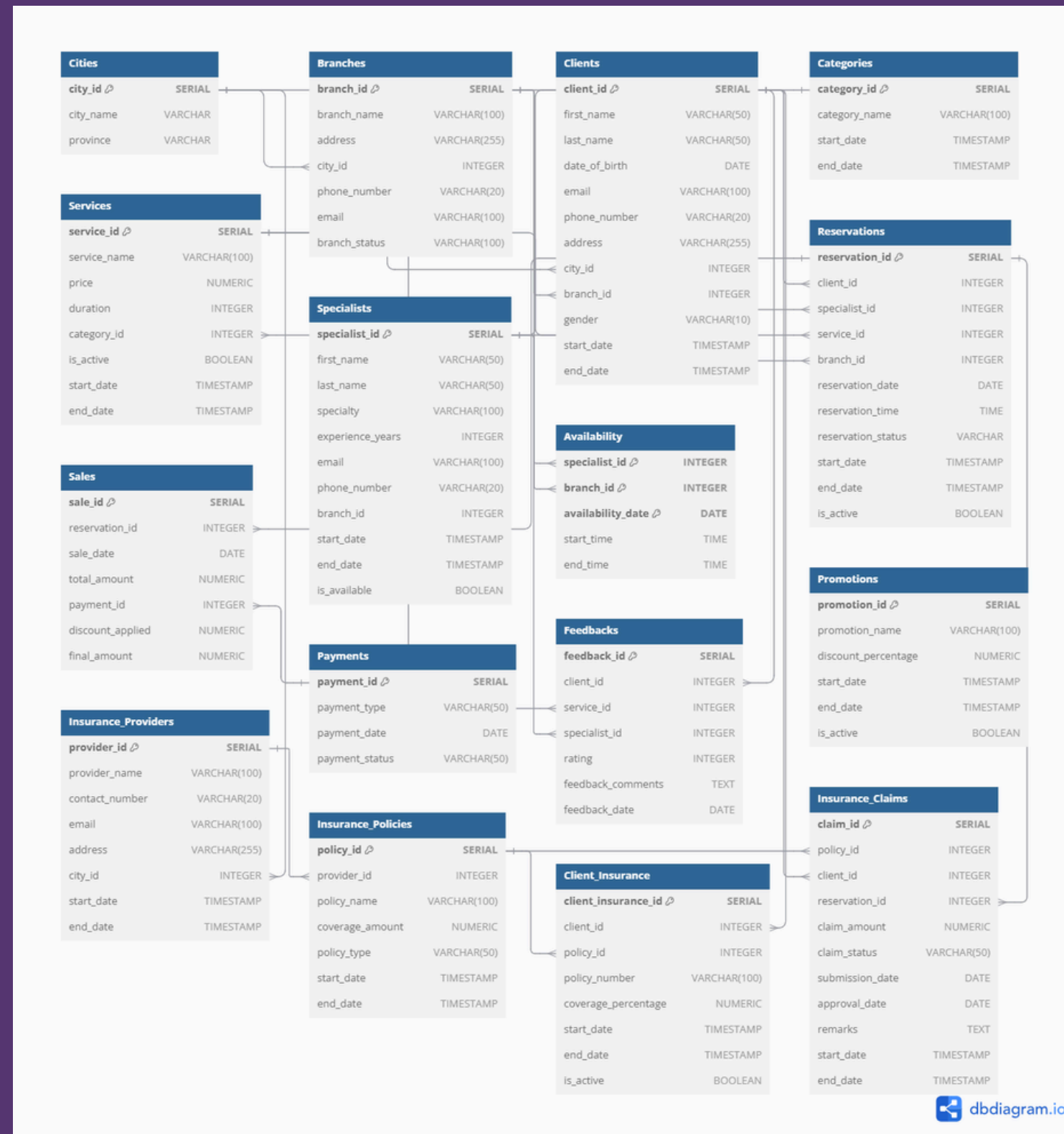# Enhancing Beauty Aesthetic Center Efficiency: Unlocking Business Potential with SQL Queries

