SQL Project – Beauty Shop Database

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Project Overview

I chose the Beauty Shop as my final project for this course because I truly enjoy spending time in a salon. As a busy mom, visiting a salon is a great relaxing way. Salons are designed to provide comfort and relaxation and offer a brief escape from daily responsibilities such as work and errands.

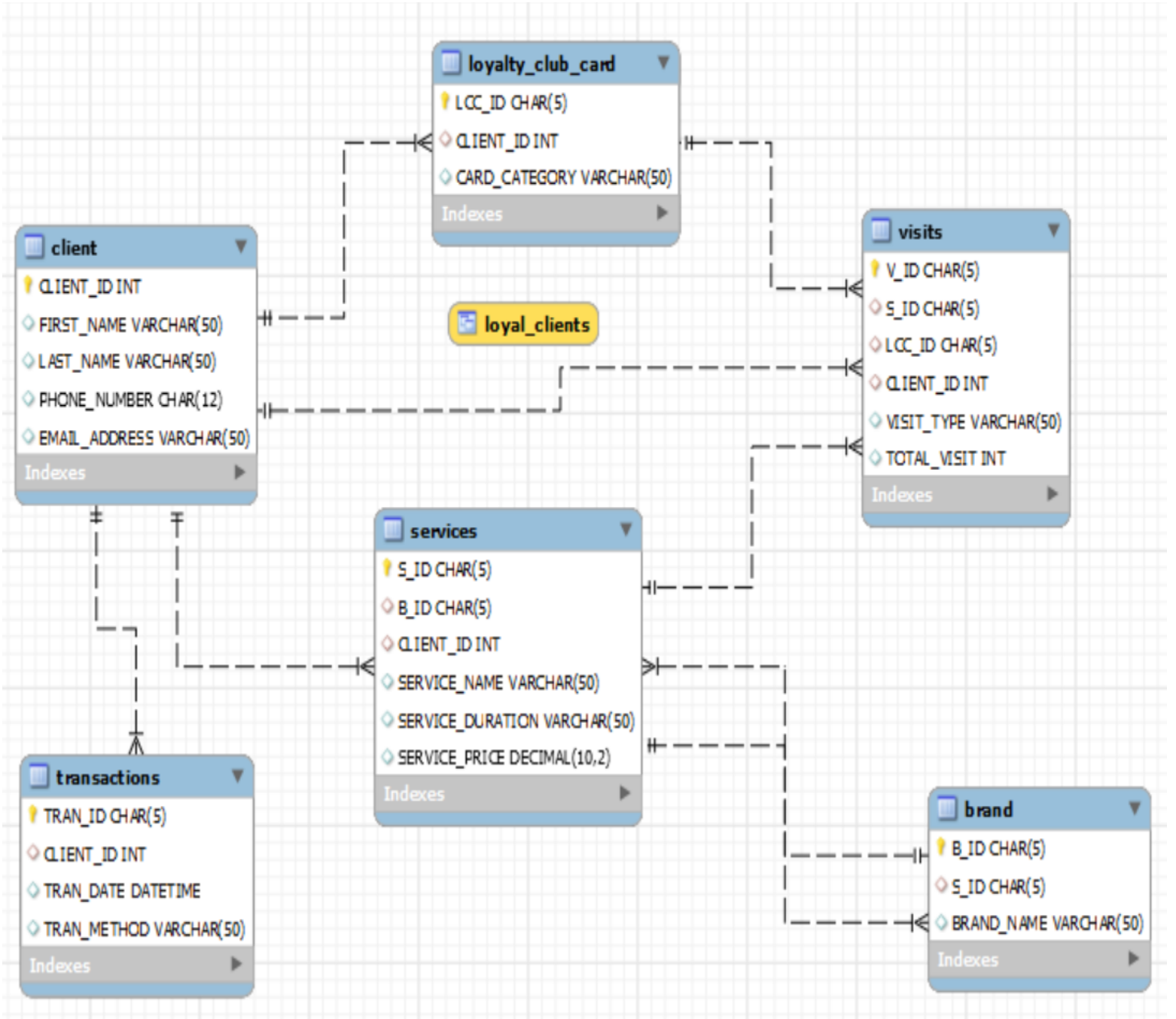
Beauty Shop Database

The ***Beauty Shop Database*** is designed to keep track of client details for women who enjoy treating themselves. These tables include contact information, service details such as name and price, brand name (used as a product name for salon services), transaction details, visit details that record the number of times they visited the beauty salon, and a loyalty club card that stores all customer transaction and data.

I have named them as follows:

CLIENT, BRAND, SERVICES, LOYALTY_CLUB_CARD, TRANSACTIONS and VISITS.

