<https://gemini.google.com/u/1/app/b76d14705d5101f9?is_sa=1&android-min-version=301356232&ios-min-version=322.0&campaign_id=bkws&utm_source=google&utm_medium=cpc&utm_campaign=2024enUS_gemfeb&pt=9008&mt=8&ct=p-growth-sem-bkws>

<https://gemini.google.com/u/1/app/42a77d08d7a45bcb>

\* \* \* \* \*

Production-Ready Specification: public.seasons\_master Table

Version: 2.1 (V2.1 Checklist REV 05-18-25-A Applied)

Date: May 18, 2025

1\. Purpose & Primary Use-Cases

Stores the definitive list of seasons (e.g., Spring, Summer, Autumn, Winter) that can be associated with curated itineraries to indicate optimal times for undertaking them. This table supports translatable season names and descriptions, allows for consistent filtering and display, and can include icons.

\*Key User-Story Touchpoints:\*

- Pilgrim (Anna): Enables filtering of curated itineraries based on recommended seasons (A7). Helps in planning (A1, A2).

- Platform Administrator (Admin Team) / Regional Content Manager (Sofia): Allows management of available seasons and assignment to itineraries (D2).

2\. Schema

| Column | Data Type | Constraints | Description (Translatable fields marked) |

| `id` | `integer` | Primary Key, Generated always as identity | Unique identifier for each season. |

| `season\_code` | `text` | Not Null, Unique, `CHECK (char\_length(season\_code) <= 50 AND season\_code = upper(season\_code) AND season\_code ~ '^[A-Z\_]+$')` | A stable, machine-readable code (e.g., "SPRING"). Max 50 chars. |

| `name` | `text` | Not Null, Unique, `CHECK (char\_length(name) <= 100)` | The display name of the season (Base language: English). (Translatable) Max 100 chars. |

| `description` | `text` | Nullable | A short description of the season or relevant notes (Base language: English). (Translatable) |

| `icon\_identifier` | `text` | Nullable, `CHECK (icon\_identifier IS NULL OR char\_length(icon\_identifier) <= 100)` | Optional identifier (e.g., CSS class, image name, SVG key) for an icon representing this season. |

| `sort\_order` | `integer` | Not Null, Default `0` | Optional integer to control the display order of seasons in UI lists/filters. |

| `is\_active` | `boolean` | Not Null, Default `true` | Whether the season is currently active and available for assignment/display. |

| `created\_at` | `timestamp with time zone` | Not Null, Default `now()` | Timestamp of record creation. |

| `created\_by\_profile\_id` | `uuid` | Foreign Key to `public.profiles(id)` ON DELETE SET NULL, Nullable | Profile ID of the user who created this record. |

| `updated\_at` | `timestamp with time zone` | Not Null, Default `now()` | Timestamp of last update (auto-updated by trigger). |

| `updated\_by\_profile\_id` | `uuid` | Foreign Key to `public.profiles(id)` ON DELETE SET NULL, Nullable | Profile ID of the user who last updated this record. |

