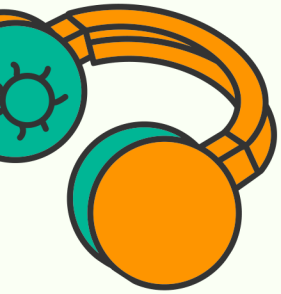
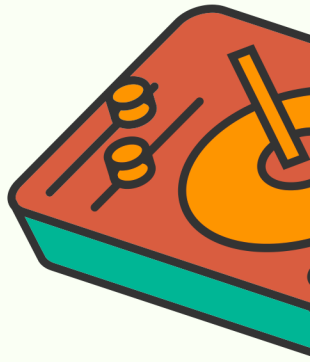
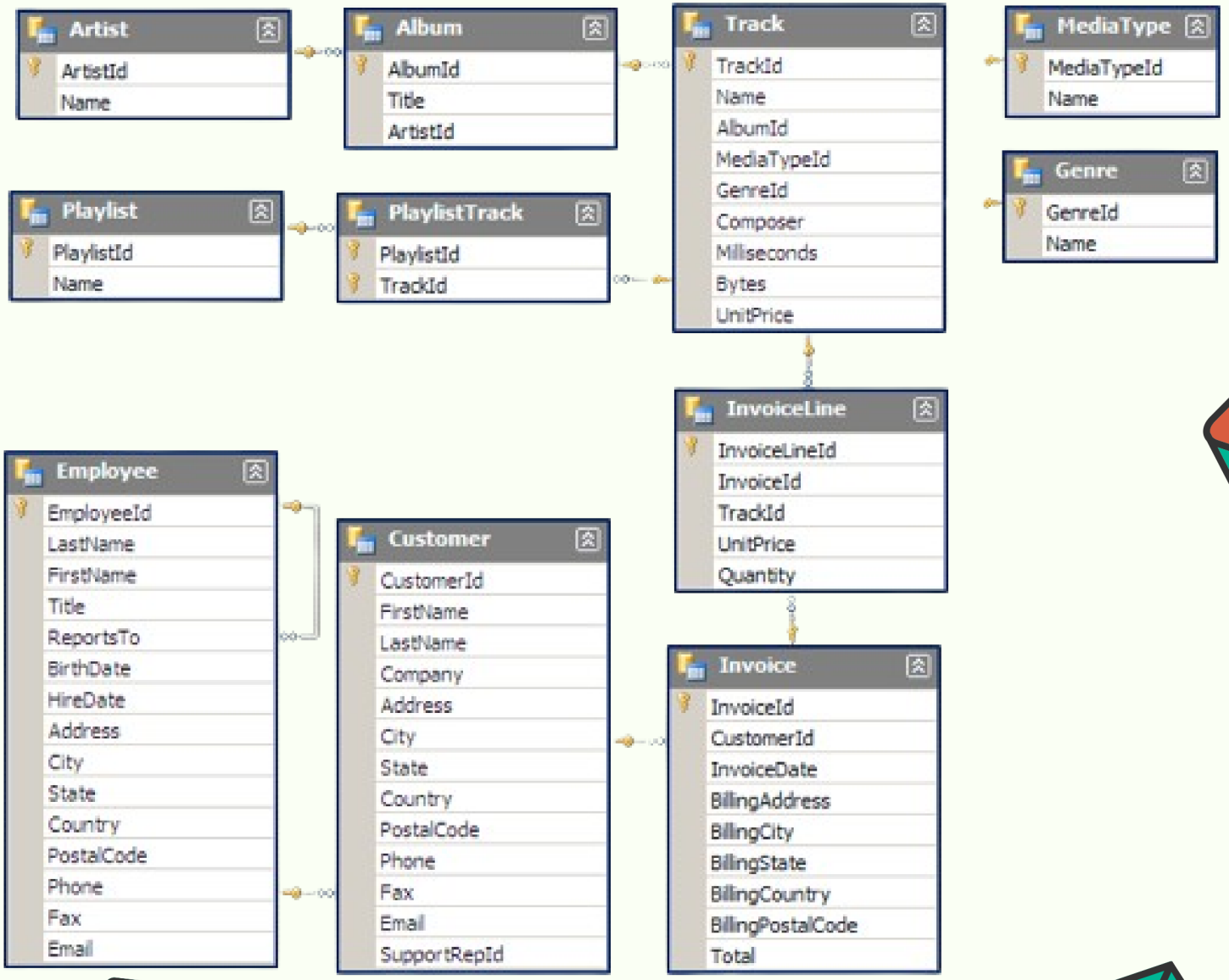

MUSIC STORE
ANALYSIS

DATABASE SCHEMA







Query | Query History

```sql

/* Q1: Who is the senior most employee based on job title? */
SELECT title, first_name, last_name
FROM employee
ORDER BY levels DESC
LIMIT 1;

/* Q2: Which countries have the most Invoices? */
SELECT COUNT(*) AS c,billing_country
FROM invoice
GROUP BY billing_country
ORDER BY c DESC;

/* Q3: What are top 3 values of total invoice? */
SELECT total
FROM invoice
ORDER BY total DESC
LIMIT 3;

