EDB Geography game backend API document

|  |  |
| --- | --- |
| Version | 1.3 |

Changelogs

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Description | Version | Responder |
| 15th Dec 2020 | Initial release of this document | 0.1 Alpha | PO |
| 16th Dec 2020 | Complete basic structure on this document | 1.0 | PO |
| 16th Dec 2020 | Fix typo | 1.1 | PO |
| 16th Dec 2020 | No more PUT method API | 1.2 | PO |
| 22nd Dec 2020 | Remove API  GET /api/leaderboard/{game\_id}  GET /api/leaderboard/{game\_id}/school/{school\_id}  Add API  GET /api/leaderboard  GET /api/leaderboard/{school\_id}  GET /api/profile  POST /api/logout | 1.3 | PO |
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# Basic Concepts

## Type notation

Every API request and response will be shown as list format. Every type attribute will show as notation format. The rules of type notation format are list below.

* Basic type
  + String
  + Int
  + double
  + enum()
  + Object
* Advanced modifier
  + [String]
  + String?
  + Enum (AAAStatus)
  + /

### Basic type

#### String

#### Int

#### Double

#### enum

#### Object

### Advanced modifier

Modifier can be combined with any other modifier. However, modifier cannot combine same modifier itself and cannot mix the format together.

These modifiers are allowed

* [String]?
* String / Int
* [String] / int?
* [String] / [int]
* [String]? / [int]?

These modifiers are now allowed

* [[String]]
* [String / Int]

Note: type notation is not case sensitive.

## Global response code

Every response must contain an integer typed attribute called “code”. When code is 0, API is execute succeeded without any errors. If code > 0, API is executed with error. Please kindly check the error code explanation of API method.

Note: Code never less than 0.

# API

## POST /api/authenticate

Authenticate with username and password

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| loginId | String |  |
| password | String |  |
| avatarIndex | Int? | In normal situation, this field should be omitted |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| user | User? |  |
| authenticationToken | String? |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 1 | loginId or password is not set |
| 2 | User not found |
| 3 | Password incorrect |
| 4 | LoginId and password is correct but please provide avatarIndex and try again |
|  |  |
|  |  |
|  |  |

## POST /api/logout

Logout

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## POST /api/profile

Modify current authenticated user profile

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| avatarIndex | Int? |  |
| avatarImageUrl | String? |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| user | User |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Get /api/profile

Get current authenticated user profile

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| user | User |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 1 | User are not login |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## GET /api/game

List all available games

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| games | [Game] |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## GET /api/leaderboard

Get the leaderboard for school score

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| leaderboards | [Leaderboard] |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |

## GET /api/leaderboard/{school\_id}

Get the leaderboard with specified game and school\_id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| school\_id | int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| leaderboards | [Leaderboard] |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 4 | Specified school\_id is not found |
|  |  |
|  |  |
|  |  |

## GET /api/game/{game\_id}/log

List the game logs with specified game\_id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| game\_id | int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| gameLogs | [GameLog] |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Specified game\_id is not found |
|  |  |
|  |  |
|  |  |

## POST /api/game/{game\_id}/log

Submit the gamelog

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| game\_id | int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| status | Enum(GameLogStateEnum) |  |
| score | Double? | 0 if omitted |
| extra | String | Custom data field, put anything as you want |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| gameLogs | GameLog |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Specified game\_id is not found |
| 3 | Status is incorrect |
| 4 | Score < 0 / NaN/-INF/+INF |
| 5 | Extra is null |

## GET /api/announcement

Get the announcement list

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| announcement | Announcement |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |

## GET /api/announcement/{announcement\_id}

Get announcement with specified announcement id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| announcement \_id | Int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| announcements | [Announcement] |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |

## POST /api/announcement

Create a new announcement

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| title | String |  |
| content | String |  |
| start | Epoch? | Epoch.now() is omitted |
| end | Epoch? | start.nextWeek() is omitted |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| announcement | Announcement |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 1 | Some fields are null |
| 2 | End epoch is before start epoch |
| 3 | Access denied |
|  |  |

## POST /api/announcement/{announcement\_id}

Modify an announcement with specified announcement id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| announcement \_id | Int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| title | String? |  |
| content | String? |  |
| start | Epoch? |  |
| end | Epoch? |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| announcement | Announcement |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 1 | Some fields are null |
| 2 | End epoch is before start epoch |
| 3 | Access denied |
|  |  |

## DELETE /api/announcement/{announcement\_id}

Delete an announcement with specified announcement id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| announcement \_id | Int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Access denied |
|  |  |
|  |  |
|  |  |