Relation Model of Database

Interactive link

Reservations with Client, Service, Specialist, and Branch Details

reservation_id integer	client text	service_name character varying (100)	specialist text	branch_name character varying (100)	reservation_date date	reservation_time time without time zone	reservation_status character varying (50)
22	Anahit Khachatryan	IV Therapy	Albert Arakelyan	Zeytun	2024-12-24	17:45:00	Completed
40	Araks Torosyan	Jawline Contouring	Marina Khachatryan	Davtashen	2024-12-19	12:00:00	Confirmed
39	Siranush Melikyan	Anti-Aging Treatments	Aram Grigoryan	Artashat Branch of Hmayq Aesthetics Center	2024-12-07	17:09:00	Cancelled
18	Arax Margaryan	PRP Hair Therapy	Narine Hovhannisyan	Abovyan Branch of Hmayq Aesthetics Center	2024-12-04	08:16:00	Completed
1	Varduhi Hovhannisyan	Anti-Aging Treatments	Levon Hovhannisyan	Kentron	2024-11-25	13:01:00	Pending
12	Silva Haroyan	Laser Hair Removal	Tatev Simonyan	Goris Branch of Hmayq Aesthetics Center	2024-11-23	18:10:00	Confirmed
38	Siranush Stepanyan	Dental Crowns & Bridges	Silva Stepanyan	Artashat Branch of Hmayq Aesthetics Center	2024-11-15	16:55:00	Confirmed
48	Silva Petrosyan	Microneedling	Sergey Baghdasaryan	Kentron	2024-11-10	15:11:00	Completed
27	Silva Badalyan	Dental Implants	Arusyak Danielyan	Artashat Branch of Hmayq Aesthetics Center	2024-11-10	18:30:00	Completed

```
SELECT
    r.reservation_id,
    CONCAT(c.first_name, ' ', c.last_name) AS client,
    srv.service_name,
    CONCAT(sp.first_name, ' ', sp.last_name) AS specialist,
    b.branch_name,
    r.reservation_date,
    r.reservation_time,
    r.reservation_status
FROM
    Reservations r
JOIN Clients c ON r.client_id = c.client_id
JOIN Services srv ON r.service_id = srv.service_id
JOIN Specialists sp ON r.specialist_id = sp.specialist_id
JOIN Branches b ON r.branch_id = b.branch_id
ORDER BY r.reservation_date DESC;
```

Client Feedback on Services

```sql
SELECT
    f.feedback_id,
    CONCAT(c.first_name, ' ', c.last_name) AS client,
    s.service_name,
    CONCAT(sp.first_name, ' ', sp.last_name) AS specialist,
    f.rating,
FROM Feedbacks f
JOIN Clients c ON f.client_id = c.client_id
JOIN Services s ON f.service_id = s.service_id
JOIN Specialists sp ON f.specialist_id = sp.specialist_id;
```

feedback_id integer	client text	service_name character varying (100)	specialist text	rating integer
92	Shushan Simonyan	Scalp Micropigmentation	Tigran Karapetyan	5
93	Hasmik Torosyan	Waxing	Hovhannes Mkrtch…	2
94	Vardan Karapetyan	Botox Injections	Marianna Mkrtchyan	5
95	Anahit Harutyunyan	Dental Implants	Hayk Avagyan	4
96	Hripsime Margaryan	Dental Cleaning	Vahan Grigoryan	5
97	Lusine Stepanyan	Hormone Replacement Therapy	Ara Marukyan	1
98	Araks Torosyan	Microneedling	Narine Hovhannisy…	4
99	Tsolak Khachaturyan	IV Therapy	Arpine Vardanyan	1
1	Arevik Khachatryan	Cheek Enhancement	Sylvia Avetisyan	3
2	Tsolak Abrahamyan	Jawline Contouring	Arman Petrosyan	5