```

```sql
/* Q4: Which city has the best customers? We would like to throw a promotional
Music Festival in the city we made the most money.
Write a query that returns one city that has the highest sum of invoice totals.
Return both the city name & sum of all invoice totals */

SELECT billing_country, SUM(total) AS invoicetotal
FROM invoice
GROUP BY billing_country
ORDER BY invoicetotal DESC
LIMIT 1;
/* Q5: Who is the best customer? The customer who has spent the most money will be declared th
Write a query that returns the person who has spent the most money.*/

SELECT customer.customer_id, first_name, last_name, SUM(total) AS total_spending
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
GROUP BY customer.customer_id
ORDER BY total_spending DESC
LIMIT 1;
```

Query | Query History

```
40
41
42
43
44  /* Q6: Write query to return the email, first name, last name,
45  & Genre of all Rock Music listeners.
46  Return your list ordered alphabetically by email starting with A. */
47  SELECT DISTINCT email,first_name, last_name
48  FROM customer
49  JOIN invoice ON customer.customer_id = invoice.customer_id
50  JOIN invoice_line ON invoice.invoice_id = invoice_line.invoice_id
51  WHERE track_id IN(
52      SELECT track_id FROM track
53      JOIN genre ON track.genre_id = genre.genre_id
54      WHERE genre.name LIKE 'Rock'
55  )
56  ORDER BY email;
57
58
59
```

Query | Query History

```
58
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61  /* Q7: Let's invite the artists who have written the most rock music in our dataset.
62  Write a query that returns the Artist name and
63  total track count of the top 10 rock bands. */
64
65  SELECT artist.artist_id, artist.name,COUNT(artist.artist_id) AS number_of_songs
66  FROM track
67  JOIN album ON album.album_id = track.album_id
68  JOIN artist ON artist.artist_id = album.artist_id
69  JOIN genre ON genre.genre_id = track.genre_id
70  WHERE genre.name LIKE 'Rock'
71  GROUP BY artist.artist_id
72  ORDER BY number_of_songs DESC
73  LIMIT 10;
74
75
```

Query | Query History

```
74
75  /* Q8: Return all the track names that have a song
76  length longer than the average song length.
77  Return the Name and Milliseconds for each track.
78  Order by the song length with the longest songs listed first. */
79  SELECT name,miliseconds
80  FROM track
81  WHERE miliseconds > (
82      SELECT AVG(miliseconds) AS avg_track_length
83      FROM track )
84  ORDER BY miliseconds DESC;
85
86
```

```sql
/* Q9: Find how much amount spent by each customer on artists?
Write a query to return customer name, artist name and total spent */

WITH best_selling_artist AS (
    SELECT artist.artist_id AS artist_id, artist.name AS artist_name,
    SUM(invoice_line.unit_price*invoice_line.quantity) AS total_sales
    FROM invoice_line
    JOIN track ON track.track_id = invoice_line.track_id
    JOIN album ON album.album_id = track.album_id
    JOIN artist ON artist.artist_id = album.artist_id
    GROUP BY 1
    ORDER BY 3 DESC
    LIMIT 1
)
SELECT c.customer_id, c.first_name, c.last_name, bsa.artist_name,
SUM(il.unit_price*il.quantity) AS amount_spent
FROM invoice i
JOIN customer c ON c.customer_id = i.customer_id
JOIN invoice_line il ON il.invoice_id = i.invoice_id
JOIN track t ON t.track_id = il.track_id
JOIN album alb ON alb.album_id = t.album_id
JOIN best_selling_artist bsa ON bsa.artist_id = alb.artist_id
GROUP BY 1,2,3,4
```

Query History

```sql
/* Q2: We want to find out the most popular music Genre for each country.
We determine the most popular genre as the genre
with the highest amount of purchases.
Write a query that returns each country along with the top Genre. For countries where
the maximum number of purchases is shared return all Genres. */

WITH popular_genre AS
(
    SELECT COUNT(invoice_line.quantity) AS purchases, customer.country, genre.name, genre.genre_id,
    ROW_NUMBER() OVER(PARTITION BY customer.country ORDER BY COUNT(invoice_line.quantity) DESC) AS RowNo
    FROM invoice_line
    JOIN invoice ON invoice.invoice_id = invoice_line.invoice_id
    JOIN customer ON customer.customer_id = invoice.customer_id
    JOIN track ON track.track_id = invoice_line.track_id
    JOIN genre ON genre.genre_id = track.genre_id
    GROUP BY 2,3,4
    ORDER BY 2 ASC, 1 DESC
)
SELECT * FROM popular_genre WHERE RowNo <= 1
```

```sql
/* Q3: Write a query that determines the customer that has spent the most on music for each country.
Write a query that returns the country along with the top customer and how much they spent.
For countries where the top amount spent is shared, provide all customers who spent this amount. */

WITH Customter_with_country AS (
        SELECT customer.customer_id,first_name,last_name,billing_country,SUM(total) AS total_spending
        ROW_NUMBER() OVER(PARTITION BY billing_country ORDER BY SUM(total) DESC) AS RowNo
        FROM invoice
        JOIN customer ON customer.customer_id = invoice.customer_id
        GROUP BY 1,2,3,4
        ORDER BY 4 ASC,5 DESC)
SELECT * FROM Customter_with_country WHERE RowNo <= 1
```

THANKS!