



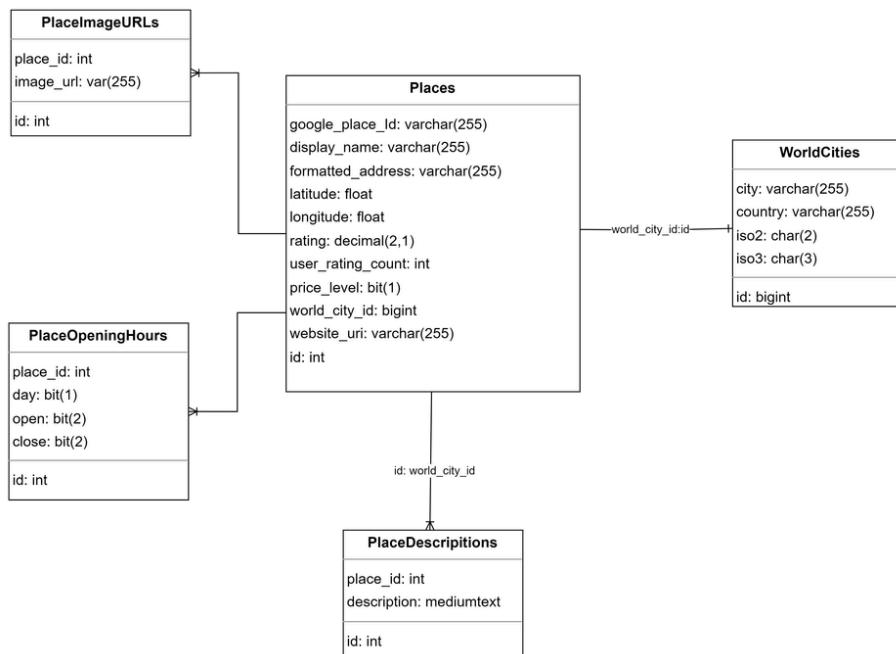
Place Microservice Database Schema

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Introduction

This document provides a comprehensive overview of the database schema designed for the Place microservice. The Place microservice is responsible for managing and storing information related to places, including details such as location, ratings, opening hours, and descriptions. The schema is designed to efficiently store and retrieve place-related data to support the functionality of the Place microservice.

Database Design



Database Schema

Places Table

The `Places` table is the main table in the schema and contains the core information about each place.

Column Name	Date Type	Constraints	Descriptions
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id	INT	Primary Key	Unique identifier for each place
google_place_id	VARCHAR(255)		Google Place ID associated with the place
display_name	VARCHAR(255)		Display name of the place
formatted_address	VARCHAR(255)		Formatted address of the place
latitude	FLOAT		Latitude coordinate of the place
longitude	FLOAT		Longitude coordinate of the place
rating	DECIMAL(2,1)		Average rating of the place (0.0 to 5.0)
user_rating_count	INT		Number of user ratings for the place
price_level	BIT(1)		Price level of the place (e.g., free, cheap, moderate, expensive, very expensive)
world_city_id	BIGINT	Foreign Key	Reference to the associated world city
website_url	VARCHAR(255)		Website URL of the place

WorldCities Table

The `WorldCities` table stores information about world cities associated with places.

Column Name	Data Type	Constraints	Description
id	BIGINT	Primary Key	Unique identifier for each world city
city	VARCHAR(255)		Name of the city
country	VARCHAR(255)		Name of the country
iso2	CHAR(2)		ISO 3166-1 alpha-2 country code
iso3	CHAR(3)		ISO 3166-1 alpha-3 country code

PlaceImageURLs Table

Column Name	Data Type	Constraints	Description
id	INT	Primary Key	Unique identifier for each image URL record
place_id	INT	Foreign Key	Reference to the associated place
image_url	VARCHAR(255)		URL of the place image

PlaceOpeningHours Table

Column Name	Data Type	Constraints	Description
id	INT	Primary Key	Unique identifier for each opening hours record
place_id	INT	Foreign Key	Reference to the associated place
day	BIT(1)		Day of the week (1-7, where 1 is Monday)
open	BIT(2)		Opening time of the place (0-23)
close	BIT(2)		Closing time of the place (0-23)

PlaceDescriptions Table

Column Name	Data Type	Constraints	Description
id	INT	Primary Key	Unique identifier for each description record

place_id	INT	Foreign Key	Reference to the associated place
description	TEXT		Textual description of the place

Relationship

- The `Places` table has a foreign key `world_city_id` that references the `id` column in the `WorldCities` table, establishing a many-to-one relationship between places and world cities.
- The `PlaceImageURLs` table has a foreign key `place_id` that references the `id` column in the `Places` table, establishing a one-to-many relationship between places and their image URLs.
- The `PlaceOpeningHours` table has a foreign key `place_id` that references the `id` column in the `Places` table, establishing a one-to-many relationship between places and their opening hours.
- The `PlaceDescriptions` table has a foreign key `place_id` that references the `id` column in the `Places` table, establishing a one-to-many relationship between places and their descriptions.

Conclusion

This database schema provides a structured and efficient way to store and manage place-related data for the Place microservice. By following this schema design, the microservice can effectively handle place information, support various functionalities, and ensure data integrity and performance.