Package 'rwalkr'

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Type Package

Title API to Melbourne Pedestrian Data

Version 0.5.5

Description Provides API to Melbourne pedestrian and weather data <https://data.melbourne.vic.gov.au> in tidy data form.

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URL https://pkg.earo.me/rwalkr/

BugReports https://github.com/earowang/rwalkr/issues

Depends R (>= 3.1.3)

Imports dplyr, hms, httr, tidyr, progress

Suggests plotly, shiny (>= 1.0.4)

Encoding UTF-8

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Author Earo Wang [aut, cre] (<https://orcid.org/0000-0001-6448-5260>), Stuart Lee [aut] (<https://orcid.org/0000-0003-1179-8436>)

Maintainer Earo Wang <earo.wang@gmail.com>

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R topics documented:

`melb_shine` *A simple shiny app for pedestrian data*

Description

Provides a GUI to download data of selected sensors over a specified period as a CSV file, accompanied with basic visualisation.

Usage

```
melb_shine()
```

Details

It offers some basic plots to give a glimpse of the data over a short time period. In order to be reproducible, scripting using `melb_walk` or `melb_walk_fast` is recommended.

Value

A shiny app.

`melb_walk` *API using compedapi to Melbourne pedestrian data*

Description

Provides API using compedapi to Melbourne pedestrian data in a tidy data form.

Usage

```
melb_walk(from = to - 6L, to = Sys.Date() - 1L, na.rm = FALSE, session = NULL)
```

Arguments

`from`	Starting date.
`to`	Ending date.
`na.rm`	Logical. `FALSE` is the default suggesting to include `NA` in the dataset. `TRUE` removes the `NA`s.
`session`	`NULL` or "shiny". For internal use only.

Details

It provides API using compedapi, where counts are uploaded on a daily basis. The up-to-date data would be till the previous day. The data is sourced from Melbourne Open Data Portal. Please refer to Melbourne Open Data Portal for more details about the dataset and its policy.

Value

A tibble including these variables as follows:

- Sensor: Sensor name (43 sensors up to date)
- Date_Time: Date time when the pedestrian counts are recorded
- Date: Date associated with Date_Time
- Time: Time of day
- Count: Hourly counts

See Also

melb_walk_fast

Examples

```
## Not run:
# Retrieve last week data
melb_walk()

# Retrieve data of a speficied period
start_date <- as.Date("2017-07-01")
end_date <- start_date + 6L
melb_walk(from = start_date, to = end_date)

## End(Not run)
```

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melb_walk_directional *API using Socrata to Melbourne pedestrian data with directions (per minute)*

Description

API using Socrata to Melbourne pedestrian data with directions (per minute)

Usage

```
melb_walk_directional(app_token = NULL)
```

Arguments

app_token	Characters giving the application token. A limited number of requests can be made without an app token (NULL), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

It provides the API using Socrata, to access minute by minute directional pedestrian counts for *the last hour* from pedestrian sensor devices located across the city. The data is updated every 15 minutes.

Columns `sensor_id`, `direction_1`, and `direction_2` can be used to join the data with the Sensor Locations dataset which details the location, status, and directional readings of sensors, which can be obtained from `pull_sensor()`.

Value

A tibble including these variables as follows:

- `sensor_id`: Sensor name
- `date_time`: Date time when the pedestrian counts are recorded
- `date`: Date associated with `date_time`
- `time`: Time of day
- `direction_1`: Direction 1 sensor reading (count of pedestrians)
- `direction_2`: Direction 2 sensor reading (count of pedestrians)
- `total_of_directions`: Total sensor reading i.e. direction 1+2 (count of pedestrians)

See Also

`pull_sensor()`

Examples

```
## Not run:
melb_walk_directional()

## End(Not run)
```

`melb_walk_fast` *API using Socrata to Melbourne pedestrian data (per hour)*

Description

API using Socrata to Melbourne pedestrian data (per hour)

Usage

```
melb_walk_fast(year = NULL, sensor = NULL, na.rm = FALSE, app_token = NULL)
```

Arguments

year	An integer or a vector of integers. By default, it's the current year.
sensor	Sensor names. By default, it pulls all the sensors. Use pull_sensor to see the available sensors.
na.rm	Logical. FALSE is the default suggesting to include NA in the dataset. TRUE removes the NAs.
app_token	Characters giving the application token. A limited number of requests can be made without an app token (NULL), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

It provides the API using Socrata, where counts are uploaded on a monthly basis. The up-to-date data would be till the previous month. The data is sourced from Melbourne Open Data Portal. Please refer to Melbourne Open Data Portal for more details about the dataset and its policy.

