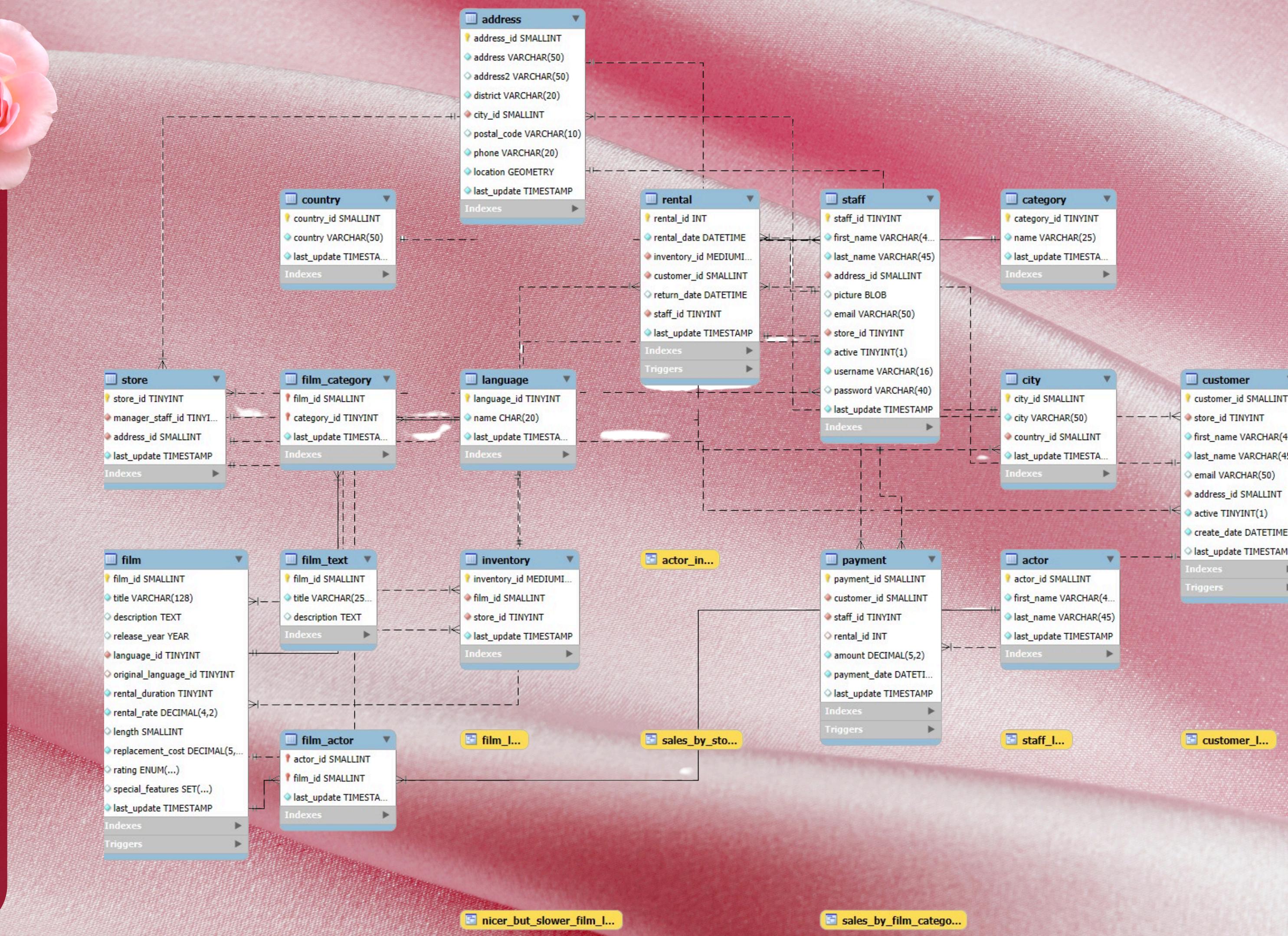


# SQL PROJECT

By : Zynb Mkrm.



