Similarity Search API Specification

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Use cases

Find similar stock to item from image

- 1 endpoint way:
  - Post item via code / image { url, text } to get similar stock
    - Improved latency if `code` & `variation_code` are used
- 2 endpoints way:
  - Post image binary to get item tokens
  - Post item token to get similar stock

Recognize items from image

- Post image binary to get items that contain recognized information & token for use with other endpoints

Common attributes

Base URL: `https://cubki.jp/api/v1`

`POST /sim_searches/<provider>/items.json`

Purpose

Find stock similar to the posted item.

Request body

Allowed `Content-Type` is `multipart/form-data`, `application/x-www-form-urlencoded` and `application/json`.

Post item via code / image

Optional - if any used: all required

- `code` (string): Same as `stock.code` of the response
- `variation_code` (string): Same as `stock.variation_code` of the response

If `code` & `variation_code` are found, the response latency will be lower than using `image`.

Required

- `image` (object: `{ url, text }`):
  - `url` (string): URL of the image that contains the item (or multiple items)
  - `text` (string): Text used to choose the target item of the above image for the search

If `code` & `variation_code` are not found or not specified, it will use `image`.

Post item via token

- `token` (string): A value in a `token` field that is returned from `POST /sim_searches/<provider>.json`

Query parameters

- `include` (string, default: `stock`): Specify fields to be returned
  - (Example 1) `stock`: Will include `stock` field
  - (Example 2) `stock.images`: Will include `stock` field that contains `images`
  - (Example 3) `stock.standard_images`: Will include `stock` field that contains `standard_images`
  - (Example 4) `stock.standard_images,stock.thumbnail_images`: Will include `stock` field that contains both of `standard_images` and `thumbnail_images`
  - (Example 5) `stock.distance`: Will include `stock` field that contains `distance` as a descendant child
- `stock_limit` (integer: `1` - `100`, default: `20`)
  - Controls how many stocks will be returned for each item at most
  - Note that this doesn't guarantee the number of stock will be returned
  - Will be used only when the response contains a `stock` field
- `gender` (string: `female`, `male` or `unisex`)
  - Specifies which gender type of stocks should be returned
  - When specifying `female` or `male`, `unisex` stock will also be returned
  - When specifying `unisex`, only `unisex` stock will be returned
  - When this parameter isn't passed, gender types aren't considered
- `age_group` (string: `kids` or `adult`)
  - Specifies which age group of stocks should be returned
  - When this parameter isn't passed, the field isn't considered
- `sizes%5B%5D` (string: Any value in a list which is configured when indexing)
  - Specifies which size of stocks should be returned
  - When this parameter isn't passed, the field isn't considered
  - When this parameter is specified multiple times, it works as an OR condition

Examples

Request for item with `some-token`

```
$ curl -X POST 'https://cubki.jp/api/v1/sim_searches/baroque_japan/items.json?
gender=female&age_group=adult&include=stock.distance&sizes%5B%5D=S&sizes%5B%5D=M'
 -F token=some-token
```

Response:

```
{
   "category": "hat",
   "token": "some-token",
   "stock": [
      {
        "code": "250ESM30-023B",
        "url": "https://cubki.jp/stock/baroque_japan/250ESM30-023B/variations/7422
        "name": "BOUCLE LOOSE CPO JACKET",
        "categories": [
          "AZUL by moussy",
          "アウター",
          "ジャケット"
        ],
        "brand": "AZUL by moussy",
        "review_count": null,
        "list_price": 3294,
        "list_price_text": "¥3,294",
        "sales_price": 3294,
        "sales_price_text": "¥3,294",
        "provider_name": "baroque_japan",
        "provider_display_name": "SHEL'TTER WEBSTORE",
        "variation_code": "742269",
        "unique_code": "baroque_japan:250ESM30-023B:742269",
        "distance": 0.12345
      },
      {
        "code": "510DAZ30-0820",
        "url": "https://cubki.jp/stock/baroque_japan/510DAZ30-0820/variations/7298
        "name": "BRUSHED OVER JK",
        "categories": [
          "LAGUA GEM",
          "アウター",
          "ブルゾン"
        ],
        "brand": "LAGUA GEM",
        "review_count": null,
        "list_price": 8360,
        "list_price_text": "¥8,360",
        "sales_price": 8360,
        "sales_price_text": "¥8,360",
        "provider_name": "baroque_japan",
        "provider_display_name": "SHEL'TTER WEBSTORE",
        "variation_code": "729874",
        "unique_code": "baroque_japan:510DAZ30-0820:729874",
        "distance": 0.23456
      },
      ...
   ]
}
```

POST /sim_searches/<provider>.json

Purpose

Recognize items of an image. Get token for each item for use with other endpoints.

Request body

Allowed `Content-Type` is `multipart/form-data`.

- `image` (Binary image data. Tested with JPEG, PNG, GIF, WebP): Query image

Query parameters

- `include` (string, default: `items`): Specify fields to be returned
  - (Example 1) `items`: Will include `items` field in the response
  - (Example 2) `items.stock`: Will include `items` field that contains `stock` as a descendant child
  - (Example 3) `items.stock.standard_images,items.stock.thumbnail_images`: Will include `items` field that contains `stock` as a descendant child that contains both of `standard_images` and `thumbnail_images`
- `stock_limit` (integer: `1` - `100`, default: `20`)
  - Controls how many stocks will be returned for each item at most
  - Note that this doesn't guarantee the number of stock will be returned
  - Will be used only when the response contains a `stock` field in an item field

Examples

Request using default values:

```
$ curl -X POST 'https://cubki.jp/api/v1/sim_searches/baroque_japan.json' -F
image=@model.jpeg
```

Response for above request:

```
{
   "items":[
      {
         "category":"hat",
         "labels":[
            {
               "name":"ブラック",
               "score":0.98542356
            }
            ...
         ],
         "bounding_box":{
            "top":0.11900735,
            ...
         },
        "token":"some-token"
      },
      ...
   ]
}
```