
datagovsg*api*

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Visit the Github repo at [half0wl/datagovsg_api](https://github.com/half0wl/datagovsg_api) for installation, usage, and examples.

class `datagovsg_api.DataGovSG (API_KEY)`

Base class for API wrappers to inherit from.

Parameters `API_KEY (str)` – A valid API key obtained from developers.data.gov.sg.

build_url (`endpoint`)

Build the request url.

Parameters `endpoint (str)` – Endpoint of the request (e.g. ‘environment/psi’).

Returns The built/final URL to the endpoint.

Return type `str`

get (`endpoint, params`)

Base method for making requests to the API endpoint.

Parameters

- **endpoint** (`str`) – Endpoint of the request (e.g. ‘environment/psi’).
- **params** (`dict, optional`) – Request parameters.

Returns A Response object.

class `datagovsg_api.TransportAPI (API_KEY)`

<https://developers.data.gov.sg/transport/>

This class contains APIs under the Transport category.

Parameters `API_KEY (str)` – A valid API key obtained from developers.data.gov.sg.

taxi_availability (`date_time=None`)

<https://developers.data.gov.sg/transport/taxi-availability>

List of all available taxis, retrieved every 30 seconds from LTA’s Datamall.

Parameters `date_time (str, optional)` – Latest available data at that moment in time. Use the format `YYYY-MM-DD[T]HH:mm:ss (SGT)`, for example: `2016-12-12T09:45:00`.

Returns A Response object. Call `.json()` to get the json data. The returned json of this method is valid GeoJSON.

traffic_images (`date_time=None`)

<https://developers.data.gov.sg/transport/traffic-images>

Images from traffic cams with camera location. Retrieved every 20 seconds from LTA’s Datamall.

Parameters `date_time (str, optional)` – Latest available data at that moment in time. Use the format `YYYY-MM-DD[T]HH:mm:ss (SGT)`, for example: `2016-12-12T09:45:00`.

Returns A Response object. Call `.json()` to get the json data.

class `datagovsg_api.EnvironmentAPI (API_KEY)`

<https://developers.data.gov.sg/environment/>

This class contains APIs under the Environment category.

Parameters `API_KEY (str)` – A valid API key obtained from developers.data.gov.sg.

air_temperature (`date=None, date_time=None`)

<https://developers.data.gov.sg/environment/air-temperature>

Air temperature readings across Singapore. Per-minute readings from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

pm25 (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/pm25>

PM2.5 readings across Singapore. Retrieved hourly from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data. The `region_metadata` field in the response contains the lat/lon for the regions.

psi (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/psi>

PSI readings across Singapore. Retrieved hourly from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data. The `region_metadata` field in the response contains the lat/lon for the regions.

rainfall (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/rainfall>

Rainfall readings across Singapore. 5-minute readings from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

relative_humidity (*date=None, date_time=None*)

https://developers.data.gov.sg/environment/relative_humidity

Relative humidity readings across Singapore. Per-minute readings from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

uv_index (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/uv-index>

UV index readings across Singapore. Retrieved every hour between 7AM and 7PM everyday.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

weather_forecast (*duration, date=None, date_time=None*)

<https://developers.data.gov.sg/environment/2-hour-weather-forecast>

<https://developers.data.gov.sg/environment/24-hour-weather-forecast>

<https://developers.data.gov.sg/environment/4-day-weather-forecast>

<https://developers.data.gov.sg/environment/4-day-weather-forecast>

Weather forecast. 2-hour forecast is retrieved half-hourly from NEA, 24-hour is retrieved multiple times throughout the day, and 4-day is retrieved twice a day from NEA.

Parameters

- **duration** (*str*) – The duration to retrieve: '2-hour', '24-hour', '4-day'.
- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

Raises `Exception` – Duration must be a string '2-hour', '24-hour', '4-day'.

wind_direction (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/wind-direction>

Wind direction readings across Singapore. Per-minute readings from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

wind_speed (*date=None, date_time=None*)

<https://developers.data.gov.sg/environment/wind-speed>

Wind speed readings across Singapore. Per-minute readings from NEA.

Parameters

- **date** (*str, optional*) – All data on that day. Use the format YYYY-MM-DD, for example: 2016-12-12.
- **date_time** (*str, optional*) – Latest available data at that moment in time. Use the format YYYY-MM-DD[T]HH:mm:ss (SGT), for example: 2016-12-12T09:45:00.

Returns A Response object. Call `.json()` to get the json data.

class datagovsg_api.**AllAPI** (*API_KEY*)

This class exposes all available APIs, so a single instance can access both Transport and Environment APIs.

Parameters **API_KEY** (*str*) – A valid API key obtained from developers.data.gov.sg.

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