The next page will showcase an ER diagram that beautifully demonstrates how tables in the database are related. This powerful visual aid will greatly enhance your understanding of the data. So, get ready to be impressed!


loyalty_club_card
LCC_ID CHAR(5)
CLIENT_ID INT
CARD_CATEGORY VARCHAR(50)
Indexes
client
CLIENT_ID INT
FIRST_NAME VARCHAR(50)
LAST_NAME VARCHAR(50)
PHONE_NUMBER CHAR(12)
EMAIL_ADDRESS VARCHAR(50)
Indexes
loyal_clients
visits
V_ID CHAR(5)
S_ID CHAR(5)
LCC_ID CHAR(5)
CLIENT_ID INT
VISIT_TYPE VARCHAR(50)
TOTAL_VISIT INT
Indexes
services
S_ID CHAR(5)
B_ID CHAR(5)
CLIENT_ID INT
SERVICE_NAME VARCHAR(50)
SERVICE_DURATION VARCHAR(50)
SERVICE_PRICE DECIMAL(10,2)
Indexes
transactions
TRAN_ID CHAR(5)
CLIENT_ID INT
TRAN_DATE DATETIME
TRAN_METHOD VARCHAR(50)
Indexes
brand
B_ID CHAR(5)
S_ID CHAR(5)
BRAND_NAME VARCHAR(50)
Indexes

Tables

1. CLIENT

The following information is included in the CLIENT table:

Client ID, First Name, Last Name, Phone Number and Email Address.

Input in MySQL:

```
CREATE TABLE CLIENT (
CLIENT_ID INT PRIMARY KEY,
FIRST_NAME VARCHAR(50),
LAST_NAME VARCHAR(50),
PHONE_NUMBER CHAR(12),
EMAIL_ADDRESS VARCHAR(50) UNIQUE
);
```

Output:

CLIENT_ID	FIRST_NAME	LAST_NAME	PHONE_NUMBER	EMAIL_ADDRESS
1	Hannah	Erridge	7419767843	Hanerridge@gmail.com
2	Noufi	Elmi	7501614652	Noufie@gmail.com
3	Nimo	Ahmed	7718119860	Nimoa@gmail.com
4	Huda	Bekko	7549670903	Hudabe@gmail.com
5	Eman	Issac	7416283915	Emanis@gmail.com
6	Lola	Oliver	7938470467	Lolao@gmail.com
7	Nora	Ali	7350200634	Norali@gmail.com

2. BRAND

The following information is included in the BRAND table:

B ID, S ID and Brand Name.

Input in MySQL:

```
CREATE TABLE BRAND (
B_ID CHAR(5) PRIMARY KEY,
S_ID CHAR(5), FOREIGN KEY (S_ID) REFERENCES SERVICES(S_ID),
BRAND_NAME VARCHAR(50)
);
```

Output:

B_ID	S_ID	BRAND_NAME
B001	S001	Luxe Brow
B002	S002	Wella
B003	S003	Kérastase
B004	S004	OPI
B005	S005	London Lash
B006	S006	Hot Stone Massage
B007	S007	Rose Water
B008	S008	Aloe Vera
B009	S009	Kérastase
B010	S010	Null
B011	S011	OPI
B012	S012	Acetone
B013	S013	Niksa
B014	S014	Kérastase
B015	S015	Fenty Beauty
B016	S016	Huda Beauty
B017	S017	elf
B018	S018	Moroccan Oil Bath Soap
B019	S019	Fenty Beauty
B020	S020	Warm & Crème Wax

3. SERVICES

The following information is included in the SERVICES table:

S ID, Client ID, Service Name, Service Duration and Service Price.

Input in MySQL:

```
CREATE TABLE SERVICES (
S_ID CHAR(5) PRIMARY KEY,
B_ID CHAR(5),
CLIENT_ID INT, FOREIGN KEY (CLIENT_ID) REFERENCES CLIENT(CLIENT_ID),
SERVICE_NAME VARCHAR(50),
SERVICE_DURATION VARCHAR(50),
SERVICE_PRICE DECIMAL(10,2)
);
```

Output:

S_ID	B_ID	CLIENT_ID	SERVICE_NAME	SERVICE_DURATION	SERVICE_PRICE
S001	B001	1	Brow Laminaiton	60min	25.00
S002	B002	2	Hair Full Color	60/90min	250.00
S003	B003	3	Hair Wash & Dry	30min	45.00
S004	B004	4	Pedicure	30min	18.00
S005	B005	5	Lashes	60min	59.00
S006	B006	6	Full Body Massage	90min	69.00
S007	B007	7	Face Massage	15min	19.00
S008	B008	1	Facial	45min	19.00
S009	B009	1	Hair Style	45min	49.00
S010	B010	2	Hair Cut	30min	29.00
S011	B011	3	Manicure	45min	16.00
S012	B012	4	Gel Polish Removal	15min	15.00
S013	B013	5	Hand & Foot Spa	45min	55.00
S014	B014	6	Hair Scalp Mask	60min	79.00
S015	B015	7	Bridal Makeup	90min	499.00
S016	B016	3	Simple Glam Makeup	60min	150.00
S017	B017	2	Eyebrow Bleaching	20min	35.00
S018	B018	4	Moroccan Bath	120min	299.00
S019	B019	1	Eyebrow Tinting	15min	25.00
S020	B020	1	Full Body Wax	120min	250.00

4. LOYALTY CLUB CARD

The following information is included in the LOYALTY CLUB CARD table: Lcc ID, Client ID and Card Category.