## GET /api/news

Get all available news of school

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| news | [News] |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |

## GET /api/news/{news\_id}

Get news of school with specified news\_id

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| news\_id | int |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| news | News |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
|  |  |
|  |  |
|  |  |
|  |  |

## POST /api/news

Create a new news

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| title | String |  |
| content | String |  |
| status | Enum(NewsStatus) |  |
| lang | Enum(Lang)? | Zh only, case sensitive, first letter is capital  Zh if this field is omitted |
| order | Int? | Order of the news, smaller order should put in first, larger order should put in last  0 if this field is omitted |
| release | Int? | When the news publish, 0 or < Epoch.now() mean publish now  Epoch.now() if this field is omitted |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| news | News |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Access denied |
|  |  |
|  |  |
|  |  |

## POST /api/news/{news\_id}

Modify a news

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| news\_id |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| title | String? |  |
| content | String? |  |
| status | Enum(NewsStatus)? |  |
| lang | Enum(lang)? | Zh only, case sensitive, first letter is capital |
| order | Int? | Order of the news, smaller order should put in first, larger order should put in last |
| release | Int? | When the news publish, 0 or < Epoch.now() mean publish now |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
| news | News |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Access denied |
| 3 | News\_id is not specified |
| 4 | News\_id is incorrect |
| 5 | Access denied (different school) |

## DELETE /api/news/{news\_id}

Delete news

Request Headers

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |

Url param

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| news\_id |  |  |
|  |  |  |

Request parameters: Form

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Response attributes: JSON

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| code | Int |  |
|  |  |  |
|  |  |  |
|  |  |  |

Code

|  |  |
| --- | --- |
| No | Description |
| 2 | Access denied |
| 3 | News\_id is not specified |
| 4 | News\_id is incorrect |
| 5 | Access denied (different school) |

# Enum

## NewsStatus

|  |  |
| --- | --- |
| Value | Description |
| SHOW | Show to all users in school |
| HIDDEN | Hidden to all users in school |
| DELETED | News is deleted |
|  |  |
|  |  |

## GameLogStatus

|  |  |
| --- | --- |
| Value | Description |
| PLAYING | This log is playing record, score is not count to leaderboard |
| SURRENDERED | Player is aborted the game or surrendered, score is count to leaderboard |
| FINISHED | Player is finished the game, score is count to leaderboard |
|  |  |
|  |  |

## LeaderboardType

|  |  |
| --- | --- |
| Value | Description |
| PERSONAL SCORE | This is personal score in school |
| SCHOOL SCORE | This is total score in school |
|  |  |
|  |  |
|  |  |

## Lang

|  |  |
| --- | --- |
| Value | Description |
| Zh |  |
| En |  |
|  |  |
|  |  |
|  |  |

# Object

## User

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| loginId | User |  |
| nameZh | String |  |
| nameEn | String |  |
| avatarIndex | Int |  |
| avatarImageUrl | String |  |
| register | Epoch |  |
| lastLogin | Epoch |  |
| school | School |  |
| admin\_level | int | 0=student, 1=teacher, 2=admin |
| deleted | int |  |

## School

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| nameZh | String |  |
| nameEn | String |  |

## Game

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| nameZh | String |  |
| nameEn | String |  |
| descZh | String |  |
| descEn | String |  |
| lang | Enum(lang) |  |
| level | Level |  |
|  |  |  |
|  |  |  |

## Level

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| nameZh | String |  |
| nameEn | String |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## GameLog

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| user | User |  |
| game | Game |  |
| status | Enum(GameStatus) |  |
| score | Double |  |
| timestamp | Epoch |  |
| extra | String |  |
|  |  |  |
|  |  |  |

## Leaderboard

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| type | Enum(LeaderboardType) |  |
| score | Double |  |
| timestamp | Epoch |  |
| game | Game |  |
| school | School |  |
| User | user |  |
|  |  |  |
|  |  |  |

## Announcement

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| title | String |  |
| content | String |  |
| start | Epoch |  |
| end | Epoch |  |
| lastmod | Epoch |  |
| deleted | int |  |
|  |  |  |
|  |  |  |

## News

|  |  |  |
| --- | --- | --- |
| Attribute | Type | Description |
| id | Int |  |
| title | String |  |
| content | String |  |
| status | Enum(NewsStatus) |  |
| release | Epoch |  |
| add | Epoch |  |
| lastmod | Epoch |  |
| user | User |  |
| school | School |  |
| lang | Enum(lang) |  |
| order | Int |  |

## Epoch

Alias of 64bit integer, an UNIX timestamp.