Total Sales per Branch

```sql
SELECT
    b.branch_name,
    COUNT(sa.sale_id) AS total_sales,
    SUM(sa.total_amount) AS total_amount,
    SUM(sa.discount_applied) AS total_discounts,
    SUM(sa.final_amount) AS final_amount
FROM
    Sales sa
JOIN Reservations r ON sa.reservation_id = r.reservation_id
JOIN Branches b ON r.branch_id = b.branch_id
GROUP BY b.branch_name
ORDER BY final_amount DESC;
```

branch_name character varying (100)	total_sales bigint	total_amount numeric	total_discounts numeric	final_amount numeric
Zeytun	19	1108086.41	100580.63	1007505.7800000000105
Abovyan Branch of Hmayq Aesthetics Center	14	918284.28	79738.37	838545.910000000017
Etchmiadzin Branch of Hmayq Aesthetics Center	16	779109.75	67631.32	711478.430000000027
Armavir Branch of Hmayq Aesthetics Center	11	599664.34	59229.15	540435.190000000017
Artashat Branch of Hmayq Aesthetics Center	8	396619.77	33534.79	363084.979999999997
Komitas	8	398679.18	48317.72	350361.459999999999
Davtashen	5	345485.64	22018.61	323467.03000000001
Vanadzor Branch of Hmayq Aesthetics Center	5	228785.79	20105.89	208679.90
Mashtots	5	244779.42	38563.30	206216.119999999998
Kapan Branch of Hmayq Aesthetics Center	3	184827.23	19377.51	165449.72
Shengavit	2	95783.72	10975.48	84808.240000000004
Kentron	2	76928.03	6689.86	70238.17
Goris Branch of Hmayq Aesthetics Center	1	78735.59	9641.94	69093.65
Gyumri Branch of Hmayq Aesthetics Center	1	25758.67	9755.81	16002.859999999999

Clients with Their Insurance Policies and Claims

```sql
SELECT
    CONCAT(c.first_name, ' ', c.last_name) AS client_name,
    ip.policy_name,
    ci.policy_number,
    ci.coverage_percentage,
    ic.claim_id,
    ic.claim_amount,
    ic.claim_status,
    ic.submission_date,
    ic.approval_date
FROM
    Clients c
LEFT JOIN Client_Insurance ci ON c.client_id = ci.client_id AND ci.is_active = TRUE
LEFT JOIN Insurance_Policies ip ON ci.policy_id = ip.policy_id
LEFT JOIN Insurance_Claims ic ON c.client_id = ic.client_id
ORDER BY c.last_name, c.first_name;
```

client_name text	policy_name character varying (100)	policy_number character varying (100)	coverage_percentage numeric	claim_id integer	claim_amount numeric	claim_status character varying (50)	submission_date date	approval_date date
Siranush Abrahamyan	[null]	[null]	[null]	53	40812.45504304501	Rejected	2024-06-07	2024-06-12
Tsolak Abrahamyan	[null]	[null]	[null]	4	28849.259255043333	Rejected	2024-07-25	2024-08-01
Vardan Abrahamyan	Health Care	POL0043	61.42	[null]	[null]	[null]	[null]	[null]
Arpi Arakelyan	Health Plus	POL0009	56.12	54	23707.359590317323	Pending	2024-08-10	2024-07-24
Arpi Arakelyan	Health Plus	POL0032	61.97	15	48546.395744603564	Pending	2024-06-06	2024-05-26
Arpi Arakelyan	Health Plus	POL0032	61.97	20	49892.169751148	Pending	2024-06-28	2024-08-22
Arpi Arakelyan	Health Plus	POL0009	56.12	20	49892.169751148	Pending	2024-06-28	2024-08-22
Arpi Arakelyan	Health Plus	POL0009	56.12	15	48546.395744603564	Pending	2024-06-06	2024-05-26
Arpi Arakelyan	Health Plus	POL0032	61.97	54	23707.359590317323	Pending	2024-08-10	2024-07-24
Gayane Arakelyan	[null]	[null]	[null]	51	23409.640003923545	Pending	2024-06-19	2024-07-08