3\. PostgreSQL DDL

SQL

```

CREATE TABLE public.seasons\_master (

id INTEGER GENERATED ALWAYS AS IDENTITY PRIMARY KEY,

season\_code TEXT NOT NULL UNIQUE CHECK (char\_length(season\_code) <= 50 AND season\_code = upper(season\_code) AND season\_code ~ '^[A-Z\_]+$'),

name TEXT NOT NULL UNIQUE CHECK (char\_length(name) <= 100), -- Was name\_en, (Translatable)

description TEXT, -- Was description\_en, (Translatable)

icon\_identifier TEXT CHECK (icon\_identifier IS NULL OR char\_length(icon\_identifier) <= 100), -- Added

sort\_order INTEGER NOT NULL DEFAULT 0,

is\_active BOOLEAN NOT NULL DEFAULT true,

created\_at TIMESTAMPTZ NOT NULL DEFAULT now(),

created\_by\_profile\_id UUID REFERENCES public.profiles(id) ON DELETE SET NULL,

updated\_at TIMESTAMPTZ NOT NULL DEFAULT now(),

updated\_by\_profile\_id UUID REFERENCES public.profiles(id) ON DELETE SET NULL

);

-- Indexes

CREATE INDEX IF NOT EXISTS idx\_seasons\_master\_is\_active ON public.seasons\_master(is\_active);

CREATE INDEX IF NOT EXISTS idx\_seasons\_master\_sort\_order ON public.seasons\_master(sort\_order);

CREATE INDEX IF NOT EXISTS idx\_seasons\_master\_created\_by ON public.seasons\_master(created\_by\_profile\_id) WHERE created\_by\_profile\_id IS NOT NULL;

CREATE INDEX IF NOT EXISTS idx\_seasons\_master\_updated\_by ON public.seasons\_master(updated\_by\_profile\_id) WHERE updated\_by\_profile\_id IS NOT NULL;

-- Comments

COMMENT ON TABLE public.seasons\_master IS 'Master lookup table for seasons (e.g., Spring, Summer) to indicate optimal travel times for itineraries. Name and description are translatable. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.id IS 'PK. Unique identifier for each season. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.season\_code IS 'A stable, machine-readable code for the season (e.g., "SPRING"). Uppercase, letters, underscores. Max 50 chars. Must be unique. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.name IS 'The display name of the season (Base language: English). Translatable via public.translations. Max 100 chars. Must be unique. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.description IS 'A short description of the season or relevant notes (Base language: English). Translatable via public.translations. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.icon\_identifier IS 'Optional identifier (e.g., CSS class, image name, SVG key) for an icon representing this season. Max 100 chars. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.sort\_order IS 'Optional integer to control the display order of seasons in UI lists/filters (e.g., Spring first). Lower numbers display first. Default 0. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.is\_active IS 'Whether the season is currently active and available for assignment/display. Default true. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.created\_at IS 'Timestamp of record creation. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.created\_by\_profile\_id IS 'Profile ID of the user who created this record. FK to public.profiles.id. Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.updated\_at IS 'Timestamp of last update (auto-updated by trigger). Version 2.1.';

COMMENT ON COLUMN public.seasons\_master.updated\_by\_profile\_id IS 'Profile ID of the user who last updated this record. FK to public.profiles.id. Version 2.1.';

-- Initial Population Example (adapt 'PUT\_SYSTEM\_USER\_UUID\_HERE' as needed)

INSERT INTO public.seasons\_master (season\_code, name, description, icon\_identifier, sort\_order, created\_by\_profile\_id, updated\_by\_profile\_id) VALUES

('SPRING', 'Spring', 'Typically March to May, pleasant temperatures and blooming flora.', 'flower\_icon', 10, 'PUT\_SYSTEM\_USER\_UUID\_HERE', 'PUT\_SYSTEM\_USER\_UUID\_HERE'),

('SUMMER', 'Summer', 'June to August, can be hot, longer daylight hours.', 'sun\_icon', 20, 'PUT\_SYSTEM\_USER\_UUID\_HERE', 'PUT\_SYSTEM\_USER\_UUID\_HERE'),

('AUTUMN', 'Autumn', 'September to November, cool weather and autumn colors.', 'leaf\_icon', 30, 'PUT\_SYSTEM\_USER\_UUID\_HERE', 'PUT\_SYSTEM\_USER\_UUID\_HERE'),

('WINTER', 'Winter', 'December to February, colder, potential for snow, shorter days.', 'snowflake\_icon', 40, 'PUT\_SYSTEM\_USER\_UUID\_HERE', 'PUT\_SYSTEM\_USER\_UUID\_HERE'),

('YEAR\_ROUND', 'Year-round', 'Suitable for travel throughout the year, though conditions may vary.', 'calendar\_icon', 5, 'PUT\_SYSTEM\_USER\_UUID\_HERE', 'PUT\_SYSTEM\_USER\_UUID\_HERE');

-- Seed corresponding English 'name' and 'description' into public.translations table.

```

4\. Triggers/Functions

- Audit Metadata Trigger:

SQL

```

-- Assuming public.set\_master\_table\_audit\_meta() is defined (see terrain\_types\_master example)

CREATE TRIGGER trigger\_seasons\_master\_audit\_meta

BEFORE INSERT OR UPDATE ON public.seasons\_master

FOR EACH ROW

EXECUTE FUNCTION public.set\_master\_table\_audit\_meta();

```

\*Comment on Trigger\*: Manages `created\_at`, `updated\_at`, `created\_by\_profile\_id`, and `updated\_by\_profile\_id` columns.

- Orphaned Translation Cleanup Trigger:

SQL

```

CREATE OR REPLACE FUNCTION public.cleanup\_seasons\_master\_translations()

RETURNS TRIGGER AS $$

BEGIN

DELETE FROM public.translations

WHERE table\_identifier = 'seasons\_master'

AND row\_foreign\_key = OLD.id::text;

RETURN OLD;

END;

$$ LANGUAGE plpgsql SECURITY DEFINER;

ALTER FUNCTION public.cleanup\_seasons\_master\_translations() SET search\_path = public;

CREATE TRIGGER trigger\_cleanup\_seasons\_master\_translations

AFTER DELETE ON public.seasons\_master

FOR EACH ROW

EXECUTE FUNCTION public.cleanup\_seasons\_master\_translations();

```

\*Comment on Trigger\*: After a season is deleted, this trigger removes associated translations for `name` and `description` from `public.translations`.

