

Manual

Beau De Clercq

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1 Running & using the app

1.1 Starting the app

In order to run the app, the user needs to execute the *run.sh* script on Mac/Linux or the *run.bat* script on Windows.

1.2 Usage

2 API calls

2.1 Provinces

```
{
  "data": {
    "provinces": [
      {
        "entiteitcode": "A",
        "entiteitnummer": "1",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/1",
          },
          {
            "rel": "haltes",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/1/haltes",
          },
          {
            "rel": "lijnen",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/1/lijnen",
          },
          {
            "rel": "gemeenten",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/1/gemeenten",
          },
        ],
        "omschrijving": "Antwerpen",
      },
      {
        "entiteitcode": "O",
        "entiteitnummer": "2",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/2",
          },
          {
            "rel": "haltes",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/2/haltes",
          },
          {
            "rel": "lijnen",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/2/lijnen",
          },
          {
            "rel": "gemeenten",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/2/gemeenten",
          },
        ],
        "omschrijving": "Oost-Vlaanderen",
      },
      {
        "entiteitcode": "B",
        "entiteitnummer": "3",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/3",
          },
          {
            "rel": "haltes",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/3/haltes",
          },
          {
            "rel": "lijnen",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/3/lijnen",
          },
          {
            "rel": "gemeenten",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/3/gemeenten",
          },
        ],
        "omschrijving": "Vlaams-Brabant",
      },
      {
        "entiteitcode": "L",
        "entiteitnummer": "4",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/4",
          },
          {
            "rel": "haltes",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/4/haltes",
          },
          {
            "rel": "lijnen",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/4/lijnen",
          },
          {
            "rel": "gemeenten",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/4/gemeenten",
          },
        ],
        "omschrijving": "Limburg",
      },
      {
        "entiteitcode": "W",
        "entiteitnummer": "5",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/5",
          },
          {
            "rel": "haltes",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/5/haltes",
          },
          {
            "rel": "lijnen",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/5/lijnen",
          },
          {
            "rel": "gemeenten",
            "url": "https://api.delijn.be/DLKernOpenData/api/v1/entiteiten/5/gemeenten",
          },
        ],
        "omschrijving": "West-Vlaanderen"
      }
    ]
  },
  "status": "success"
}
```

API call:

/get_provinces

Return value: a JSON format response object as shown above.

2.2 Lines

```
{
  "data": {
    "lines": [
      {
        "bedieningstype": "NORMAAL",
        "entiteitnummer": "1",
        "lijnGeldigTot": "2019-08-31",
        "lijnGeldigVan": "2019-04-22",
        "lijnummer": "2",
        "lijnummerPubliek": "2",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/v1/beta/lijnen/1/2"
          }
        ],
        "omschrijving": "Hoboken - P+R Merksem",
        "publiek": true,
        "vervoertype": "TRAM"
      },
      {
        "bedieningstype": "NORMAAL",
        "entiteitnummer": "1",
        "lijnGeldigTot": "2019-08-31",
        "lijnGeldigVan": "2019-04-22",
        "lijnummer": "3",
        "lijnummerPubliek": "3",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/v1/beta/lijnen/1/3"
          }
        ],
        "omschrijving": "P+R Merksem - P+R Melsele",
        "publiek": true,
        "vervoertype": "TRAM"
      },
      {
        "bedieningstype": "NORMAAL",
        "entiteitnummer": "1",
        "lijnGeldigTot": "2019-08-29",
        "lijnGeldigVan": "2019-06-02",
        "lijnummer": "997",
        "lijnummerPubliek": "Buu",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/v1/beta/lijnen/1/997"
          }
        ],
        "omschrijving": "Buurtbu Brassaant",
        "publiek": true,
        "vervoertype": "BUS"
      },
      {
        "bedieningstype": "TECHNISCHE_LIJN",
        "entiteitnummer": "1",
        "lijnGeldigTot": "2019-08-31",
        "lijnGeldigVan": "2019-04-22",
        "lijnummer": "999",
        "lijnummerPubliek": "999",
        "links": [
          {
            "rel": "detail",
            "url": "https://api.delijn.be/DLKernOpenData/v1/beta/lijnen/1/999"
          }
        ],
        "omschrijving": "Uit- en inrijdende ritten Antwerpen Tram",
        "publiek": false,
        "vervoertype": "BUS"
      }
    ]
  },
  "status": "success"
}
```

API call:

`/get_lines/<province>`

Return value: a JSON format response object as (shortened) shown above. This object describes the available lines for the given province.

2.3 Routes & passings

```
{
  "data": {
    "routes": [
      [
        ["51.2587202", "4.4627988"],
        ["51.2580442", "4.4624877"],
        ["51.2560165", "4.4605994"],
        . . . ,
        ["51.1828995", "4.3736422"],
        ["51.1828244", "4.373138"],
        ["51.1827684", "4.3728861"]
      ],
      "stops": [
        {
          "lati": 51.2587626674685,
          "longi": 4.46271548234936,
          "name": "P+R Merkssem",
          "temp": 17.45,
          "time": ["00:35:00", "06:35:00"],
          "weather": "clear sky",
        },
        {
          "lati": 51.25366088473669,
          "longi": 4.458164614670439,
          "name": "Ringlaan",
          "temp": 17.45,
          "time": ["00:36:00", "06:36:00"],
          "weather": "clear sky",
        },
        {
          "lati": 51.251262697852084,
          "longi": 4.45592564903742,
          "name": "Rerum Novarum",
          "temp": 17.45,
          "time": ["00:37:00", "06:37:00"],
          "weather": "clear sky",
        },
        {
          "lati": 51.18318020637612,
          "longi": 4.383688211677621,
          "name": "Schijfwerper",
          "temp": 17.44,
          "time": ["01:06:00", "07:06:00"],
          "weather": "clear sky",
        },
        {
          "lati": 51.18309990244975,
          "longi": 4.378267845704564,
          "name": "Sportstraat",
          "temp": 17.44,
          "time": ["01:08:00", "07:08:00"],
          "weather": "clear sky",
        },
        {
          "lati": 51.18317216965261,
          "longi": 4.37246136797233,
          "name": "Zwaantjes",
          "temp": 17.42,
          "time": ["01:09:00", "07:09:00"],
          "weather": "clear sky"
        }
      ]
    },
    "status": "success"
  }
}
```

API calls:

```
/get_timetable/<province>/<line>/to/
/get_timetable/<province>/<line>/from/
```

Return value: a JSON format response object as (shortened) shown above. This object describes the stops on the line and provides passing times, weather information and coordinates for the route that will be followed.

2.4 Other calls

API calls:

```
/timetable/static/img/<name>
/timetable/<province>/<line>/static/img/<name>
```

Return value: the image saved in the folder *static/img* as *name*.

3 Site links

3.1 /

3.2 /provinces

3.3 /lines/;province_i

3.4 /timetable/;province_i/;line_i/to

3.5 /timetable/;province_i/;line_i/from

4 Design choices

5 Tools used

- Flask as the main framework
- Python *requests* module to reduce the lines of code needed to perform an API call
- JavaScript & LeafLet.js for all things map-related