SQL Murder Mystery Investigation

Date of Report: July 18, 2025

Subject: Investigation into the murder that occurred on January 15, 2018, in SQL City.

Introduction

A crime has been committed in the SQL city, on the 15th of January 2018. Utilizing a relational database containing crime scene reports, personal information, driver's licenses, gym memberships, and social media activity, we will try to identify the perpetrator.

Initial Crime Scene

We shall commence with studying the crime scene with the aid of the `crime_scene_report` table. What we already know is that the crime took place in SQL city, the type of crime perpetrated is murder and this happened on the 15th of January 2018. We shall query our database as follows:

QUERY

```
SELECT * FROM crime_scene_report_data WHERE date = 20180115 AND type = 'murder' AND city = 'SQL City';
```

The result of the query is:

Date	type	Description	city
1/15/2018	murder	Security footage shows that there were 2 witnesses. The first witness lives at the last house on "Northwestern Dr". The second witness, named Annabel, lives somewhere on "Franklin Ave".	SQL City

The crime scene report revealed that there were two witnesses to the murder:

- The first witness resides at the last house on "Northwestern Dr".
- The second witness, named Annabel, lives somewhere on "Franklin Ave".

Witness Identification and Testimony

The next step is to identify our witnesses. To gather crucial information and to save time we shall query the `person and interview table` to extract both the names of the witnesses and their interview transcripts.

- **First Witness:**

Identification: By querying the `person` table for individuals on "Northwestern Dr" and ordering by `address_number` in descending order, the last resident would be our first witness.

QUERY:

```
SELECT T1.name, T2.transcript FROM person AS T1 JOIN interview AS T2 ON T1.id = T2.person_id WHERE T1.address_street_name = 'Northwestern Dr' ORDER BY T1.address_number DESC LIMIT 1;
```

The result:

Name	Transcript
Morty Schapiro	I heard a gunshot and then saw a man run out. He had a "Get Fit Now Gym" bag. The membership number on the bag started with "48Z". Only gold members have those bags. The man got into a car with a plate that included "H42W".

- **Second Witness:**

Identification: A query on the `person` table for individuals named "Annabel" on "Franklin Ave".

QUERY:

```
SELECT T1.name, T2.transcript FROM person AS T1 JOIN interview AS T2 ON T1.id = T2.person_id WHERE T1.address_street_name = 'Franklin Ave' AND T1.name LIKE 'Annabel%';
```

The result:

Name	Transcript
Annabel Miller	I saw the murder happen, and I recognized the killer from my gym when I was working out last week on January the 9th.

Identification of the Murderer

Next to identify the murderer, by combining the witness testimonies, key leads are established:

1. The killer was a "gold member" of "Get Fit Now Gym".
2. The killer's gym membership number started with "48Z".
3. The killer was at the gym on January 9, 2018.
4. The killer's car plate included "H42W".

To narrow down suspects:

- The `get_fit_now_check_in` table would be queried for check-ins on '20180109'.
- The `get_fit_now_member` table would also be used to find members with an ID starting with '48Z' and a `membership_status` of 'gold'.

QUERY:

```
SELECT T2.person_id, T2.name, T1.membership_id FROM get_fit_now_check_in AS T1 JOIN get_fit_now_member AS T2 ON T1.membership_id = T2.id WHERE T1.check_in_date = '20180109' AND T2.id LIKE '48Z%' AND T2.membership_status = 'gold';
```

The result:

person_id	name	membership_id
28819	Joe Germuska	48Z7A
67318	Jeremy Bowers	48Z55

This led to two potential suspects: **Joe Germuska** and **Jeremy Bowers**.

To confirm the murderer, we shall consult the `drivers_license` table for the vehicle plate number:

QUERY:

```
SELECT T2.name, T1.plate_number FROM drivers_license AS T1 JOIN person AS T2 ON T1.id = T2.license_id WHERE T2.id IN (28819, 67318) AND T1.plate_number LIKE '%H42W%';
```

The result:

name	plate_number
Jeremy Bowers	0H42W2

Checking Jeremy Bowers driver's license details revealed a plate number of "0H42W2", which includes "H42W".

Based on the corroborating evidence, **Jeremy Bowers** is identified as the murderer.

Identification of the Mastermind

Upon apprehending Jeremy Bowers, his interview transcript was reviewed to uncover any further details about the crime's origins.

QUERY:

```
SELECT * FROM interview WHERE person_id = 67318;
```

The result:

person_id	Transcript
67318	"I was hired by a woman with a lot of money. I don't know her name but I know she's around 5'5"" (65"") or 5'7"" (67""). She has red hair and she drives a Tesla Model S. I know that she attended the SQL Symphony Concert 3 times in December 2017."

These new clues were used to identify the mastermind. The `drivers_license` table would be queried for female individuals with red hair, driving a 'Tesla' 'Model S', and a height between 65 and 67 inches.

QUERY:

```
SELECT T1.id AS license_id, T2.id AS person_id, T2.name, T1.height, T1.hair_color, T1.car_make, T1.car_model FROM drivers_license AS T1 JOIN person AS T2 ON T1.id = T2.license_id WHERE T1.gender = 'female' AND T1.hair_color = 'red' AND T1.car_make = 'Tesla' AND T1.car_model = 'Model S' AND T1.height BETWEEN 65 AND 67;
```

The result:

license_id	person_id	name	height	hair_color	car_make	car_model
918773	78881	Red Korb	65	red	Tesla	Model S
291182	90700	Regina George	66	Red	Tesla	Model S
202298	99716	Miranda Priestly	66	red	Tesla	Model S

This search yielded three potential suspects based on their license IDs (202298, 291182, 918773) and associated person IDs (78881, 90700, 99716).

To pinpoint the specific mastermind, the `facebook_event_checkin` table would be examined for attendance at the 'SQL Symphony Concert' in December 2017:

QUERY:

```
SELECT person_id, COUNT (*) AS concert_count FROM facebook_event_checkin WHERE event_name = 'SQL Symphony Concert' AND date BETWEEN '20171201' AND '20171231' AND person_id IN (78881, 90700, 99716) GROUP BY person_id;
```

The result:

person_id	concert_count
99716	3

Only **person ID 99716** attended the 'SQL Symphony Concert' three times in December 2017.

Finally, querying the `person` table for person ID 99716 revealed the mastermind's identity.

QUERY:

```
SELECT name FROM person WHERE id = 99716;
```

The result:

Name
Miranda Priestly

The mastermind behind the murder is **Miranda Priestly**.