API Documentation

Dublin Route's main goal is to do everything we can to dramatically improve the user experience of bus riders in the Dublin area. Therefore, Dublin Route created a RESTful API to enable developers to take advantage of our bus line predictions.

Note: Dublin Route's bus line and stop information is automatically downloaded on a weekly basis so our API always has the most recent [GTFS data from National Transport Ireland](#).

The RESTful API enables developers to download JSON data over HTTPS. The API allows for the following data to be requested:

1. All bus line IDs

2. Specific bus line directions

3. Station information for a particular bus line (stop_id, stop_name, stop_lat, stop_long, true_stop_id)

4. Duration prediction

Tutorial

The four sections below are examples that demonstrate how to obtain a response from our API four request types mentioned above.

1. All bus line IDs

> URL: https://www.dublinroute.com/api/allroutes

Response Example:

```
[
    {
        "routes": "1"
    },
    {
        "routes": "102"
    },
    {
        "routes": "104"
    },
    {
        "routes": "11"
    },
]
```

Returns all Dublin bus line id.

2. Get directions of a line ID

URL: https://www.dublinroute.com/api/direction?routeid=${your_line_id}

Request Example: https://www.dublinroute.com/api/direction?routeid=46A

Response:

```json
{
    "dir1": "From Phoenix Park To Dun Laoghaire",
    "dir2": "From Dun Laoghaire To Phoenix Park "
}
```

Note: The routeid is not case sensitive.

3. Get the stations of a line id

URL: https://www.dublinroute.com/api/station?direction=${direction}&route=${routeid}

Response:

```json
{
    "status": "success",
    "data": [
        {
            "stop_id": "8220DB000807",
            "stop_name": "Arbour Hill, Phoenix Park Gate",
            "stop_lat": "53.35155651211540000000",
            "stop_long": "-6.29770038608451000000",
            "true_stop_id": 807
        },
        {
            "stop_id": "8220DB000808",
            "stop_name": "Cabra East, North Circular Road (O'Devaney Gardens)",
            "stop_lat": "53.35399466951961000000",
            "stop_long": "-6.29534982649487100000",
            "true_stop_id": 808
        },
        {
            "stop_id": "8220DB000809",
            "stop_name": "Cabra East, North Circular Road (Oxmanstown Road)",
            "stop_lat": "53.35526073980500400000",
            "stop_long": "-6.29337634624951000000",
            "true_stop_id": 809
        },
        {
            "stop_id": "8220DB000810",
            "stop_name": "Cabra East, North Circular Road",
            "stop_lat": "53.35709986015710000000",
            "stop_long": "-6.28999764127673000000",
            "true_stop_id": 810
        },
```

```
        {
            "stop_id": "8220DB000811",
            "stop_name": "Cabra East, North Circular Road",
            "stop_lat": "53.35767214989720500000",
            "stop_long": "-6.28728544721744100000",
            "true_stop_id": 811
        },
        {
            "stop_id": "8220DB000812",
            "stop_name": "Cabra East, Grangegorman Hospital",
            "stop_lat": "53.35826636065229400000",
            "stop_long": "-6.28422674373800000000",
            "true_stop_id": 812
        },
        {
            "stop_id": "8220DB000813",
            "stop_name": "Cabra East, North Circular Road (Charleville Road)",
            "stop_lat": "53.35919004609720400000",
            "stop_long": "-6.28095937438322000000",
            "true_stop_id": 813
        },
        {
            "stop_id": "8220DB000814",
            "stop_name": "Phibsborough, North Circular Road (Cabra Road)",
            "stop_lat": "53.36054001513700000000",
            "stop_long": "-6.27609704929995100000",
            "true_stop_id": 814
        }
    }
```

- `stop_id` : The full stop id of the stop.
- `stop_name` : The name of the stop.
- `stop_lat` : The latitude of the stop.
- `stop_lng` : The longitude of the stop.
- `true_stop_id` : The last four digit

4. Duration prediction

API CALL: `https://www.dublinroute.com/api/time?`
`routeid=${routeid}&start_stop=${start_stop}&end_stop=${end_stop}&datetime=${datetime}&direction=${direction}`

Request Parameters:

`routeid` : The bus line id of the route.

`start_stop` : The stop id of the departure stop.

`end_stop` : The stop id of the destination stop.

