Service Contract Marito

This document outlines the service-level agreement and technical contract for the **Marito Platform**. It defines the expectations, responsibilities, and communication structure between the backend and frontend to ensure consistent, secure, and well-defined interactions.

All endpoints are prefixed with /api/v1, and all JSON payloads follow standard HTTP request/response patterns.

Authentication Service

The Marito Authentication Service provides essential identity and access management capabilities for the platform. It includes user registration, login with OAuth2, access token issuance, and authenticated endpoints for retrieving user details or generating signed URLs.

Authentication Endpoints

/api/v1/auth/register

Method:

POST

Description:

Registers a new user.

Example Request:

```
{
  "email": "user@example.com",
  "first_name": "string",
  "last_name": "string",
  "role": "linguist",
  "profile_pic_url": "string",
```

```
"password": "string"
}
```

Possible Response Codes:

- 201 Successful Response
- 422 Validation Error

/api/v1/auth/login

Method:

POST

Description:

OAuth2 compatible token login, get an access token for future requests. The frontend LoginPage.tsx sends 'email' (as username) and 'password'.

Example Request:

```
{
   "grant_type" : "string",
   "username" : "string",
   "password" : "string",
   "scope" : "string",
   "client_id" : "string",
   "client_secret" : "string"
}
```

Possible Response Codes:

- 200 Successful Response
- 422 Validation Error

/api/v1/auth/me

Method:

GET

Description:

Get current logged-in user's details.

Possible Response Codes:

• 200 Successful Response

Uploads Endpoints

/api/v1/uploads/generate-signed-url

Method:

POST

Description:

Generates a temporary, secure URL that allows an authenticated user to upload a file directly to a private Google Cloud Storage bucket.

Example Request:

```
{
    "content_type": "string",
    "filename": "string"
}
```

Possible Response Codes:

- 200 Successful Response
- 422 Validation Error

Admin Endpoints

/api/v1/admin/users/{user_id}/role

Method:

GET

Description:

Updates a user role

Required Parameter:

• user_id: string

new_role : string

Possible Response Codes:

- 200 Successful Response
- 422 Validation Error

/api/v1/admin/users

Method:

GFT

Description:

Fetch all users

Possible Response Codes:

• 200 Successful Response

/api/v1/admin/users/{user_id}/uploads

Method:

GET

Description:

Fetch user uploads

Required Parameter:

• user_id: string

Possible Response Codes:

- 200 Successful Response
- 422 Validation Error

/api/v1/admin/download-url

Method:

GET

Description:

Get signed download url.

Required Parameter:

• gcs_key: string

Possible Response Codes:

- 200 Successful Response
- 422 Validation Error

/api/v1/admin/users-with-uploads

Method:

GET

Description:

Fetch users with uploads.

Possible Response Codes:

• 200 Successful Response

Health Endpoints

/

Method:

GET

Description:

Health check endpoint. Used to verify that the Search Service is online and responsive.

Possible Response Codes:

• 200 Successful Response

Search Service

The Search Service is responsible for querying the glossary database to retrieve relevant terms, suggest matching entries, and support health check functionality. This service powers both precise and fuzzy search across multiple filters including language and domain.

Search Endpoints

/api/v1/search/

Method:

GET

Description:

Searches database for terms matching given parameters.

Parameters:

query: string

• language: string

domain: string

• sort_by: name or popularity

• page: number

page_size : number

fuzzy: boolean

Possible Response Codes:

- 201 Successful Response
- 422 Validation Error

Suggest Endpoints

/api/v1/suggest/

Method:

GET

Description:

Returns search suggestions based on a partial query using fuzzy matching.

Parameters:

• query: string

Possible Response Codes:

- 201 Successful Response
- 422 Validation Error

/api/v1/glossary/categories

Method:

GET

Description:

Retrieves all available glossary categories.

Possible Response Codes:

• 200 OK

/api/v1/glossary/categories/{category_name}/terms

Method:

GET

Description:

Fetches all terms associated with a specific category.

Path Parameters:

category_name : string

Possible Response Codes:

200 OK

422 Validation Error

/api/v1/glossary/terms/{term_id}/translations

Method:

GET

Description:

Fetches all translations for a specific term.