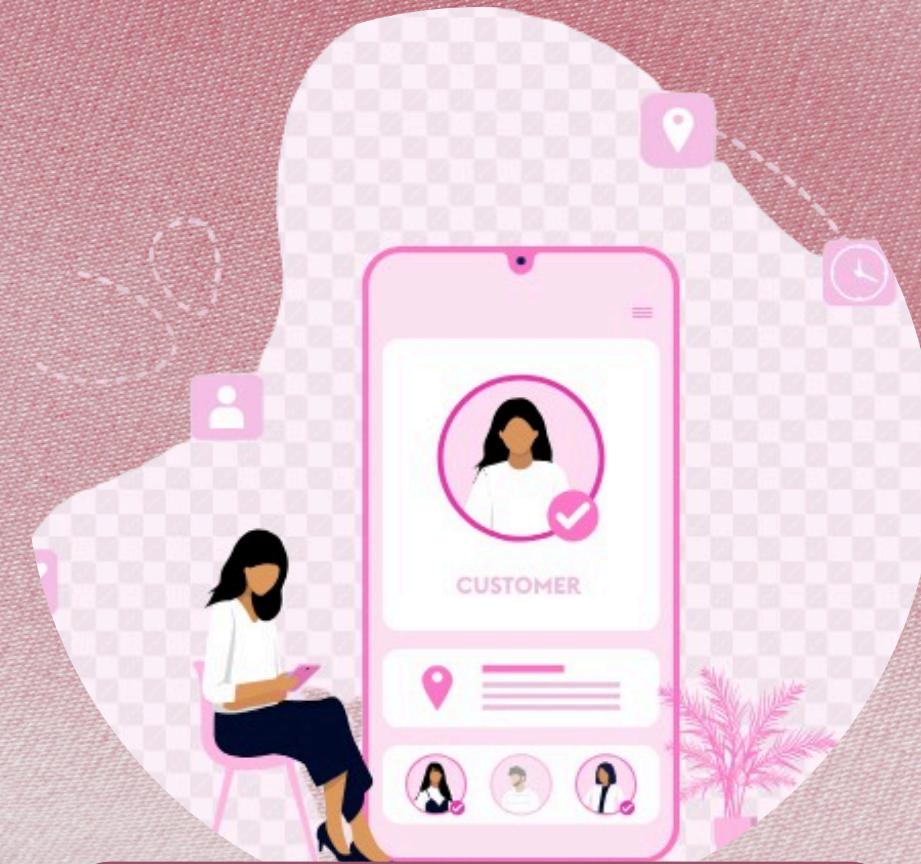
This image appears to be an Entity-Relationship (ER) diagram of the Sakila sample database schema. It visually represents the various tables (entities) and their relationships (connections) within the database.



# Extract some questions based on the diagram of sakila database.



ACTORS  
AND FILMS.



CUSTOMERS  
AND RENTALS



STAFF AND  
PAYMENTS

# Actors and Films.

Retrieve the top 5 most rented films.

```
SELECT f.title, COUNT(r.rental_id) AS rental_count  
FROM film f  
JOIN inventory i ON f.film_id = i.film_id  
JOIN rental r ON i.inventory_id = r.inventory_id  
GROUP BY f.film_id  
ORDER BY rental_count DESC  
LIMIT 5;
```

\*This query retrieves the top 5 most rented films from the Sakila database\*

Overall, this query:

- Joins the film, inventory, and rental tables to retrieve information about films and their rentals.
- Groups the results by film ID and counts the number of rentals for each film.
- Sorts the results by the number of rentals in descending order.
- Returns the top 5 films with the highest number of rentals.



# Customers and Rentals

Identify the customer who has rented the most films.

```
SELECT c.customer_id, c.first_name, c.last_name,  
COUNT(r.rental_id) AS total_rentals  
FROM customer c  
JOIN rental r ON c.customer_id = r.customer_id  
GROUP BY c.customer_id  
ORDER BY total_rentals DESC  
LIMIT 1;
```

\*This query identifies the customer who has rented the most films in the Sakila database\*



Overall, this query:

The query effectively identifies the customer with the highest number of rentals by combining customer information with rental data, grouping the results by customer, counting rentals, sorting the results, and selecting the top customer.

# Staff and Payments

Determine the total number of payments made by each staff member.

```
SELECT s.staff_id, s.first_name, s.last_name,  
COUNT(p.payment_id) AS total_payments  
FROM staff s  
JOIN payment p ON s.staff_id = p.staff_id  
GROUP BY s.staff_id;
```

\*This query calculates the total number of payments made by each staff member in the Sakila database\*

Overall, this query:  
provides a list of all staff members and the total number of payments they have processed.





# Thank You