5\. JSON Schema Mirror

JSON

```

{

"title": "seasons\_master",

"description": "Master lookup table for seasons (e.g., Spring, Summer) to indicate optimal travel times for itineraries. Name and description are translatable. Version 2.1.",

"type": "object",

"properties": {

"id": {

"type": "integer",

"readOnly": true,

"description": "PK. Unique identifier for each season. Version 2.1."

},

"season\_code": {

"type": "string",

"maxLength": 50,

"pattern": "^[A-Z\_]+$",

"description": "A stable, machine-readable code for the season (e.g., \"SPRING\"). Uppercase, letters, underscores. Must be unique. Version 2.1."

},

"name": {

"type": "string",

"maxLength": 100,

"description": "The display name of the season (Base language: English). Translatable via public.translations. Max 100 chars. Must be unique. Version 2.1."

},

"description": {

"type": ["string", "null"],

"description": "A short description of the season or relevant notes (Base language: English). Translatable via public.translations. Version 2.1."

},

"icon\_identifier": {

"type": ["string", "null"],

"maxLength": 100,

"description": "Optional identifier (e.g., CSS class, image name, SVG key) for an icon representing this season. Max 100 chars. Version 2.1."

},

"sort\_order": {

"type": "integer",

"default": 0,

"description": "Optional integer to control the display order of seasons in UI lists/filters (e.g., Spring first). Lower numbers display first. Default 0. Version 2.1."

},

"is\_active": {

"type": "boolean",

"default": true,

"description": "Whether the season is currently active and available for assignment/display. Default true. Version 2.1."

},

"created\_at": {

"type": "string",

"format": "date-time",

"readOnly": true,

"description": "Timestamp of record creation. Read-only. Version 2.1."

},

"created\_by\_profile\_id": {

"type": ["string", "null"],

"format": "uuid",

"description": "Profile ID of the user who created this record. FK to public.profiles.id. Read-only. Version 2.1.",

"readOnly": true

},

"updated\_at": {

"type": "string",

"format": "date-time",

"readOnly": true,

"description": "Timestamp of last update (auto-updated by trigger). Read-only. Version 2.1."

},

"updated\_by\_profile\_id": {

"type": ["string", "null"],

"format": "uuid",

"description": "Profile ID of the user who last updated this record. FK to public.profiles.id. Read-only. Version 2.1.",

"readOnly": true

}

},

"required": [

"season\_code",

"name",

"sort\_order",

"is\_active",

"created\_at",

"updated\_at"

],

"primary\_key": ["id"],

"unique\_constraints": [

{"columns": ["season\_code"], "name": "seasons\_master\_season\_code\_key"},

{"columns": ["name"], "name": "seasons\_master\_name\_key"}

]

}

```

6\. Relationships & Integrity

- This table is a parent table.

- Referenced by `curated\_itinerary\_to\_season.season\_id` (FK) with `ON DELETE RESTRICT`.

- Audit FKs to `public.profiles(id)`.

7\. Multilingual Strategy

- `name` and `description` store base language (English) text.

- Translations managed in `public.translations`, linked by `table\_identifier = 'seasons\_master'`, `column\_identifier = 'name'` or `'description'`, and `row\_foreign\_key = seasons\_master.id::TEXT`.

- An `AFTER DELETE` trigger handles orphan cleanup.

8\. Role-Based Workflow & RLS Notes

- Workflow: `is\_active` flag. Audit columns track changes.

- RLS Policies: Admins have full CUD. Authenticated/Anonymous users have `SELECT` on active seasons.

9\. ENUM vs Lookup Discussion

- This table \*is\* the result of promoting a previous `text[]` field for seasons for better consistency, translatability, and manageability.

10\. UI/UX Enablement

- `name` (translated), `icon\_identifier` (if added), `sort\_order` power UI filters and displays. `is\_active` filters selection lists.

11\. Auditing & Lifecycle Management

- Audit Columns: `created\_at`, `updated\_at`, `created\_by\_profile\_id`, `updated\_by\_profile\_id`.

- Lifecycle: `is\_active` flag. `ON DELETE RESTRICT` from junction table protects active seasons.

12\. Scalability & Future-Proofing

- Small table, easily extensible.

13\. Seed Data

- Initial seed data for `season\_code`, `name` (base English), `icon\_identifier`, `description`, `sort\_order`, and audit FKs required.

- Corresponding English `name` and `description` translations to be seeded into `public.translations`. (Example DDL includes seed data for the master table).

14\. Next-Action Checklist

- 🔴 Implement DDL: Create `public.seasons\_master` with corrected `name`/`description` columns, new `icon\_identifier` column, audit columns, indexes, and comments.

- 🔴 Implement Audit Trigger: Apply `public.set\_master\_table\_audit\_meta` (or similar).

- 🔴 Implement Orphaned Translation Cleanup Trigger.

- 🔴 Populate Seed Data: Insert initial seasons into this table and their English names/descriptions into `public.translations`.

- 🟠 Implement RLS Policies.

- 🟠 Verify FK constraints in `curated\_itinerary\_to\_season` point correctly to this table.

- 🟢 Ensure Admin UI uses this table for season management and selection.

\* \* \* \* \*