https://gemini.google.com/u/1/app/a3fdff8118a11194

Okay, let's create the specification for the view public.v\_regions\_list\_localized.

### **Specification:** public.v\_regions\_list\_localized **(View)**

**1. Purpose & Primary Use-Cases**

* **Purpose**: To provide a simplified and denormalized representation of essential region information required for list displays, with textual fields already translated into available languages. Each row in the view represents a region in a specific language.
* **Primary Use-Cases**:
  + Populating lists of regions in a user's selected language on websites and mobile applications (e.g., for Browse available pilgrimage areas).
  + Simplifying queries for a potential GET /regions API endpoint by pre-joining regions with translations for names, descriptions, and primary media details.
  + Providing a basis for filtering regions by various criteria while displaying localized names.

**2. View Definition (SQL DDL)**

SQL

CREATE OR REPLACE VIEW public.v\_regions\_list\_localized

AS

SELECT

r.id AS region\_id,

r.slug AS region\_slug,

-- Core region attributes for list display

r.is\_featured,

r.content\_visibility\_status AS region\_content\_visibility\_status,

r.deleted\_at AS region\_deleted\_at,

r.map\_default\_latitude,

r.map\_default\_longitude,

r.map\_default\_zoom,

-- Language of this particular localized record

region\_name\_trans.language\_code,

-- Translated Region Fields

region\_name\_trans.translated\_text AS region\_name,

region\_desc\_trans.translated\_text AS region\_description,

-- Primary Image Thumbnail Info

m.id AS primary\_media\_id,

-- Assuming 'thumbnail\_S' is a defined key in image\_variants\_json for a small list-view thumbnail

m.image\_variants\_json ->> 'thumbnail\_S' AS primary\_image\_thumbnail\_url,

media\_alt\_text\_trans.translated\_text AS primary\_image\_alt\_text,

(m.media\_status = 'approved') AS media\_is\_approved -- Assuming media has a status like 'approved'

FROM

public.regions r

-- Join for Region Name (drives the language for each view row)

INNER JOIN public.translations region\_name\_trans

ON region\_name\_trans.table\_identifier = 'regions'

AND region\_name\_trans.row\_foreign\_key = r.id::TEXT

AND region\_name\_trans.column\_identifier = 'name'

AND region\_name\_trans.translation\_status = 'published\_live' -- Assuming this status indicates ready-to-use

-- Join for Region Description (e.g., a general description or a specific 'short\_description' if available)

LEFT JOIN public.translations region\_desc\_trans

ON region\_desc\_trans.table\_identifier = 'regions'

AND region\_desc\_trans.row\_foreign\_key = r.id::TEXT

AND region\_desc\_trans.column\_identifier = 'description' -- Using 'description' as the main descriptive field for a list

AND region\_desc\_trans.language\_code = region\_name\_trans.language\_code

AND region\_desc\_trans.translation\_status = 'published\_live'

-- Join for Primary Media (and its translated alt text)

LEFT JOIN public.media m ON r.primary\_media\_id = m.id

LEFT JOIN public.translations media\_alt\_text\_trans

ON media\_alt\_text\_trans.table\_identifier = 'media' -- Assuming 'media' as table\_identifier for media text

AND media\_alt\_text\_trans.row\_foreign\_key = m.id::TEXT -- Assuming media.id is the FK for media translations

AND media\_alt\_text\_trans.column\_identifier = 'alt\_text'

AND media\_alt\_text\_trans.language\_code = region\_name\_trans.language\_code

AND media\_alt\_text\_trans.translation\_status = 'published\_live'

WHERE

-- Ensure only active/published regions are initially considered by the view's base query

r.deleted\_at IS NULL AND r.content\_visibility\_status = 'published';

-- If media must be approved to be shown, add:

-- AND (m.id IS NULL OR m.media\_status = 'approved');

-- This is reflected in the media\_is\_approved flag instead for filtering flexibility by the consumer.

COMMENT ON VIEW public.v\_regions\_list\_localized IS 'Provides a denormalized and localized list of regions for display purposes, joining regions with their translations for name, description, and primary media details in various languages. Each row represents a region in one specific language. Version 1.0';

