
urlextract

Release 1.8.0

Dec 19, 2022

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urlextract is package with python class and command line script used for extraction of URLs from given text.

CHAPTER 1

urlextract - command line

urlextract - command line program that will print all URLs to stdout

Usage: `$ urlextract [-h] [-v] [-u] [-dl] [-c] [-i <ignore_file>] [-p <permit_file>] [-l LIMIT] [<input_file>]`

positional arguments: <input_file> input text file with URLs to extract

optional arguments:

- h, --help** show this help message and exit
- v, --version** show program's version number and exit
- u, --unique** print out only unique URLs found in file
- dl, --disable-localhost** disable extracting "localhost" as URL
- c, --check-dns** print out only URLs for existing domain names
- i <ignore_file>, --ignore-file <ignore_file>** input text file with URLs to exclude from extraction
- p <permit_file>, --permit-file <permit_file>** input text file with URLs that can be processed
- l LIMIT, --limit LIMIT** Maximum count of URLs that can be processed. Set 0 to disable the limit. Default: 10000

URLExtract class

class `urlextract.URLExtract` (*extract_email=False, cache_dns=True, extract_localhost=True, limit=10000, allow_mixed_case_hostname=True, **kwargs*)
Class for finding and extracting URLs from given string.

Examples:

```
from urlextract import URLExtract

extractor = URLExtract()
urls = extractor.find_urls("Let's have URL example.com example.")
print(urls) # prints: ['example.com']

# Another way is to get a generator over found URLs in text:
for url in extractor.gen_urls(example_text):
    print(url) # prints: ['example.com']

# Or if you want to just check if there is at least one URL in text:
if extractor.has_urls(example_text):
    print("Given text contains some URL")
```

add_enclosure (*left_char: str, right_char: str*)

Add new enclosure pair of characters. That and should be removed when their presence is detected at beginning and end of found URL

Parameters

- **left_char** (*str*) – left character of enclosure pair - e.g. “(”
- **right_char** (*str*) – right character of enclosure pair - e.g. “)”

allow_mixed_case_hostname

If set to True host should contain mixed case letters (upper-case and lower-case)

Return type bool

extract_email

If set to True email will be extracted from text

Return type bool

extract_localhost

If set to True 'localhost' will be extracted as URL from text

Return type bool

find_urls (*text*: str, *only_unique*=False, *check_dns*=False, *get_indices*=False, *with_schema_only*=False) → List[Union[str, Tuple[str, Tuple[int, int]]]]

Find all URLs in given text.

Parameters

- **text** (*str*) – text where we want to find URLs
- **only_unique** (*bool*) – return only unique URLs
- **check_dns** (*bool*) – filter results to valid domains
- **get_indices** (*bool*) – whether to return beginning and ending indices as (<url>, (idx_begin, idx_end))
- **with_schema_only** (*bool*) – get domains with schema only (e.g. <https://janlipovsky.cz> but not example.com)

Returns list of URLs found in text

Return type list

Raises **URLExtractError** – Raised when count of found URLs reaches given limit. Processed URLs are returned in *data* argument.

gen_urls (*text*: str, *check_dns*=False, *get_indices*=False, *with_schema_only*=False) → Generator[Union[str, Tuple[str, Tuple[int, int]]], None, None]

Creates generator over found URLs in given text.

Parameters

- **text** (*str*) – text where we want to find URLs
- **check_dns** (*bool*) – filter results to valid domains
- **get_indices** (*bool*) – whether to return beginning and ending indices as (<url>, (idx_begin, idx_end))
- **with_schema_only** (*bool*) – get domains with schema only

Yields URL or URL with indices found in text or empty string if nothing was found

Return type str|tuple(str, tuple(int, int))

get_after_tld_chars () → List[str]

Returns list of chars that are allowed after TLD

Returns list of chars that are allowed after TLD

Return type list

get_enclosures () → Set[Tuple[str, str]]

Returns set of enclosure pairs that might be used to enclosure URL. For example brackets (example.com), [example.com], {example.com}

Returns set of tuple of enclosure characters

Return type set(tuple(str, str))

get_stop_chars_left () → Set[str]

Returns set of stop chars for text on left from TLD.

Returns set of stop chars

Return type set

get_stop_chars_left_from_scheme () → Set[str]

Returns set of stop chars for text on left from scheme.

Returns set of stop chars

Return type set

get_stop_chars_right () → Set[str]

Returns set of stop chars for text on right from TLD.

Returns set of stop chars

Return type set

static get_version () → str

Returns version number.

Returns version number

Return type str

has_urls (text: str, check_dns=False, with_schema_only=False) → bool

Checks if text contains any valid URL. Returns True if text contains at least one URL.

Parameters

- **text** – text where we want to find URLs
- **check_dns** (bool) – filter results to valid domains
- **with_schema_only** (bool) – consider domains with schema only

Returns True if at least one URL was found, False otherwise

Return type bool

ignore_list

Set of URLs to be ignored (not returned) while extracting from text

Returns Returns set of ignored URLs

Return type set(str)

load_ignore_list (file_name)

Load URLs from file into ignore list

Parameters **file_name** (str) – path to file containing URLs

load_permit_list (file_name)

Load URLs from file into permit list

Parameters **file_name** (str) – path to file containing URLs

permit_list

Set of URLs that can be processed

Returns Returns set of URLs that can be processed

Return type set(str)

remove_enclosure (left_char: str, right_char: str)

Remove enclosure pair from set of enclosures.

Parameters

- **left_char** (*str*) – left character of enclosure pair - e.g. “(”
- **right_char** (*str*) – right character of enclosure pair - e.g. “)”

set_after_tld_chars (*after_tld_chars: Iterable[str]*)

Set chars that are allowed after TLD.

Parameters **after_tld_chars** (*list*) – list of characters

set_stop_chars_left (*stop_chars: Set[str]*)

Set stop characters for text on left from TLD. Stop characters are used when determining end of URL.

Parameters **stop_chars** (*set*) – set of characters

Raises `TypeError`

set_stop_chars_left_from_scheme (*stop_chars: Set[str]*)

Set stop characters for text on left from scheme. Stop characters are used when determining end of URL.

Parameters **stop_chars** (*set*) – set of characters

Raises `TypeError`

set_stop_chars_right (*stop_chars: Set[str]*)

Set stop characters for text on right from TLD. Stop characters are used when determining end of URL.

Parameters **stop_chars** (*set*) – set of characters

Raises `TypeError`

update ()

Update TLD list cache file.

Returns `True` if update was successful `False` otherwise

Return type `bool`

update_when_older (*days: int*) → `bool`

Update TLD list cache file if the list is older than number of days given in parameter *days* or if it does not exist.

Parameters **days** (*int*) – number of days from last change

Returns `True` if update was successful, `False` otherwise

Return type `bool`

CHAPTER 3

Indices and tables

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