

python-none-objects

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Abstract

A collection of "None" objects compatible with various Python types

Current version: 2024-05-06

Current number of commits: 36

Current git SHA1: 5bb1f18fe783ccbbb05ab1e37e1c88d41006f545

Code lines: 1710 total lines, 1448 not empty lines, 262 empty lines.

1 Files tree

```
.
├── build_and_checks.sh
├── COPYING
├── COPYING.LESSER
├── dist
│   ├── python_none_objects-1.0.0-py3-none-any.whl
│   ├── python_none_objects-1.0.0.tar.gz
│   ├── python_none_objects-1.0.1-py3-none-any.whl
│   ├── python_none_objects-1.0.1.tar.gz
│   ├── python_none_objects-1.1.0-py3-none-any.whl
│   ├── python_none_objects-1.1.0.tar.gz
│   ├── python_none_objects-1.1.10-py3-none-any.whl
│   ├── python_none_objects-1.1.10.tar.gz
│   ├── python_none_objects-1.1.11-py3-none-any.whl
│   ├── python_none_objects-1.1.11.tar.gz
│   ├── python_none_objects-1.1.1-py3-none-any.whl
│   ├── python_none_objects-1.1.1.tar.gz
│   ├── python_none_objects-1.1.2-py3-none-any.whl
│   ├── python_none_objects-1.1.2.tar.gz
│   ├── python_none_objects-1.1.3-py3-none-any.whl
│   ├── python_none_objects-1.1.3.tar.gz
│   └── python_none_objects-1.1.4-py3-none-any.whl
```

```

├── python_none_objects-1.1.4.tar.gz
├── python_none_objects-1.1.5-py3-none-any.whl
├── python_none_objects-1.1.5.tar.gz
├── python_none_objects-1.1.6-py3-none-any.whl
├── python_none_objects-1.1.6.tar.gz
├── python_none_objects-1.1.7-py3-none-any.whl
├── python_none_objects-1.1.7.tar.gz
├── python_none_objects-1.1.8-py3-none-any.whl
├── python_none_objects-1.1.8.tar.gz
├── python_none_objects-1.1.9-py3-none-any.whl
├── python_none_objects-1.1.9.tar.gz
├── .gitignore
├── latex
│   ├── python-none-objects.tex
│   └── python-none-objects.tex.tpl
├── pyproject.toml
├── python-none-objects.pdf
├── README.md
├── README.md.tpl
├── src
│   └── python_none_objects
│       ├── __init__.py
│       └── py.typed
├── typing_test
│   └── __init__.py
└── wget_sha512.sh

```

6 directories, 42 files

```

[4.0K May  6 04:02] ./
├── [1.6K May  6 03:55] build_and_checks.sh*
├── [ 34K May  2 2018] COPYING
├── [7.5K Jul 24 2018] COPYING.LESSER
├── [4.0K May  6 04:00] dist/
│   ├── [ 20K Nov 10 15:35]
│   │   ├── python_none_objects-1.0.0-py3-none-any.whl
│   │   └── [ 16K Nov 10 15:35] python_none_objects-1.0.0.tar.gz
│   ├── [ 20K Nov 11 19:04]
│   │   ├── python_none_objects-1.0.1-py3-none-any.whl
│   │   └── [ 17K Nov 11 19:04] python_none_objects-1.0.1.tar.gz
│   ├── [ 20K Dec 30 21:39]
│   │   ├── python_none_objects-1.1.0-py3-none-any.whl
│   │   └── [ 17K Dec 30 21:39] python_none_objects-1.1.0.tar.gz
│   ├── [ 21K May  4 03:00]
│   │   ├── python_none_objects-1.1.10-py3-none-any.whl
│   │   └── [ 20K May  4 03:00] python_none_objects-1.1.10.tar.gz