Specialists Available at a Specific Branch on a Given Date

```sql
SELECT
    sp.first_name,
    sp.last_name,
    a.availability_date,
    a.start_time,
    a.end_time
FROM Specialists sp
JOIN Availability a ON sp.specialist_id = a.specialist_id
JOIN Branches b ON a.branch_id = b.branch_id
WHERE b.branch_name = 'Komitas'
AND a.availability_date = '2024-06-24';
```

first_name character varying (50)	last_name character varying (50)	availability_date date	start_time time without time zone	end_time time without time zone
Anahit	Sargsyan	2024-06-24	11:21:00	17:21:00

The number of reservations made by clients who have an active insurance policy.

```sql
SELECT
    CONCAT(c.first_name, ' ', c.last_name) AS client_name,
    COUNT(r.reservation_id) AS total_reservations
FROM Reservations r
JOIN Clients c ON r.client_id = c.client_id
JOIN Client_Insurance ci ON c.client_id = ci.client_id
WHERE ci.is_active = TRUE
GROUP BY client_name;
```

client_name text	total_reservations bigint
Siranush Stepanyan	1
Tigran Zakharyan	1
Vardanush Melikyan	2
Siranush Melikyan	3
Arevik Khachatryan	2
Hasmik Hovhannisyan	2
Nazik Manasyan	2
Hovhannes Simonyan	1
Gayane Kharabyan	1
Anushka Mkrtchyan	3

Monthly Sales Trends

```sql
SELECT
    TO_CHAR(DATE_TRUNC('month', sa.sale_date),
'YYYY-MM') AS sale_month,
    COUNT(sa.sale_id) AS total_sales,
    SUM(sa.total_amount) AS total_amount,
    SUM(sa.discount_applied) AS total_discounts,
    SUM(sa.final_amount) AS final_amount
FROM
    Sales sa
GROUP BY sale_month
ORDER BY sale_month;
```

sale_month text	total_sales bigint	total_amount numeric	total_discounts numeric	final_amount numeric
2024-01	16	894060.68	84328.14	809732.5400000000055
2024-02	15	728533.49	77438.95	651094.54000000019
2024-03	7	424754.52	31067.13	393687.389999999998
2024-04	8	436262.30	64248.46	372013.84000000001
2024-05	10	542739.72	35593.84	507145.880000000009
2024-06	12	600265.02	61765.74	538499.280000000009
2024-07	21	1214779.59	114905.01	1099874.580000000028
2024-08	11	640132.50	56813.11	583319.39

Service Ratings and Feedback Counts

```sql
SELECT
    srv.service_name,
    COUNT(f.feedback_id) AS feedback_count,
    ROUND(AVG(f.rating)::numeric, 2) AS average_rating
FROM
    Services srv
LEFT JOIN Feedbacks f ON srv.service_id = f.service_id
GROUP BY srv.service_name
ORDER BY average_rating DESC NULLS LAST;
```

service_name character varying (100)	feedback_count bigint	average_rating numeric
Jawline Contouring	2	5.00
Scalp Micropigmentation	1	5.00
Threading	2	4.00
Teeth Whitening	1	4.00
Permanent Hair Reduction	1	4.00
Liposuction	2	4.00
Microdermabrasion	1	4.00
Gum Treatments	1	4.00
Vitamin Injections	1	4.00
Veneers	5	3.80

