Kurs Datenbankgrundlagen und Modellierung

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SoSe 2023

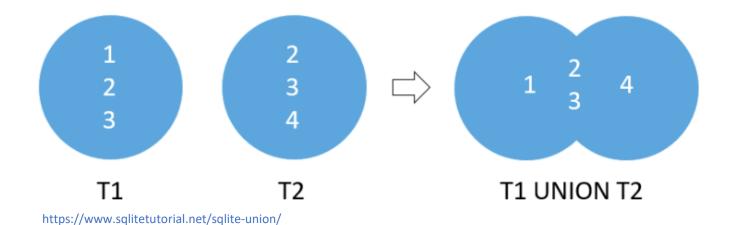
24.05.2023

Tutorial 3: Maneths Pub and NOT Conditions

Tutor: Marcel Westenberg

Questions?

- (NOT) IN
- (NOT) EXISTS
- UNION
- EXCEPT



Setting up Maneths Pub:

- 1. Download the manethspub.sqlite3 file
- 2. Put it into the same directory as your other databases
- 3. sqlite3 manethspub.sqlite3
- 4. .tables

Pub Queries:

- Find ingredients, that have no alcohol
- Find the ingredient with the most alcohol
- At which supplier can we buy our ingredients?
- How much is our current storage of beverages worth?

- How many ingredients have alcohol and how many have none?
- List the cocktails and their alcohol percentage

Using our knowledge:

- how many movies have no director / producer / writer?
- how many movies have no budget information?
- how many movies have no grossworldwide?
- how many movies have no grossopeningweekend?
- how many movies have no rating / runtime / location?
- Bonus:
- how many movies have no actor?

how many movies have no director / producer / writer?

 select count(*) as cnt from movies where movieid NOT IN (select movieid from directors2movies);

cnt = 0

 select count(*) as cnt from movies where movieid NOT IN (select movieid from producers2movies);

cnt = 719

 select count(*) as cnt from movies where movieid NOT IN (select movieid from writers2movies);

how many movies have no budget information?

 select count(*) cnt from movies where movieid NOT IN (select movieid from movies2budget);

how many movies have no grossworldwide?

 select count(*) cnt from movies where movieid NOT IN (select movieid from movies2grossworldwide);

how many movies have no grossopeningweekend?

 select count(*) cnt from movies where movieid NOT IN (select movieid from movies2grossopeningweekend);

how many movies have no rating / runtime / location?

 select count(*) cnt from movies where movieid NOT IN (select movieid from ratings);

cnt = 0

 select count(*) cnt from movies where movieid NOT IN (select movieid from runtimes);

cnt = 22

 select count(*) cnt from movies where movieid NOT IN (select movieid from locations);

Bonus: how many movies have no actor?

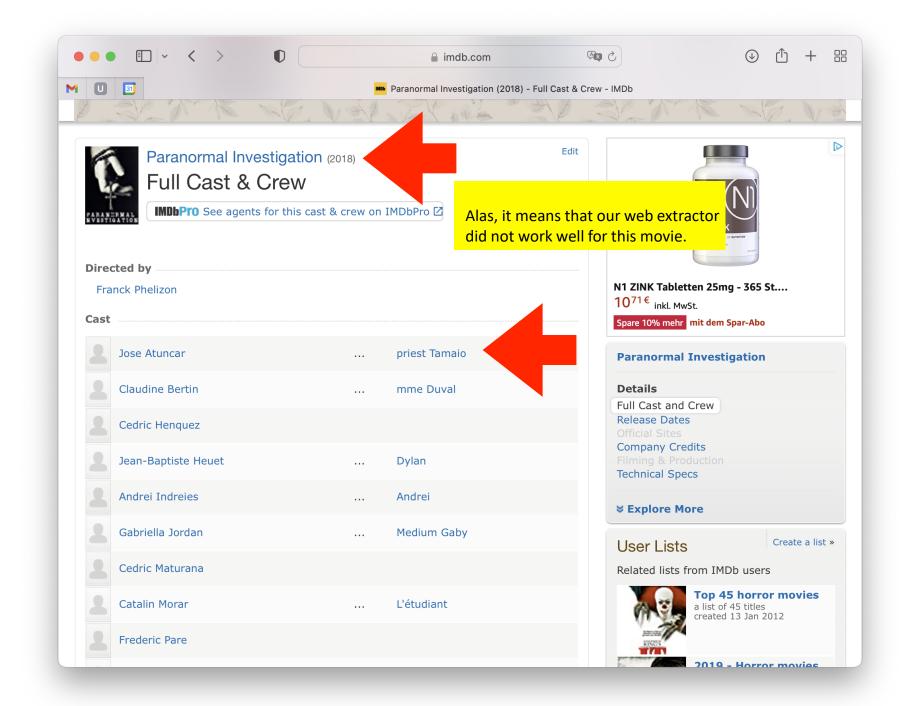
 select count(*) as cnt from movies where movieid NOT IN (select movieid from actors2movies);

cnt = 6041 (that seems wierd...)

Let's dive deeper:

 select title, year from movies where movieid not in (select movieid from actors2movies);

Abgerissen	2019
Ich habe meinen Körper verloren	2019
Isi & Ossi	2020
Betonrausch	2020
The Owners	2020
Alle Sommersprossen der Welt	2019
G-Loc	2020
The Hard Way	2019
Hooking Up	2020
Shabi Ke Mah Kamel Shod	2019
Metri Shesh Va Nim	2019
Villain	2020
The Banana Splits Movie	2019
Love Struck Sick	2019
End of the Century	2019
Children of the Sea	2019
Falling Inn Love	2019
Holidate	2020
Paranormal Investigation	2018
Halahal	2020
Malang	2020
VFW	2019
Coffee & Kareem	2020
Kaithi	2019
Enemy Lines	2020
+	+
sqlite select title, year from movies where movieid not in (select movieid from a	actors2mo
vies);	



Any ideas?

General Form of an SQL Query:

```
FROM list of tables
WHERE condition over attributes
GROUP BY list of attributes
HAVING condition over aggregates
ORDER BY list of attributes
LIMIT number
```

aggregate functions:

```
COUNT VARIANCE
SUM STDDEV
AVG BIT_OR
MAX BIT_AND
MIN
```