```

```

— [ 21K May  6 04:00] python_none_objects-1.1.11-py3-none-any.whl
— [ 98K May  6 04:00] python_none_objects-1.1.11.tar.gz
— [ 21K Dec 30 22:09] python_none_objects-1.1.1-py3-none-any.whl
— [ 17K Dec 30 22:09] python_none_objects-1.1.1.tar.gz
— [ 21K Mar 20 01:19] python_none_objects-1.1.2-py3-none-any.whl
— [ 18K Mar 20 01:19] python_none_objects-1.1.2.tar.gz
— [ 21K Mar 20 01:22] python_none_objects-1.1.3-py3-none-any.whl
— [ 18K Mar 20 01:22] python_none_objects-1.1.3.tar.gz
— [ 21K Mar 20 02:46] python_none_objects-1.1.4-py3-none-any.whl
— [ 18K Mar 20 02:46] python_none_objects-1.1.4.tar.gz
— [ 21K Mar 21 20:36] python_none_objects-1.1.5-py3-none-any.whl
— [ 18K Mar 21 20:36] python_none_objects-1.1.5.tar.gz
— [ 21K May  2 00:32] python_none_objects-1.1.6-py3-none-any.whl
— [ 20K May  2 00:32] python_none_objects-1.1.6.tar.gz
— [ 21K May  2 00:34] python_none_objects-1.1.7-py3-none-any.whl
— [ 21K May  2 00:34] python_none_objects-1.1.7.tar.gz
— [ 21K May  3 03:52] python_none_objects-1.1.8-py3-none-any.whl
— [ 21K May  3 03:52] python_none_objects-1.1.8.tar.gz
— [ 21K May  3 04:11] python_none_objects-1.1.9-py3-none-any.whl
— [ 21K May  3 04:11] python_none_objects-1.1.9.tar.gz
— [ 31 May  4 02:58] .gitignore
— [4.0K May  6 04:02] latex/
— [3.8K May  6 04:02] python-none-objects.tex
— [3.8K May  5 13:32] python-none-objects.tex.tpl
— [1.3K May  6 03:58] pyproject.toml
— [ 76K May  6 04:00] python-none-objects.pdf
— [4.6K May  6 04:02] README.md
— [4.7K Apr 28 21:25] README.md.tpl
— [4.0K Nov 10 15:03] src/
— [4.0K May  6 04:02] python_none_objects/
—   [1.8K May  6 04:02] __init__.py
—   [  0 Jul 15 2020] py.typed
— [4.0K May  6 04:02] typing_test/
—   [1.7K May  6 04:02] __init__.py
— [1.1K May  4 02:54] wget_sha512.sh

```

6 directories, 42 files

2 Listing of files

The following source code is covered by LGPLv3+. The text of the license is available at: <https://www.gnu.org/licenses/>. The git repository of this source code is also available at: <https://github.com/LLyaudet/python-none-objects/>.

2.1 build_and_checks.sh

```
1  #!/usr/bin/env bash
2  # This file is part of python-none-objects library.
3  #
4  # python-none-objects is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU Lesser General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # python-none-objects is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU Lesser General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU Lesser General Public License
20 # along with python-none-objects.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023-2024 Laurent Lyaudet
24
25 source ./wget_sha512.sh
26
27 mkdir -p build_and_checks_dependencies
28 subdir="build_and_checks_dependencies"
29
30 personal_github="https://raw.githubusercontent.com/LLyaudet/"
31 dependencies="DevOrSysAdminScripts/main/build_and_checks_dependencies"
32 URL_beginning="$personal_github$dependencies"
33
34 script="$URL_beginning/common_build_and_checks.sh"
35 correct_sha512='a46cd00d7b2d90fa1a3c7923244879fad28e789ff7dda791a0bd0'
```

```

36 correct_sha512+= 'c723848c12cb73ccf2c4c5875cdb674237da9696ef9e4deac07d'
37 correct_sha512+= 'c2b04aed6d90ffb98b9b0c4'
38 wget_sha512 "$subdir/common_build_and_checks.sh" "$script"\
39 "$correct_sha512"
40 chmod +x "$subdir/common_build_and_checks.sh"
41
42 cwd="."
43 if [[ -n "$1" ]];
44 then
45     cwd="$1"
46 fi
47
48 ./build_and_checks_dependencies/common_build_and_checks.sh "$cwd"
49
50 echo "Running pylint"
51 pylint src/python_none_objects/
52 pylint typing_test/

```

2.2 .gitignore

```

1 build_and_checks_dependencies/

```

2.3 latex/python-none-objects.tex.tpl

```

1 %!/usr/bin/env bash
2 % This file is part of python-none-objects library.
3 %
4 % python-none-objects is free software:
5 % you can redistribute it and/or modify it under the terms
6 % of the GNU Lesser General Public License
7 % as published by the Free Software Foundation,
8 % either version 3 of the License,
9 % or (at your option) any later version.
10 %
11 % python-none-objects is distributed in the hope
12 % that it will be useful,
13 % but WITHOUT ANY WARRANTY;
14 % without even the implied warranty of
15 % MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 % See the GNU Lesser General Public License for more details.
17 %
18 % You should have received a copy of
19 % the GNU Lesser General Public License
20 % along with python-none-objects.
21 % If not, see <https://www.gnu.org/licenses/>.
22 %

