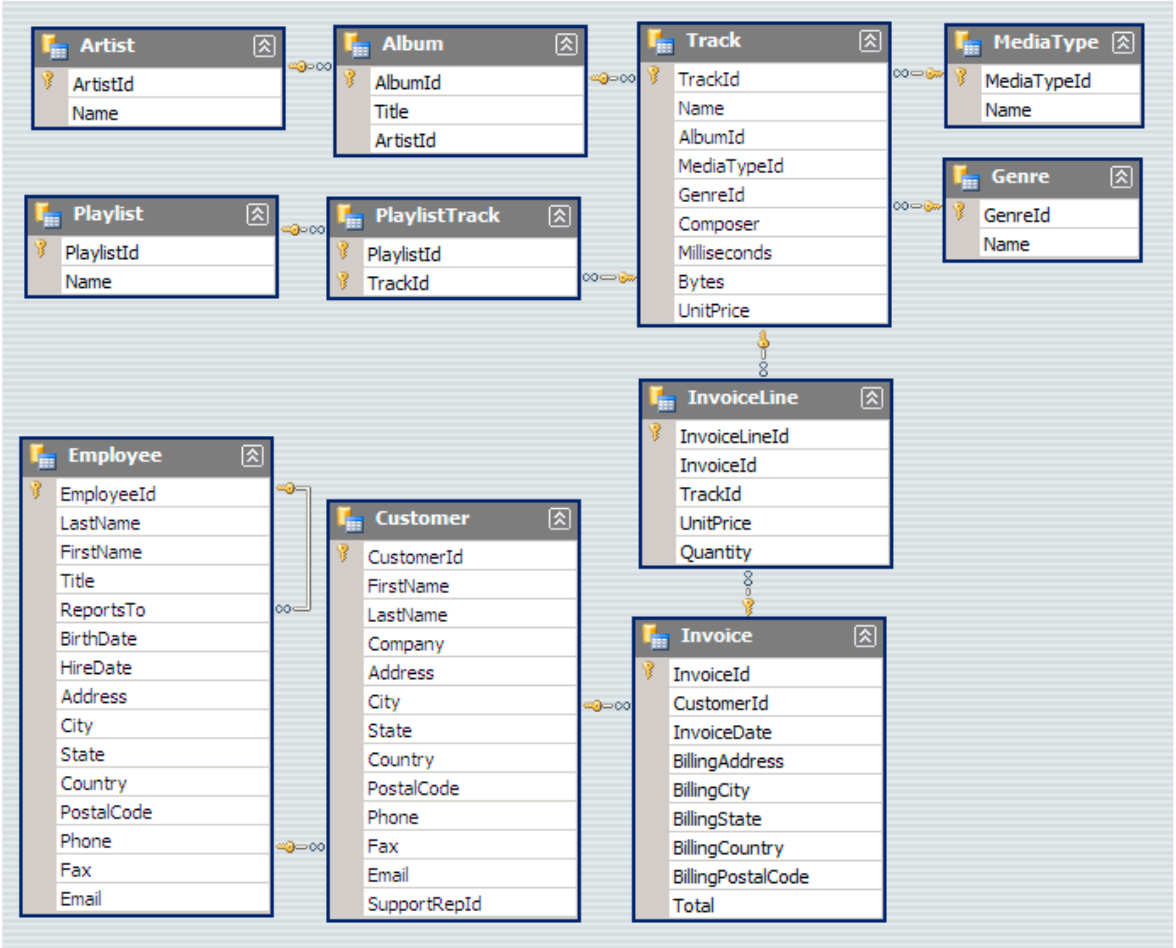
SQL PROJECT- MUSIC STORE DATA ANALYSIS

SCHEMA:



1. Who is the senior most employee based on job title?

```
select concat(trim(e.first_name),' ',trim(e.last_name)) as
full_name , e.title
from employee e
where e.reports_to is null;
```

2. Which countries have the most Invoices?

```
select i.billing_country , count(i.billing_country) as
billing_count from invoice i
group by i.billing_country
```

```
order by billing_count desc
limit 1;
```

3. What are top 3 values of total invoice?

```
select i.total from invoice i
order by i.total desc
limit 3;
```

4. 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 i.billing_city , sum(i.total) as city_total from
invoice i
group by i.billing_city order by city_total desc limit 1;
```

5. Who is the best customer? The customer who has spent the most money will be declared the best customer. Write a query that returns the person who has spent the most money

```
select concat(trim(c.first_name),' ',trim(c.last_name)) as
customer_name, sum(i.total) customer_total from invoice i
join customer c on c.customer_id = i.customer_id
group by c.customer_id
order by customer_total desc
limit 1;
```

6. Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email starting with A

```
select distinct c.email, trim(c.first_name) as first_name
,c.last_name as last_name from customer c
join invoice i on i.customer_id = c.customer_id
join invoice_line il on il.invoice_id = i.invoice_id
join track t on t.track_id = il.track_id
join genre g on g.genre_id = t.genre_id
where g.name ilike 'rock'
order by c.email;
```

7. Let's invite the artists who have written the most rock music in our dataset. Write a query that returns the Artist name and total track count of the top 10 rock bands

```
select a2."name", count(a2.artist_id) as total_track from
track t
join album a on a.album_id = t.album_id
join artist a2 on a2.artist_id = a.artist_id
join genre g on g.genre_id = t.genre_id
where g.name ilike 'rock'
group by a2.artist_id
order by total_track desc
limit 10;
```

8. Return all the track names that have a song length longer than the average song length. Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first

```
select t."name" , t.milliseconds from track t
where t.milliseconds > (select avg(tt.milliseconds) from
track tt)
order by t.milliseconds desc;
```

9. Find how much amount spent by each customer on artists? Write a query to return customer name, artist name and total spent

```
select concat(trim(c.first_name),' ',trim(c.last_name)) as
customer_name , a2."name" as artist_name, sum(i.total) as
total_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 a on t.album_id = a.album_id
join artist a2 on a2.artist_id = a.artist_id
group by c.customer_id , a2.artist_id
order by customer_name , total_spent desc;
```

10. 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

```
select billing_country , customer_name , money_spent from (
select
i.billing_country ,
sum(i.total) as money_spent,
concat(trim(c.first_name),' ',trim(c.last_name)) as
customer_name ,
dense_rank() over(partition by i.billing_country order by
sum(i.total) desc) as customer_rank
from invoice i
join customer c on i.customer_id = c.customer_id
group by i.billing_country , c.customer_id
order by i.billing_country ) tab
where customer_rank = 1;
```

11. 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

```
select billing_country , genre_name from
(select i.billing_country ,
g.name as genre_name,
dense_rank() over(partition by i.billing_country order by
count(g.name) desc) as country_genre_rank
from invoice i
join invoice_line il on il.invoice_id  = i.invoice_id
join track t on il.track_id = t.track_id
join genre g on g.genre_id = t.genre_id
group by i.billing_country , g.name) st;
where country_genre_rank = 1;
```