Guide for registration and use of the Open Data API of the ECOBICI individual transport system.

REGISTER

Anyone can register through the website, entering the requested data, including a brief description of the use that will be given to the information that the service will provide. Users who register will receive three emails:

1.- Registration validation link.
2.- *client_id*.
3.- *client_secret*.

The *client_credentials* parameter will be formed by the *client_id* and the *client_secret*.

API USAGE

Registered people will be able to use the API in two steps:

1. Get the access key (access token).
2. Request information from the API.
    a. Get the list of registered bike stations.
    b. Get the availability of bikes and anchorages at bike stations.

GET THE ACCESS KEY (ACCESS TOKEN)

To get the access key (*access_token*), perform a query to the following URL, replacing the data received by mail:

```
https://pubsbapi-
latam.smartbike.com/oauth/v2/token?client_id={CLIENT_ID}&client_secret={CLIE
NT_SECRET}&grant_type=client_credentials
```

In response, the following information will be obtained in JSON format:

```
{
        "access_token": "{ACCESS_TOKEN}",
        "expires_in": 3600,
        "refresh_token": "{REFRESH_TOKEN}",
        "scope": null,
        "token_type": "bearer"
}
```

The *access_token* is valid for one hour (3.600 seconds).

To renew an expired *access_token* you may get a new one by the same way or through the "*refresh_token*" provided with the expired *access_token*, with the URL:

```
https://pubsbapi-
latam.smartbike.com/oauth/v2/token?client_id={CLIENT_ID}&client_secret={CLIE
NT_SECRET}&grant_type=refresh_token&refresh_token={REFRESH_ TOKEN}
```

Both operations have the same response.

GET THE LIST OF THE REGISTERED BIKE STATIONS.

To get the list of registered bike stations and their related information, you can use the request:

```
https://pubsbapi-
latam.smartbike.com/api/v1/stations.json?access_token={ACCESS_TOKEN}
```

The *access_token* can be set as a parameter in the query string or as a HTTP header of the request (but not in both places at the same time):

```
Authorization: Bearer {ACCESS_TOKEN}
```

The response is a JSON with the next information for each bike station:

Parameter	Type
id	integer
name	string
address	string
addressNumber	string
zipCode	string
districtCode	string
districtName	string
nearbyStations	array with station id's (integers)
location	array
stationType	string

The internal format of the *"Location"* array:

Parameter	Type
lat	Float
lon	Float

Values for latitude and longitude are the bike stations coordinates, based on the World Geodesic System (WGS84).

GET THE AVAILABILITY OF BIKES AND ANCHORAGES AT BIKE STATIONS.

To obtain the bike stations availability information you must use the next URL:

```
https://pubsbapi-
latam.smartbike.com/api/v1/stations/status.json?access_token={ACCESS_TOKEN}
```

The *access_token* can be set as a parameter in the query string or as a HTTP header of the request (but not in both places at the same time):

```
Authorization: Bearer {ACCESS_TOKEN}
```

The response is a JSON with the next information for each bike station:

Parameter	Type
id	integer
status	string (OPN = open stations, CLS = closed stations)
availability	array

The internal format of the *"availability"* array:

Parameter	Type
bikes	integer
slots	integer