The number of clients per branch, grouped by city

```sql
SELECT
    ct.city_name,
    b.branch_name,
    COUNT(c.client_id) AS total_clients
FROM Clients c
JOIN Branches b ON c.branch_id = b.branch_id
JOIN Cities ct ON b.city_id = ct.city_id
GROUP BY ct.city_name, b.branch_name;
```

	city_name character varying (100) 🔒	branch_name character varying (100) 🔒	total_clients bigint 🔒
1	Yerevan	Komitas	10
2	Etchmiadzin	Etchmiadzin Branch of Hmayq Aesthetics Center	5
3	Armavir	Armavir Branch of Hmayq Aesthetics Center	6
4	Yerevan	Davtashen	11
5	Yerevan	Shengavit	6
6	Vanadzor	Vanadzor Branch of Hmayq Aesthetics Center	7
7	Artashat	Artashat Branch of Hmayq Aesthetics Center	5
8	Yerevan	Zeytun	4
9	Kapan	Kapan Branch of Hmayq Aesthetics Center	5
10	Yerevan	Malatia Sebastia	6
11	Yerevan	Kentron	5
12	Gyumri	Gyumri Branch of Hmayq Aesthetics Center	10
13	Goris	Goris Branch of Hmayq Aesthetics Center	5
14	Abovyan	Abovyan Branch of Hmayq Aesthetics Center	5
15	Yerevan	Mashtots	10

The total sales amount per service, including discounts applied

```
SELECT
    s.service_name,
    SUM(sa.final_amount) AS total_sales
FROM Sales sa
JOIN Reservations r ON sa.reservation_id = r.reservation_id
JOIN Services s ON r.service_id = s.service_id
GROUP BY s.service_name;
```

service_name character varying (100)	total_sales numeric
Root Canal Therapy	262858.590000000005
Chemical Peels	208679.90
PRP Hair Therapy	336816.52
Microneedling	70238.17
Anti-Aging Treatments	101707.179999999992
Laser Skin Resurfacing	77151.31
Facial Treatments	156029.460000000009
Permanent Hair Reduction	290832.010000000008
Dental Crowns & Bridges	302729.13000000001
Vitamin Injections	177603.579999999998

All services that have been reserved, along with the number of times each service has been reserved.

```
SELECT
    s.service_name,
    COUNT(r.reservation_id) AS reservation_count
FROM Reservations r
JOIN Services s ON r.service_id = s.service_id
GROUP BY s.service_name;
```

service_name character varying (100)	reservation_count bigint
Root Canal Therapy	2
Chemical Peels	2
Microneedling	1
Anti-Aging Treatments	2
Laser Skin Resurfacing	1
Facial Treatments	1
Vitamin Injections	1
Laser Hair Removal	1
Oxygen Therapy	1
Hormone Replacement Therapy	1

All active promotions, along with the services they can be applied to

```sql
SELECT
    p.promotion_name,
    s.service_name,
    p.discount_percentage
FROM Promotions p
JOIN Services s ON s.service_id = (
    SELECT r.service_id
    FROM Reservations r
    LIMIT 1
)
WHERE p.is_active = TRUE;
```

promotion_name character varying (100)	service_name character varying (100)	discount_percentage numeric
Summer Glow Package	Anti-Aging Treatments	20
Autumn Rejuvenation	Anti-Aging Treatments	15

The total number of reservations and total sales for each branch

```sql
SELECT
    b.branch_name,
    COUNT(r.reservation_id) AS
total_reservations,
    SUM(s.final_amount) AS total_sales
FROM Branches b
JOIN Reservations r ON b.branch_id =
r.branch_id
JOIN Sales s ON r.reservation_id =
s.reservation_id
GROUP BY b.branch_name;
```

branch_name character varying (100)	total_reservations bigint	total_sales numeric
Goris Branch of Hmayq Aesthetics Center	1	69093.65
Armavir Branch of Hmayq Aesthetics Center	11	540435.190000000017
Komitas	8	350361.459999999999
Abovyan Branch of Hmayq Aesthetics Center	14	838545.910000000017
Vanadzor Branch of Hmayq Aesthetics Center	5	208679.90
Kapan Branch of Hmayq Aesthetics Center	3	165449.72
Davtashen	5	323467.03000000001
Etchmiadzin Branch of Hmayq Aesthetics Center	16	711478.430000000027
Shengavit	2	84808.240000000004
Artashat Branch of Hmayq Aesthetics Center	8	363084.979999999997
Mashtots	5	206216.119999999998

Thank you!