Input in MySQL:

```
CREATE TABLE LOYALTY_CLUB_CARD (
LCC_ID CHAR(5) PRIMARY KEY,
CARD_CATEGORY VARCHAR(50),
CLIENT_ID INT, FOREIGN KEY (CLIENT_ID) REFERENCES CLIENT(CLIENT_ID)
);
```

Output:

LCC_ID	CLIENT_ID	CARD_CATEGORY
LCC1	1	Golden
LCC2	2	Bronze
LCC3	3	Golden
LCC4	4	Silver
LCC5	5	Silver
LCC6	6	Bronze
LCC7	7	Golden

5. TRANSACTIONS

The following information is included in the TRANSACTIONS table: Tran ID, Client ID, Tran Method and Tran Date.

Input in MySQL:

```
CREATE TABLE TRANSACTIONS (
TRAN_ID CHAR(5) PRIMARY KEY,
CLIENT_ID INT, FOREIGN KEY (CLIENT_ID) REFERENCES CLIENT(CLIENT_ID),
TRAN_DATE DATETIME,
TRAN_METHOD VARCHAR(50)
);
```

Output:

TRAN_ID	CLIENT_ID	TRAN_DATE	TRAN_METHOD
T001	1	2024-01-01 12:05:30	Apple Pay
T002	2	2024-01-02 14:10:20	Debit Card
T003	3	2024-01-06 09:15:33	Debit Card
T004	4	2024-01-04 10:20:40	Credit Card
T005	5	2024-01-10 11:30:01	Apple Pay
T006	6	2024-01-05 12:17:05	Credit Card
T007	7	2024-01-07 15:15:08	Apple Pay
T008	1	2024-01-08 11:18:04	Debit Card
T009	1	2024-01-01 09:10:55	Credit Card
T010	2	2024-01-20 18:25:00	Debit Card
T011	3	2024-01-20 16:35:00	Debit Card
T012	4	2024-01-15 16:48:20	Apple Pay
T013	5	2024-01-15 15:10:20	Apple Pay
T014	6	2024-01-13 17:19:20	Apple Pay
T015	7	2024-01-13 17:14:30	Credit Card
T016	3	2024-01-08 11:18:04	Debit Card
T017	2	2024-01-05 12:17:05	Apple Pay
T018	4	2024-01-04 10:20:40	Cash
T019	1	2024-01-07 15:15:08	Cash
T020	1	2024-01-01 09:10:50	Cash

6. Visits

The following information is included in the VISITS table:

V ID, Client ID, S ID, Lcc ID, Visit Type and Total Visits.

Input in MySQL:

```
CREATE TABLE VISITS (
V_ID CHAR(5) PRIMARY KEY,
VISIT_TYPE VARCHAR(50),
TOTAL_VISIT INT,
LCC_ID CHAR(5), FOREIGN KEY (LCC_ID) REFERENCES LOYALTY_CLUB_CARD(LCC_ID),
CLIENT_ID INT, FOREIGN KEY (CLIENT_ID) REFERENCES CLIENT(CLIENT_ID),
S_ID CHAR(5), FOREIGN KEY (S_ID) REFERENCES SERVICES(S_ID));
```

Output:

V_ID	S_ID	LCC_ID	CLIENT_ID	VISIT_TYPE	TOTAL_VISIT
V001	S001	LCC1	1	VVIP	8
V002	S002	LCC2	2	VIP	4
V003	S003	LCC3	3	VVIP	8
V004	S004	LCC4	4	Standard	10
V005	S005	LCC5	5	Standard	7
V006	S006	LCC6	6	VIP	15
V007	S007	LCC7	7	VVIP	9

VIEW

Loyal Clients in our beauty shop.

Using the CREATE VIEW statement, the query below displays detailed information about VVIP clients classified as 'Loyal Clients' who possess the Golden card, including their completed services and the frequency of their visits to the salon.