**3. Output Columns**

| **Column Name** | **Data Type** | **Description** |
| --- | --- | --- |
| region\_id | INTEGER | The unique ID of the region (from public.regions.id). |
| region\_slug | TEXT | The URL-friendly slug of the region (from public.regions.slug). |
| is\_featured | BOOLEAN | Flag indicating if the region is featured. |
| region\_content\_visibility\_status | content\_visibility\_status\_enum | Visibility status of the base region record. |
| region\_deleted\_at | TIMESTAMPTZ | Soft deletion timestamp for the base region record. |
| map\_default\_latitude | DOUBLE PRECISION | Default latitude for map centering. |
| map\_default\_longitude | DOUBLE PRECISION | Default longitude for map centering. |
| map\_default\_zoom | SMALLINT | Default zoom level for maps. |
| language\_code | TEXT | The language code (e.g., 'en', 'it') for the translated textual fields in this row. |
| region\_name | TEXT | The translated name of the region in the specified language\_code. |
| region\_description | TEXT | The translated general description of the region in the specified language\_code. |
| primary\_media\_id | INTEGER | The ID of the region's primary media image. |
| primary\_image\_thumbnail\_url | TEXT | URL for a small thumbnail of the region's primary image (e.g., from image\_variants\_json ->> 'thumbnail\_S'). |
| primary\_image\_alt\_text | TEXT | The translated alt text for the region's primary image in the specified language\_code. |
| media\_is\_approved | BOOLEAN | Indicates if the linked primary media item is approved (based on media.media\_status). |

**4. Example Usage**

To get a list of featured regions in English, ordered by name:

SQL

SELECT

region\_id,

region\_slug,

region\_name,

region\_description,

primary\_image\_thumbnail\_url

FROM

public.v\_regions\_list\_localized

WHERE

language\_code = 'en'

AND is\_featured = TRUE

-- AND (media\_is\_approved = TRUE OR primary\_media\_id IS NULL) -- If strict media approval is needed at query time

ORDER BY

region\_name ASC

LIMIT 10 OFFSET 0;

**5. Underlying Tables & Key Joins**

* **Primary Table**: public.regions (aliased as r)
* **Key Joins**:
  + public.translations (multiple times for region\_name, region\_description, media\_alt\_text). Joins are based on table\_identifier, row\_foreign\_key, column\_identifier, language\_code, and translation\_status = 'published\_live'.
  + public.media (as m): For primary image details.

**6. RLS (Row-Level Security) Considerations**

* The view will be defined with SECURITY INVOKER by default. RLS policies on public.regions, public.media, and public.translations will apply based on the querying user's permissions.
* The view's base WHERE clause (r.deleted\_at IS NULL AND r.content\_visibility\_status = 'published') filters for publicly visible regions.
* Consumers of the view might also want to filter on media\_is\_approved = TRUE if display of unapproved media is undesirable.

**7. Performance & Optimization Notes**

* **Indexing**:
  + Crucial indexes on public.translations: A composite index on (table\_identifier, column\_identifier, language\_code, row\_foreign\_key, translation\_status) or similar is vital.
  + Ensure r.primary\_media\_id in public.regions is indexed (as it's an FK, this is often automatic but good to verify).
  + Indexes on public.regions.is\_featured, public.regions.content\_visibility\_status, and public.regions.deleted\_at will aid filtering.
* **Join Strategy**: The INNER JOIN for region\_name\_trans ensures regions must have a published name in at least one language to appear. Other translated fields use LEFT JOIN.
* **Materialized View**: If read performance for common languages is critical, this view could be materialized and refreshed periodically.
* **Filtering**: Always include WHERE language\_code = 'desired\_lang' when querying.

**8. Assumptions & Dependencies**

* Assumes public.translations.translation\_status column exists and 'published\_live' is the correct value for visible translations. The column\_identifier for the main region description is assumed to be 'description'.
* Assumes public.media.media\_status column exists and 'approved' is the correct value for visible media.
* Assumes specific keys like 'thumbnail\_S' exist in public.media.image\_variants\_json.
* Assumes table\_identifier for media translations is 'media' and column\_identifier is 'alt\_text'.

**9. Next-Action Checklist**

* 🟠 **Finalize** translation\_status **and** media\_status **values**: Confirm the exact values to use for 'published' or 'approved' statuses in translations and media tables.
* 🟠 **Confirm** image\_variants\_json **keys**: Verify the specific key for thumbnails (e.g., thumbnail\_S) in media.image\_variants\_json.
* 🟠 **Confirm** column\_identifier **for Region Description**: Ensure 'description' is the correct column\_identifier for the desired descriptive text in translations for regions, or adjust if a specific 'short\_description' field is used for lists.
* 🟠 **Test View Definition**: Create and thoroughly test the view with sample data, covering various languages and scenarios (missing descriptions, missing media, unapproved media).
* 🟢 **Create Indexes**: Ensure optimal indexes exist on public.translations and public.regions supporting the view's joins and filters.
* 🟢 **Integrate into API**: Update any GET /regions (list) API endpoint logic to query this view.
* 🟢 **Monitor Performance**: After deployment, monitor the performance and consider materialization if needed.
* 🟢 **Document for API Consumers**: Clearly document the view's output columns and effective querying patterns.