Value

A tibble including these variables as follows:

- Sensor: Sensor name
- Date_Time: Date time when the pedestrian counts are recorded
- Date: Date associated with Date_Time
- Time: Time of day
- Count: Hourly counts

See Also

melb_walk

Examples

```
## Not run:
# Retrieve the year 2017
melb_walk_fast(year = 2017)

# Retrieve the year 2017 for Southern Cross Station
melb_walk_fast(year = 2017, sensor = "Southern Cross Station")

## End(Not run)
```

melb_weather *API to access Melbourne microclimate sensor data*

Description

API to access Melbourne microclimate sensor data

Usage

```
melb_weather(
  from = to - 6L,
  to = Sys.Date(),
  site = NULL,
  sensor_type = NULL,
  app_token = NULL
)
```

Arguments

from	Starting date. Earliest measurement is 2019-11-15
to	Ending date.
site	The site identifier. By default will pull in all locations that have weather sensors `pull_weather_sensors()`.
sensor_type	The type of microclimate measurement to extract see `pull_weather_types()` for details.
app_token	Characters giving the application token. A limited number of requests can be made without an app token (`NULL`), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

It provides the API using Socrata, where microclimate measurements are updated on a dailly basis. For data documentation, including a data dictionary see the Melbourne Open Data Portal. Please refer to Melbourne Open Data Portal for more details about the dataset and its policy.

Value

A tibble including these variables as follows:

- `site`: Site identifier, this is the location of the weather sensor
- `date_time`: Date time when the measurement was recorded
- `date`: Date associated with `date_time`
- `sensor_type`: The type of microclimate sensor reading
- `units`: The units that `value` is in
- `value`: The value of the reading

See Also

melb_walk, pull_weather_sensors, pull_weather_types

Examples

```
## Not run:
# Retrieve the last weeks data
melb_weather()

# Retrieve the last week but for a single location (Pelham St, Carlton)
melb_weather(site = "arc1047")

# Retrieve the last week but only ambient air temperature
melb_weather(sensor_type = "TPH.TEMP")


## End(Not run)
```

`pull_sensor` *API using Socrata to Melbourne pedestrian sensor locations*

Description

Provides API using Socrata to Melbourne pedestrian sensor locations.

Usage

```
pull_sensor(app_token = NULL)
```

Arguments

app_token	Characters giving the application token. A limited number of requests can be made without an app token (NULL), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

It provides API using Socrata.

See Also

melb_walk_fast

Examples

```
## Not run:
pull_sensor()

## End(Not run)
```

pull_weather_sensors *API using Socrata to extract Melbourne microclimate sensor locations*

Description

API using Socrata to extract Melbourne microclimate sensor locations

Usage

```
pull_weather_sensors(app_token = NULL)
```

Arguments

app_token	Characters giving the application token. A limited number of requests can be made without an app token (NULL), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

Extract all available climate sensor types and their identifiers Socrata.

See Also

melb_weather

Examples

```
## Not run:
pull_weather_types()

## End(Not run)
```

pull_weather_types *API using Socrata to Melbourne microclimate measurement types*

Description

API using Socrata to Melbourne microclimate measurement types

Usage

```
pull_weather_types(app_token = NULL)
```

Arguments

app_token	Characters giving the application token. A limited number of requests can be made without an app token (NULL), but they are subject to much lower throttling limits than request that do include one. Sign up for an app token here.

Details

Extract all available climate sensor types and their identifiers Socrata.

See Also

melb_weather

Examples

```
## Not run:
pull_weather_types()

## End(Not run)
```

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