80-4840-8840-000000000000 | Lorey      | LTV                           | PCP000000000000000000000000000000 | Meque Telus Imperiet Corp.        |
| F02E8957-144B-BEEC-E9A0-9AA7A8A6290  | Hedwig     | Gilbert                       | GE9484651582810541526             | Neque Telus Imperiet Corp.        |
| F0E2A69A-2710-2BDC-9E49-8D9D2A73381  | Hakemeen   | Alford                        | MD123411962514540120456           | Nunc Intendum Incorporated        |
| FB7D7E70-9A80-4840-8840-000000000000 | Leopold    | Muller                        | MD123411962514540120456           | Meque Telus Imperiet Corp.        |
| FACT76A0-544B-69AA-F8B0-4262C2P1261C | Stade      | Poole                         | MT051WCW588682057571634583813     | Amicuris Inc.                     |
| FAAD39FC-1A17-E141-4D35-35A5A7A7C838 | Gilbert    | Gilbert                       | GE90157928843335134463            | Arcu L.P.                         |
| FA058336-7D8B-857A-4000-8962E41B6204 | Hedwig     | Gilbert                       | GT0249769353533948247649575       | Nunc Justo Foundation             |
| FB57A7D7-9A80-4840-8840-000000000000 | Beck       | Von                           | UO000000000000000000000000000000  | Ut Semper Foundation              |
| F843DC09-C5B8-2444-1847-5962989FB8B8 | Jasper     | Landry                        | VG146908794174645729577           |                                   |
| F5ACD74B-4275-5A41-3414-6EF417638988 | Nora       | Reeves                        | MD12341196251454012070486         | Nunc Intendum Incorporated        |
| F686CA00-0030-9F64-9736-85652B91224  | Lynn       | Ridge                         | CD724277244335041335              | Ute Semper Foundation             |
| F482E201-4C94-466F-807C-9A8047A797C  | Levya      | Moore                         | ED022754744335041335              | Arcu L.P.                         |
| F48CAE41-3B8E-EA9D-9C94-466F7CEB9F9A | Chester    | Haynes                        | CY94933574050154811886256576      | Meleagrida PC                     |
| F283E645-2E6D-E914-0005-33D8ACE58DE4 | Heather    | Burke                         | SM60227547447154770260828236      | Meleagrida PC                     |
| F283E645-2E6D-E914-0005-33D8ACE58DE4 | Heather    | Gilbert                       | PCP000000000000000000000000000000 | Meleagrida PC                     |
| F233E366-A7A7-43B3-8111-09FC98A36011 | Hedwig     | Mills                         | HU95116027749275573565556322      | PCP000000000000000000000000000000 |
| F22BB861-E3CD-BC41-D0EA-A469A7F175CD | Aiko       | Chaney                        | MD5753087438783068347555          | Non Institute                     |
| F1A59B2-8C85-50A9-F1CE-FB1D69868C89  | Craig      | Shepherd                      | RS323458312213578817899999        | Lorem Eu Incorporated             |

Action Output

| Time     | Action                       | Response            | Duration / Fetch Time    |
|----------|------------------------------|---------------------|--------------------------|
| 12:50:34 | SELECT * FROM informetecnico | 587 row(s) returned | 0.011 sec / 0.00014 s... |