Path Parameters:

• term_id: string

Possible Response Codes:

- 200 OK
- 422 Validation Error

/api/v1/glossary/search

Performs a simple term search across all categories.

Query Parameters:

query: string

Possible Response Codes:

- 200 OK
- 422 Validation Error

/api/v1/glossary/search

Method:

POST

Description:

Advanced search with filters (language, domain) and pagination.

Query Parameters:

• query: string

```
• domain: string
```

• language : string

• page: integer (default: 1)

• limit: integer (default: 10)

Request Body:

```
{
    "query": "string",
    "domain": "string",
    "language": "string"
}
```

Possible Response Codes:

- 200 OK
- 422 Validation Error

/api/v1/glossary/domains

Method:

GET

Description:

Retrieves all available glossary domains.

Possible Response Codes:

200 OK

/api/v1/glossary/languages

Method:

GET

Description:

Retrieves all available glossary languages.

Possible Response Codes:

200 OK

/api/v1/glossary/translate

Method:

POST

Description:

Translates a list of terms into one or more target languages.

Query Parameters:

```
• source_language: string (default: English)
```

• domain: string

Request Body:

```
{
    "terms": ["string"],
    "target_languages": ["string"]
}
```

Possible Response Codes:

- 200 OK
- 422 Validation Error

/api/v1/glossary/stats

Method:

GET

Description:

Returns statistics about the glossary.

Possible Response Codes:

• 200 OK

/api/v1/glossary/random

Method:

GET

Description:

Returns one or more random terms.

Query Parameters:

• count: integer (default: 1)

Possible Response Codes:

- 200 OK
- 422 Validation Error

Health Endpoints

/

Method:

Get

Description:

Health check endpoint. Used to verify that the Search Service is online and responsive.

Possible Response Codes:

- 201 Successful Response
- 500 Internal Server Error

Analytics Serivce

The Marito Analytics Service provides descriptive statistics and insights derived from the glossary data. It includes coverage metrics, length distributions, and summary reports for terms, languages, and categories.

Analytics Endpoints

/api/v1/analytics/descriptive

Method:

GET

Description:

Returns all descriptive analytics in a combined legacy format.

Possible Response Codes:

200 OK

/api/v1/analytics/descriptive/category-frequency

Method:

GET

Description:

Returns frequency distribution of terms across different categories.

Possible Response Codes:

• 200 OK

/api/v1/analytics/descriptive/language-coverage

Method:

GET

Description:

Returns percentage of filled translations per language.

Possible Response Codes:

• 200 OK

/api/v1/analytics/descriptive/term-length

Method:

GET

Description:

Returns average term lengths per language.

Possible Response Codes:

200 OK

/api/v1/analytics/descriptive/definition-length

Method:

GET

Description:

Returns average definition lengths per language.

Possible Response Codes:

200 OK

/api/v1/analytics/descriptive/unique-terms

Method:

GET

Description:

Returns the number of unique terms per language.

Possible Response Codes:

200 OK

1

Method:

GET

Description:

Health check endpoint.

Possible Response Codes:

• 200 OK

Linguist Service

The Linguist Application Service enables authenticated users to submit documentation for linguist verification. This includes uploading identity documents, CVs, certifications, and optional research papers.

Linguist Endpoints

/api/v1/linguist-applications/

Method:

POST

Description:

Creates a new linguist application for the currently authenticated user.

Request Body:

```
json
CopyEdit
{
  "id_document_url": "string",
  "cv_document_url": "string",
  "certifications_document_url": "string",
  "research_papers_document_url": "string"
}
```

Possible Response Codes:

- 201 Created
- 422 Validation Error

Vote Service

The Vote Service enables users to cast votes on glossary terms. Each term supports upvotes and downvotes per user, and vote counts are recalculated in real-time.

Vote Endpoints

/api/v1/votes/

Method:

POST

Description:

Casts or updates a vote for a specific term by the authenticated user. Sends the updated vote count in the response.

Request Body:

```
{
  "term_id": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
  "vote": "upvote"
}
```

Possible Response Codes:

200 OK

```
{
    "term_id": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
    "upvotes": 0,
    "downvotes": 0,
    "user_vote": "upvote"
}
```

• 422 Validation Error