`datetime` : The unixtime

`direction` : The direction of the bus. 1 or 2.

```json
{
    "status": "success",
    "data": [
        {
            "detail": [
                129.28838530737093,
                82.1440770481716,
                86.06053386938444,
                79.33715190789118,
                8.299953887039743,
                218.5556833491369,
                63.22767360619676,
                110.06241558835553,
                92.38577100195205,
                182.2275161064153,
                70.77476925591591,
                40.81011969438985,
                15.386551849757119,
                70.01102715707745,
                25.434120498926006
            ],
            "totalDuration": 21,
            "stopsNum": 16,
            "stopInfo": [
                {
                    "stop_id": "8220DB007391",
                    "stop_name": "Merrion Square South",
                    "stop_lat": "53.33909074783990000000",
                    "stop_long": "-6.24991601709797000000",
                    "true_stop_id": 7391
                },
                {
                    "stop_id": "8220DB000493",
                    "stop_name": "Merrion Square, Holles Street",
                    "stop_lat": "53.33985341637740000000",
                    "stop_long": "-6.24737682273898000000",
                    "true_stop_id": 493
                },
                {
                    "stop_id": "8220DB000494",
                    "stop_name": "Clare Street",
                    "stop_lat": "53.34133589331870000000",
                    "stop_long": "-6.25162625805016100000",
                    "true_stop_id": 494
                },
                {
                    "stop_id": "8220DB000495",
                    "stop_name": "Pearse Station, Outside Train Station",
                    "stop_lat": "53.34359131981290000000",
                    "stop_long": "-6.24974670516903100000",
                    "true_stop_id": 495
```

```
        },
        {
            "stop_id": "8220DB000400",
            "stop_name": "Trinity College, Shaw Street",
            "stop_lat": "53.34475116159920600000",
            "stop_long": "-6.25283825801258000000",
            "true_stop_id": 400
        },
        {
            "stop_id": "8220DB007588",
            "stop_name": "Pearse Street",
            "stop_lat": "53.34502174308180000000",
            "stop_long": "-6.25290229106650900000",
            "true_stop_id": 7588
        },
        {
            "stop_id": "8220DB007392",
            "stop_name": "Temple Bar, Aston Quay",
            "stop_lat": "53.34646041538011000000",
            "stop_long": "-6.26093925922545050000",
            "true_stop_id": 7392
        },
        {
            "stop_id": "8220DB000312",
            "stop_name": "Temple Bar, Wellington Quay",
            "stop_lat": "53.34547647282640000000",
            "stop_long": "-6.26620615548430000000",
            "true_stop_id": 312
        },
        {
            "stop_id": "8220DB001444",
            "stop_name": "Dublin City South, Merchant's Quay",
            "stop_lat": "53.34511841466180000000",
            "stop_long": "-6.27374547145288900000",
            "true_stop_id": 1444
        },
        {
            "stop_id": "8220DB001445",
            "stop_name": "James's Gate, Ushers Quay",
            "stop_lat": "53.34567841025250000000",
            "stop_long": "-6.27828883961720000000",
            "true_stop_id": 1445
        },
        {
            "stop_id": "8220DB007078",
            "stop_name": "Phoenix Park, Sean Heuston Bridge",
            "stop_lat": "53.34791030524820600000",
            "stop_long": "-6.29287390375090000000",
            "true_stop_id": 7078
        },
        {
            "stop_id": "8220DB001449",
            "stop_name": "Phoenix Park, Conyngham Road Bus Garage",
```

```
                    "stop_lat": "53.3481528299489500000",
                    "stop_long": "-6.29789609467721000000",
                    "true_stop_id": 1449
                },
                {
                    "stop_id": "8220DB001450",
                    "stop_name": "Phoenix Park, Wellington Monument",
                    "stop_lat": "53.34815540423440000000",
                    "stop_long": "-6.30186141311769000000",
                    "true_stop_id": 1450
                },
                {
                    "stop_id": "8220DB001451",
                    "stop_name": "Islandbridge, Bridgewater Business Centre",
                    "stop_lat": "53.34827827893530000000",
                    "stop_long": "-6.30544644496588000000",
                    "true_stop_id": 1451
                },
                {
                    "stop_id": "8220DB002191",
                    "stop_name": "Islandbridge, Sarah Place",
                    "stop_lat": "53.34802557187770000000",
                    "stop_long": "-6.31044326467113950000",
                    "true_stop_id": 2191
                },
                {
                    "stop_id": "8220DB002192",
                    "stop_name": "Islandbridge, U.C.D Boat Club",
                    "stop_lat": "53.34724562293600000000",
                    "stop_long": "-6.31567109288469100000",
                    "true_stop_id": 2192
                }
            ],
            "bustime": [
                43500,
                "12:05:00"
            ],
            "flag": true
        }
    ]
}
```

- `status` : The response state of the data
- `data`
  - `detail` : The duration (in seconds) for one stop to another. (In order)
  - `totalDuration` : The total time for this journey (in minutes)
  - `stopsNum` The total stop number of the journey.
  - `stopInfo` : The detail information of all stops. (In order)
  - `bustime` : The bus arrive time of the bus.

- `flag` : Boolean Value. False means if there is no bus of that day after the user picked time, otherwise true.