```

```

23 % ©Copyright 2023–2024 Laurent Lyaudet
24
25 \documentclass{article}
26
27 \usepackage[utf8]{inputenc}
28 \usepackage{subfigure}
29 \usepackage{amsmath}
30 \usepackage{amssymb}
31 \usepackage{amsthm}
32 \usepackage[pdftex]{hyperref}
33 \usepackage{tikz}
34 \usepackage{caption}
35 \usepackage[round]{natbib}
36 \usepackage{fancyhdr}
37 \usepackage{amsfonts}
38 \usepackage{times}
39 \usepackage{ifpdf}
40 \usepackage{latexsym}
41 \usepackage{graphicx}
42 \usepackage{enumerate}
43 \usepackage{pmbboxdraw}
44 \usepackage{fancyvrb}
45
46 % *** les environnements ***
47 %\theoremstyle{break}
48 \newtheorem{definition}[Definition][section]
49 \newtheorem{proposition}[definition]{Proposition}
50 \newtheorem{theorem}[definition]{Theorem}
51 \newtheorem{lemma}[definition]{Lemma}
52 \newtheorem{corollary}[definition]{Corollary}
53 \newtheorem{remark}[definition]{Remark}
54 \newtheorem{openproblem}[definition]{Open problem}
55
56 \begin{document}
57
58 \author{
59   Laurent Lyaudet\\
60   \url{https://lyaudet.eu/laurent/}\\
61   laurent.lyaudet@gmail.com
62 }
63 \title{python-none-objects}
64
65 \maketitle
66 \begin{abstract}
67 A collection of "None" objects
68 compatible with various Python types

```

```

69 \end{abstract}
70
71 Current version: @current_date@
72
73 Current number of commits: @number_of_commits@
74
75 Current git SHA1: @current_git_SHA1@
76
77 Code lines: @number_of_lines@
78
79 \section{Files tree}
80 \label{section:tree}
81
82 \begin{verbatim}
83 @current_tree_light@
84 \end{verbatim}
85
86 \begin{verbatim}
87 @current_tree@
88 \end{verbatim}
89
90 \section{Listing of files}
91 \label{section:listing}
92
93 The following source code is covered by LGPLv3+.
94 The text of the license is available at:
95 \url{https://www.gnu.org/licenses/}.
96 The git repository of this source code is also available at:
97 \url{https://github.com/LLyaudet/python-none-objects/}.
98
99
100 \subsection{
101     build\_and\_checks.sh
102 }
103 \label{
104     build_and_checkssh
105 }
106
107 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
108     build_and_checks.sh
109 }
110
111
112 \subsection{
113     .gitignore
114 }

```

```

115 \label{
116     gitignore
117 }
118
119 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
120     .gitignore
121 }
122
123
124 \subsection{
125     latex/python-none-objects.tex.tpl
126 }
127 \label{
128     latex:python-none-objectstextpl
129 }
130
131 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
132     latex/python-none-objects.tex.tpl
133 }
134
135
136 \subsection{
137     pyproject.toml
138 }
139 \label{
140     pyprojecttoml
141 }
142
143 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
144     pyproject.toml
145 }
146
147
148 \subsection{
149     README.md.tpl
150 }
151 \label{
152     READMEmdtpl
153 }
154
155 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
156     README.md.tpl
157 }
158
159
160 \subsection{

```



```

161     src/python\_none\_objects/\_\_init\_\_.py
162 }
163 \label{
164     src:python_none_objects:__init__.py
165 }
166
167 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
168     src/python_none_objects/__init__.py
169 }
170
171
172 \subsection{
173     src/python\_none\_objects/py.typed
174 }
175 \label{
176     src:python_none_objects:pytyped
177 }
178
179 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
180     src/python_none_objects/py.typed
181 }
182
183
184 \subsection{
185     typing\_test/\_\_init\_\_.py
186 }
187 \label{
188     typing_test:__init__.py
189 }
190
191 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
192     typing_test/__init__.py
193 }
194
195
196 \subsection{
197     wget\_sha512.sh
198 }
199 \label{
200     wget_sha512sh
201 }
202
203 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
204     wget_sha512.sh
205 }
206

```

```

207
208 Merci Dieu ! Merci P\`ere ! Merci Seigneur ! Merci Saint Esprit !
209
210 \end{document}

