

The nlgeocoder package

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Aim

Create an R interface to the PDOK Locatieserver API.
Locatieserver is a (reverse) geocoding service for The Netherlands.
Locatieserver is part of the Dutch National Spatial Data Infrastructure and hosted by [PDOK](#).



Team

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Documentation

- ▶ <https://github.com/PDOK/locatieserver>
- ▶ <https://forum.pdok.nl/c/applicaties-en-diensten/locatieserver>

How do we name the package?

Suggestions:

- ▶ pdokr
- ▶ nllocation
- ▶ dutchgeocoder
- ▶ nlgeocoder

Considerations:

- ▶ The name should describe the functionality well
- ▶ Users should see immediately that the package is only for geocoding addresses in the Netherlands
- ▶ Maybe we want to create an interface to other PDOK functionality later, but for now we choose to create a compact package that only uses Locatieserver
- ▶ Prefix 'nl' is better than 'dutch', because the package will only work for The Netherlands, not for other countries where Dutch is spoken.
- ▶ The package should preferably end with an 'r' ;-)

What license?

“As open as possible”

Naming conventions

- ▶ Prefix functions with `n1_`

Ideas

- ▶ Use a dataframe with descriptions of locations as an input
- ▶ Return the response as an `sf` object
- ▶ Use the `score` attribute as a threshold value to determine if a search result should be returned to the user. If the score is too low, it may not be a good fit.
- ▶ Mimic the `geocode` function in the `ggmap` package. For example, add a parameter `output` (`latlon`, `latlon_a`, `more`, `all`)
- ▶ Add a parameter to choose between returning the location in WGS84 or RD_New.
- ▶ Add a parameter to limit the number of rows returned with default value 1.
- ▶ Add a parameter to add the API key to the request. Apparently not obligatory, but nice to have for PDOK to monitor API usage.
- ▶ Add parameter `type` with predefined values to choose from (e.g. `adres`).
- ▶ Add some time ('sleep') between subsequent requests.

Findings

- ▶ You can only do one-by-one requests to the Locatieserver, no bulk requests.
- ▶ What are the terms of use for Locatieserver? There are none. See [this answer](#) in the PDOK forum.

Tasks

- ▶ Create unit tests with `testthat` (Willy)
- ▶ Add documentation using `Roxygen2`
- ▶ Add functionality and make it more user-friendly (Edwin)
- ▶ Create demo using `tmap` and `shiny` (Egge-Jan, Juris)