citibike_data_warehouse

rides_fact
- 🔑 date_sk_id
- 🔑 start_station_sk_id
- 🔑 end_station_sk_id
- 🔑 member_type_sk_id
- 🔑 rideable_type_sk_id
- 🔑 weather_sk_id
- total_usage_seconds #
- total_rides_count #
- total_fare #

date_sk_id →

date_dim
- 🔑 date_sk_id ↰
- date   d
- year   #
- quarter   #
- month   #
- day   #

weather_dim
- 🔑 weather_sk_id ↰
- weather_name   t

weather_sk_id

rideable_type_sk_id

rideable_type_dim
- 🔑 rideable_type_sk_id ↰
- rideable_type_desc   t

member_type_sk_id

member_type_dim
- 🔑 member_type_sk_id ↰
- member_type_desc   t

start_station_sk_id
end_station_sk_id

station_dim
- 🔑 station_sk_id ↰
- station_id   t
- station_name t
- station_lat   #
- station_lng   #

Main Layout

Table date_dim

Idx	Name	Data Type	Description
			Stores date-related information for analysis.
* Pk	date_sk_id	integer DEFAULT nextval('citibike_dw.date_dim_date_sk_id_seq'::regclass)	Unique identifier for the date
*	date	date	Actual date
*	year	integer	Year of the date
*	quarter	integer	Quarter of the year (1-4)
*	month	integer	Month of the year (1-12)
*	day	integer	Day of the month (1-31)

Indexes

Type	Name	On	Description
Pk	date_dim_pkey	date_sk_id	

Table member_type_dim

Idx	Name	Data Type	Description
			Stores information about different types of Citi Bike members
* Pk	member_type_sk_id	integer DEFAULT nextval('citibike_dw.member_type_dim_member_type_sk_id_seq'::regclass)	Unique identifier for the member type
*	member_type_desc	text	Description of the member type

Indexes

Type	Name	On	Description
Pk	member_type_dim_pkey	member_type_sk_id	

Table rideable_type_dim

Idx	Name	Data Type	Description
			Stores information about different types of bikes.
* Pk	rideable_type_sk_id	integer DEFAULT nextval('citibike_dw.rideable_type_dim_rideable_type_sk_id_seq'::regclass)	Unique identifier for the rideable type
*	rideable_type_desc	text	Description of the rideable type

Indexes

Type	Name	On	Description
Pk	rideable_type_dim_pkey	rideable_type_sk_id	

Table rides_fact

Idx	Name	Data Type	Description
			Stores aggregated ride information, including date, start/end stations, member type, bike type, weather, usage duration, ride count, and fare
* Pk	date_sk_id	integer	Foreign key referencing the date dimension
* Pk	start_station_sk_id	integer	Foreign key referencing the start station dimension
* Pk	end_station_sk_id	integer	Foreign key referencing the end station dimension
* Pk	member_type_sk_id	integer	Foreign key referencing the member type dimension
* Pk	rideable_type_sk_id	integer	Foreign key referencing the rideable type dimension
* Pk	weather_sk_id	integer	oreign key referencing the weather dimension
*	total_usage_seconds	integer	Total duration of rides in seconds
*	total_rides_count	integer	Total number of rides

Table rides_fact

*	total_fare	integer	Total fare collected for the rides

Indexes

Type	Name	On	Description
Pk	pk_ride_fact	date_sk_id, start_station_sk_id, end_station_sk_id, member_type_sk_id, rideable_type_sk_id, weather_sk_id	

Foreign Keys

Type	Name	On	Description
	rides_fact_date_sk_id_fkey (date_sk_id) ref date_dim (date_sk_id)		
	rides_fact_start_station_sk_id_fkey (start_station_sk_id) ref station_dim (station_sk_id)		
	rides_fact_end_station_sk_id_fkey (end_station_sk_id) ref station_dim (station_sk_id)		
	rides_fact_member_type_sk_id_fkey (member_type_sk_id) ref member_type_dim (member_type_sk_id)		
	rides_fact_rideable_type_sk_id_fkey (rideable_type_sk_id) ref rideable_type_dim (rideable_type_sk_id)		
	rides_fact_weather_sk_id_fkey (weather_sk_id) ref weather_dim (weather_sk_id)		

Table station_dim

Idx	Name	Data Type	Description
	Stores information about Citi Bike stations		
* Pk	station_sk_id	integer DEFAULT nextval('citibike_dw.station_dim_station_sk_id_seq'::regclass)	Unique identifier for the station
*	station_id	text	Unique identifier for the station in the source system
*	station_name	varchar(100)	Name of the station
	station_lat	numeric	Latitude of the station
	station_lng	numeric	Longitude of the station

Indexes

Type	Name	On	Description
Pk	station_dim_pkey	station_sk_id	

Table weather_dim

Idx	Name	Data Type	Description
	Stores information about weather conditions		
* Pk	weather_sk_id	integer DEFAULT nextval('citibike_dw.weather_dim_weather_sk_id_seq'::regclass)	Unique identifier for the weather condition
*	weather_name	varchar(100)	Description of the weather condition

Indexes

Type	Name	On	Description
Pk	weather_dim_pkey	weather_sk_id	