Input in MySQL:

```
CREATE VIEW Loyal_clients AS
SELECT S.S_ID, V.V_ID, LCC.LCC_ID, LCC.CARD_CATEGORY, S.SERVICE_NAME, V.VISIT_TYPE, V.TOTAL_VISIT
FROM SERVICES S
JOIN VISITS V ON V.S_ID = S.S_ID
JOIN LOYALTY_CLUB_CARD LCC ON LCC.LCC_ID = V.LCC_ID
WHERE CARD_CATEGORY = 'Golden';
```

Output:

S_ID	V_ID	LCC_ID	CARD_CATEGORY	SERVICE_NAME	VISIT_TYPE	TOTAL_VISIT
S001	V001	LCC1	Golden	Brow Laminaiton	VVIP	8
S003	V003	LCC3	Golden	Hair Wash & Dry	VVIP	8
S007	V007	LCC7	Golden	Face Massage	VVIP	9

STORE FUNCTION

Gift Voucher

The Stored Function was created to award all clients a gift voucher based on spending.

Input in MySQL:

```
USE Beauty_shop;
DELIMITER //
CREATE FUNCTION Gift_Voucher(service_price decimal(10,2))
RETURNS VARCHAR(20)
DETERMINISTIC
BEGIN
  DECLARE client_reward VARCHAR(20);
  IF service_price > 100 THEN SET client_reward = '50% off';
  ELSEIF (service_price >= 50 AND service_price < 100) THEN SET client_reward = '25% off';
  ELSEIF service_price < 50 THEN SET client_reward = '15% off' ;
  END IF;
  RETURN client_reward;
END //
DELIMITER ;
```

/

```
USE beauty_shop;
SELECT client_id, service_name, service_price, Gift_Voucher(service_price) AS Gift_Voucher
FROM services;
```

Output:

client_id	service_name	service_price	Gift_Voucher
1	Brow Laminaiton	25.00	15% off
2	Hair Full Color	250.00	50% off
3	Hair Wash & Dry	45.00	15% off
4	Pedicure	18.00	15% off
5	Lashes	59.00	25% off
6	Full Body Massage	69.00	25% off
7	Face Massage	19.00	15% off
1	Facial	19.00	15% off
1	Hair Style	49.00	15% off
2	Hair Cut	29.00	15% off
3	Manicure	16.00	15% off
4	Gel Polish Removal	15.00	15% off
5	Hand & Foot Spa	55.00	25% off
6	Hair Scalp Mask	79.00	25% off
7	Bridal Makeup	499.00	50% off
3	Simple Glam Makeup	150.00	50% off
2	Eyebrow Bleaching	35.00	15% off
4	Moroccan Bath	299.00	50% off
1	Eyebrow Tinting	25.00	15% off
1	Full Body Wax	250.00	50% off

JOIN

Using the INNER JOIN keyword, the following query displays all hair services that use the Kérastase brand.

Input in MySQL:

```
SELECT S.S_ID, S.SERVICE_NAME, B.BRAND_NAME
FROM SERVICES S
INNER JOIN BRAND B ON B.S_ID = S.S_ID
WHERE SERVICE_NAME LIKE 'H%' AND BRAND_NAME LIKE 'Kérastase';
```

Output:

S_ID	SERVICE_NAME	BRAND_NAME
S003	Hair Wash & Dry	Kérastase
S009	Hair Style	Kérastase
S014	Hair Scalp Mask	Kérastase

GROUP BY and HAVING

Using GROUP BY and HAVING, this query displays all services with a duration of 30 minutes.

Input in MySQL:

```
SELECT COUNT(DISTINCT S.S_ID) AS TOTAL_SERVICES, S.SERVICE_NAME, S.SERVICE_DURATION
FROM SERVICES AS S
GROUP BY S.S_ID
HAVING(S.SERVICE_DURATION) = '30min';
```

Output:

TOTAL_SERVICES	SERVICE_NAME	SERVICE_DURATION
1	Hair Wash & Dry	30min
1	Pedicure	30min
1	Hair Cut	30min

Query with Subquery

The query returns the makeup service using the Fenty Beauty brand by clients.

Input in MySQL:

```
select s_id, service_name
from services
where b_id in (select b_id
from brand
where brand_name ='Fenty Beauty');
```

Output:

s_id	service_name
S015	Bridal Makeup
S019	Eyebrow Tinting

STORE PROCEDURE (Proc)

Special E-card

The stored procedure concats the client name who visited the salon the most frequently with a special E-card.

Input in MySQL:

```
DELIMITER //
CREATE PROCEDURE E_Card(Comments VARCHAR(50), Client_name VARCHAR(20))
BEGIN
    DECLARE fullE_Card VARCHAR(80);
   SET fullE_Card = CONCAT(Comments, ' ', Client_name);
   SELECT fullE_Card;
END //
DELIMITER ;

CALL E_Card('A massive thank you for being our client', 'Lola!');
```

Output:

fullE_Card
A massive thank you for being our client Lola!

Thank you! 😊

Contact Details:

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