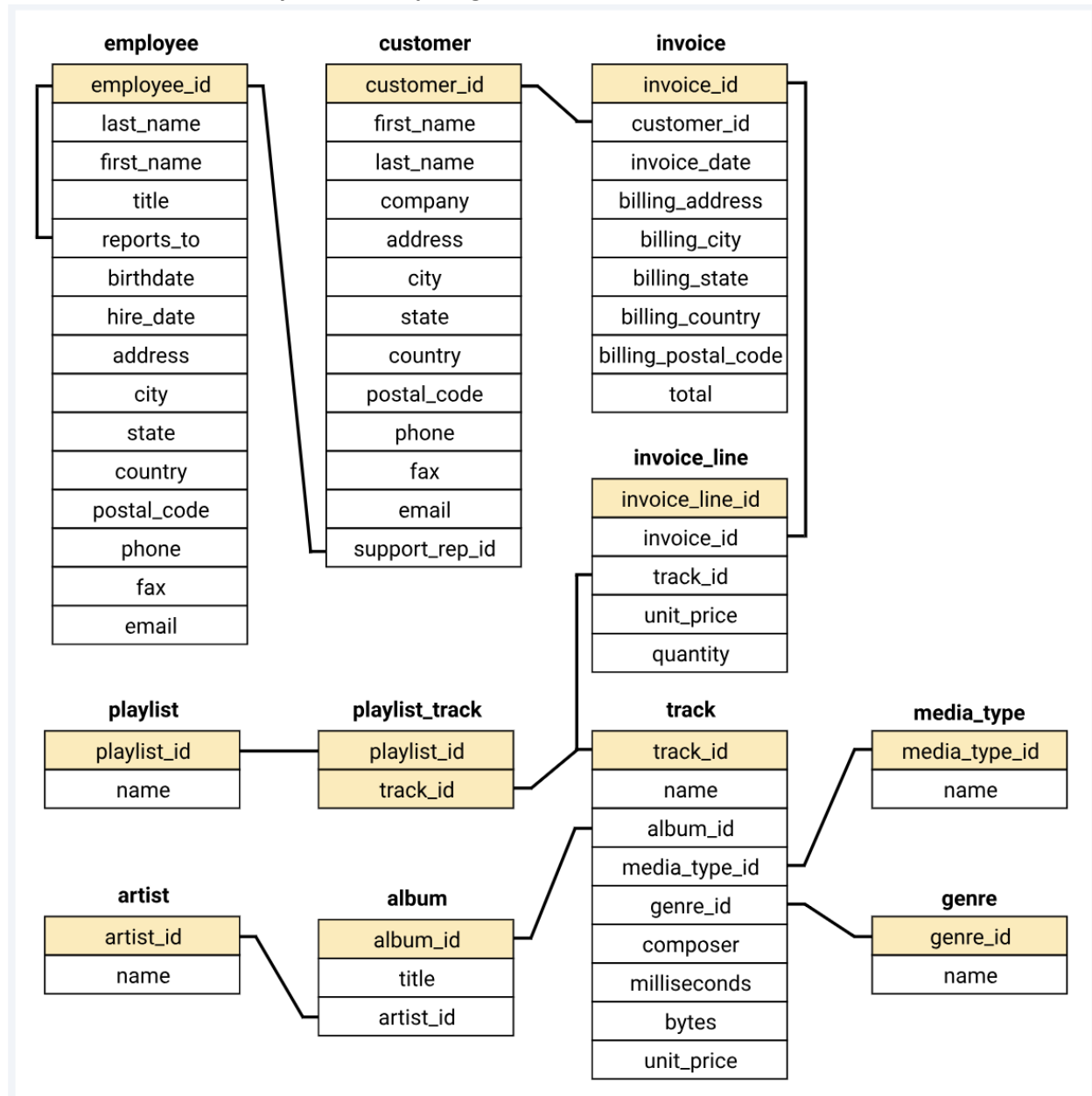# Data Storage and Structure

Chinook Music Store Entity Relationship Diagram

The first draft of a data dictionary:

It's a snowflake schema because there are several dimensions and sub-dimensions generated from the other tables.

Fact Table: invoice, invoice_line and track

Dimension: customer, employee, media_type, playlist_track, playlist, artist, album, genre
Fact Table

Table	Column	Data Types	Description
invoice	invoice_id	integer (32)	a unique identifier for invoice
	customer_id	integer (32)	a unique identifier for customer
	Invoice_date	timestamp without time zone (6)	the date and time when the invoice is made
	billing_address	character varying(50)	a unique identifier bill for address
	billing_city	character varying(50)	a unique identifier bill for city
	billing_state	character varying(50)	a unique identifier bill for state
	billing_counry	character varying(50)	a unique identifier bill for country
	billing_postal_code	character varying(20)	a unique identifier bill for address
	total	float (32)	amount paid by the customer
Invoice_line	Invoice_line _id	integer (32)	a unique identifier for invoice line
	invoice_id	integer (32)	a unique identifier for invoice
	track_id	integer (32)	a unique identifier for track
	unit_price	float(32)	a unique identifier for price
	quantity	integer (32)	a unique amount of product
track	track_id	integer (32)	a unique identifier for track
	name	character varying(50)	first name of album
	album_id	integer (32)	a unique identifier for album
	media_type_id	integer (32)	a unique identifier type for media
	genre_id	integer (32)	a unique identifier for genre
	composer	character varying(50)	a name of composer
	milliseconds	integer (32)	A time in milliseconds for track
	bytes	integer (32)	A unit for each track
	unit_price	float (32)	A unit price for each track

Dimension Table

Table	Column	Data Types	Description
customer	customer_id	integer(32)	a unique identifier for actor
	first_name	character varying(45)	first name of the actor
	last_name	character varying(45)	last name of the actor
	company	character varying(45)	Name for the company
	address	character varying(45)	Address of customer
	city	character varying(45)	Name of the city
	state	character varying(45)	the postal code of an address
	country	character varying(45)	Name of the country
	postal_code	smallint(16)	the postal code of an address
	phone	smallint(16)	the phone number for the address
	fax	smallint(16)	the fax for the address
	email	character varying(45)	the email for the address
	support_rep_id	integer(32)	a unique identifier for support customer
employee	employee_id	integer(32)	the date and time when the last update is made
	last_name	character varying(45)	a unique identifier for address
	first_name	character varying(50)	the first line of an address
	title	character varying(50)	an optional second line of an address
	report_to	character varying(20)	n/a
	birthdate	smallint(16)	The birthdate of employee
	address	character varying(45)	Address of employee
	city	character varying(45)	Name of the city
	state	character varying(10)	the postal code of an address
	country	character varying(20)	Name of the country
	postal_code	smallint(16)	the postal code of an address
	phone	timestamp without time zone(6)	the phone number for the address
	fax	smallint(16)	the fax for the address
	email	character varying(20)	the email for the address
media_type	media_type_id	integer(32)	a unique identifier type for media
	name	character varying(25)	name of media type

genre	genre_id	integer(32)	a unique identifier for genre
	name	character varying(50)	name of genre
playlist_track	playlist_track_id	integer(32)	a unique identifier for playlist_track
	track_id	character varying(50)	a unique identifier for playlist_track
album	album_id	integer(32)	a unique identifier for album
	title	character varying(20)	Name of the album
	artist_id	integer(32)	a unique identifier for artist
playlist	playlist_id	integer(32)	a unique identifier for playlist
	name	character varying(255)	the name of the playlist
artist	artist _id	integer(32)	a unique identifier for artist
	name	character varying(255)	The name of the artist