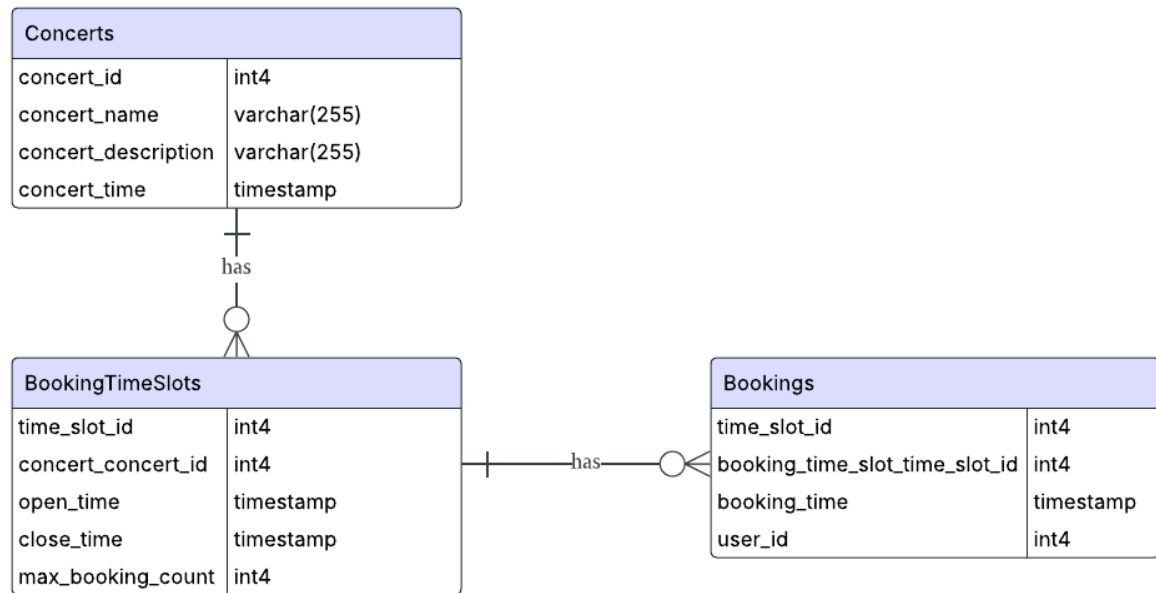# Database Design Document

Concert Ticketing Endpoints

Structure

The structure of the database can be seen as follows:

Each concert may have multiple time slots, and each time slot can be booked by multiple bookings.

Data Dictionary

Data dictionary for Concert table:

Name	Type	Example Value	Description
concert_id (Primary key)	int4	100	
concert_name	varchar(255)	"A's World Tour"	
concert_description	varchar(255)	"First concert sung by A in…"	
concert_time	timestamp	'2026-01-08T04:05:06'	The time the concert begins.

Data dictionary for Booking Time Slot table:

Name	Type	Example Value	Description
time_slot_id (Primary key)	int4	101	
concert_concert_id (Foreign key)	int4	100	ID of the concert the bookings are being made for.
open_time	timestamp	'2026-01-08T09:05:00'	When bookings can start being made to this slot.
close_time	timestamp	'2026-01-08T10:15:00'	When bookings can no longer be made to this slot.
max_booking_count	int4	10000	The maximum amount of bookings that can be made in this time slot.

Data dictionary for Booking table:

Name	Type	Example Value	Description

booking_id(Primary key)	int4	1032	
booking_time_slot_time_slot_id(Foreign key)	int4	101	
booking_time	timestamp	'2026-01-08T10:02:34'	The time the booking was made.
user_id	int4	200	The ID for the user that made the booking.