```

2.4 pyproject.toml

```

1  # pyproject.toml
2
3  [build-system]
4  requires = ["hatchling"]
5  build-backend = "hatchling.build"
6
7  [project]
8  name = "python-none-objects"
9  version = "1.1.11"
10 description = """\
11 Add more constant \None\ objects to Python \
12 to avoid boilerplate code\
13 """
14 readme = "README.md"
15 authors = [
16     { name = "Laurent Lyaudet", email = "laurent.lyaudet@gmail.com" },
17 ]
18 maintainers = [
19     { name = "Laurent Lyaudet", email = "laurent.lyaudet@gmail.com" },
20 ]
21 license = { file = "COPYING.LESSER" }
22 classifiers = [
23     "Development Status :: 5 - Production/Stable",
24     "Intended Audience :: Developers",
25     """\
26 License :: OSI Approved :: \
27 GNU Lesser General Public License v3 or later (LGPLv3+)\
28 """,
29     "Operating System :: OS Independent",
30     "Programming Language :: Python",
31     "Programming Language :: Python :: 3",
32     "Topic :: Software Development :: Libraries :: Python Modules",
33     "Typing :: Typed",
34 ]
35 keywords = ["Python", "None", "Immutable", "Default values"]
36 dependencies = [
37 ]
38 requires-python = ">=3.11"
39

```

```

40 [project.optional-dependencies]
41 dev = [
42     "black",
43     "isort",
44     "mypy",
45     "pylint",
46 ]
47
48 [project.urls]
49 "Homepage" = "https://github.com/LLyaudet/python-none-objects"
50 "Bug Tracker" = ""\
51 https://github.com/LLyaudet/python-none-objects/issues\
52 ""
53
54 [tool.black]
55 line-length = 70
56
57 [tool.isort]
58 profile = "black"
59 line_length = 70

```

2.5 README.md.tpl

```

1 # python-none-objects
2
3 [![PyPI-version-badge]][PyPI-package-page]
4 [![Downloads-badge]][PyPIStats-package-page]
5 [![Code-style:black:badge]][Black-GitHub.com]
6 [![Imports:isort:badge]][Isort-GitHub.io]
7 [![Typecheck:mypy:badge]][Typecheck-mypy-lang.org]
8 [![Linting:pylint:badge]][Pylint-GitHub.com]
9 [![CodeFactor-badge]][CodeFactor-package-page]
10 [![CodeClimateMaintainability-badge]][CodeClimateM13y-package-page]
11 [![Codacy-badge]][Codacy-package-page]
12 ![GitHub-top-language-badge]
13 ![GitHub-license-badge]
14 ![PyPI-python-version-badge]
15 ![GitHub-code-size-in-bytes-badge]
16
17 |      **A collection of "None" objects**      |
18 |:-----:|
19 | **compatible with various Python types** |
20
21
22 The following code yields warning
23 for "Default argument value is mutable".

```

```

24
25 ```python3
26 from typing import List, Dict
27
28 def foo(some: int, other: List = [], thing: Dict = {}):
29     for o in other:
30         bar(some, o, thing)
31 ```
32
33 It is usually recommended to use None instead
34 (<https://stackoverflow.com/questions/41686829>
35 /why-does-pycharm-warn-about-mutable-default-arguments-
36 how-can-i-work-around-the):
37
38 ```python3
39 from typing import List, Dict, Optional
40
41 def foo(
42     some: int,
43     other: Optional[List] = None,
44     thing: Optional[Dict] = None,
45 ):
46     if other is None:
47         other = []
48     if thing is None:
49         thing = {}
50     for o in other:
51         bar(some, o, thing)
52 ```
53
54 But I prefer less boilerplate code like this:
55
56 ```python3
57 from typing import Iterable, Mapping
58 from types import MappingProxyType
59
60 def foo(
61     some: int,
62     other: Iterable = (),
63     thing: Mapping = MappingProxyType({}),
64 ):
65     for o in other:
66         bar(some, o, thing)
67 ```
68
69 This package introduces constants to make the code more readable:

```

```

70
71 ```python3
72 from typing import Iterable, Mapping
73 from python_none_objects import NoneIterable, NoneMapping
74
75 def foo(
76     some: int,
77     other: Iterable = NoneIterable,
78     thing: Mapping = NoneMapping,
79 ):
80     for o in other:
81         bar(some, o, thing)
82 ```
83
84 Be sure to look at the discussions on GitHub:
85 <https://github.com/LLyaudet/python-none-objects/discussions>.
86
87 There is a poll on the naming convention you would prefer:
88 <https://github.com/LLyaudet/python-none-objects/discussions/2>.
89
90 And there is a discussion on various ideas
91 to optimize the code with these constants:
92 <https://github.com/LLyaudet/python-none-objects/discussions/3>.
93
94 I think it would be better to have this kind of constants
95 in the standard library.
96 If you think after reading everything, that it is indeed a good idea,
97 add a star to this repository to let the rest
98 of the Python community
99 know that you would like to see such constant objects
100 in the language :).
101 <https://github.com/LLyaudet/python-none-objects/>
102 If the project gains popularity, I'll try to propose it officially.
103
104 [PyPI-version-badge]: https://img.shields.io/pypi/v/\
105 python-none-objects.svg
106
107 [PyPI-package-page]: https://pypi.org/project/\
108 python-none-objects/
109
110 [Downloads-badge]: https://img.shields.io/pypi/dm/\
111 python-none-objects
112
113 [PyPIStats-package-page]: https://pypistats.org/packages/\
114 python-none-objects
115

```

```

116 [Code-style:black:badge]: https://img.shields.io/badge/\
117 code%20style-black-000000.svg
118
119 [Black-GitHub.com]: https://github.com/psf/black
120
121 [Imports:isort:badge]: https://img.shields.io/badge/\
122 %20imports-isort-%231674b1?style=flat&labelColor=ef8336
123
124 [Isort-GitHub.io]: https://pycqa.github.io/isort/
125
126 [Typecheck:mypy:badge]: https://www.mypy-lang.org/static/\
127 mypy_badge.svg
128
129 [Typecheck-mypy-lang.org]: https://mypy-lang.org/
130
131 [Linting:pylint:badge]: https://img.shields.io/badge/\
132 linting-pylint-yellowgreen
133
134 [Pylint-GitHub.com]: https://github.com/pylint-dev/pylint
135
136 [CodeFactor-badge]: https://www.codefactor.io/repository/github/\
137 llyaudet/python-none-objects/badge
138
139 [CodeFactor-package-page]: https://www.codefactor.io/repository/\
140 github/llyaudet/python-none-objects
141
142 [CodeClimateMaintainability-badge]: https://api.codeclimate.com/v1/\
143 badges/266efb337cabd7d7941e/maintainability
144
145 [CodeClimateMl3y-package-page]: https://codeclimate.com/github/\
146 Llyaudet/python-none-objects/maintainability
147
148 [Codacy-badge]: https://app.codacy.com/project/badge/Grade/\
149 4be488463e31459bb2ba02794091610d
150
151 [Codacy-package-page]: https://app.codacy.com/gh/Llyaudet/\
152 python-none-objects/dashboard?utm_source=gh\
153 &utm_medium=referral&utm_content=&utm_campaign=Badge_grade
154
155 [GitHub-top-language-badge]: https://img.shields.io/github/\
156 languages/top/llyaudet/python-none-objects
157
158 [GitHub-license-badge]: https://img.shields.io/github/license/\
159 llyaudet/python-none-objects
160
161 [PyPI-python-version-badge]: https://img.shields.io/pypi/pyversions/\

```

```

162 python-none-objects
163
164 [GitHub-code-size-in-bytes-badge]: https://img.shields.io/github/\
165 languages/code-size/llyaudet/python-none-objects

```

2.6 src/python_none_objects/__init__.py

```

1  """
2  This file is part of python-none-objects library.
3
4  python-none-objects is free software:
5  you can redistribute it and/or modify it under the terms
6  of the GNU Lesser General Public License
7  as published by the Free Software Foundation,
8  either version 3 of the License,
9  or (at your option) any later version.
10
11 python-none-objects is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 See the GNU Lesser General Public License for more details.
17
18 You should have received a copy of
19 the GNU Lesser General Public License
20 along with python-none-objects.
21 If not, see <https://www.gnu.org/licenses/>.
22
23 ©Copyright 2023-2024 Laurent Lyaudet
24 -----
25 The empty tuple is really useful.
26 But it is implementation dependent for it to be a constant:
27 https://docs.python.org/3.12/reference/expressions.html
28 #parenthesized-forms
29 https://stackoverflow.com/questions/41983180
30 /is-the-empty-tuple-in-python-a-constant
31 https://stackoverflow.com/questions/8185776
32 /compare-object-to-empty-tuple-with-the-is-operator-in-python-2-x
33 https://stackoverflow.com/questions/38328857
34 /why-does-is-return-true-when-is-and-is-return-false
35 https://stackoverflow.com/questions/14135542
36 /how-is-tuple-implemented-in-cpython
37 I'm wondering if there would be additional efficiency gains
38 to treat the empty tuple and the constants here differently
39 at execution of Python scripts.

```

```

40 """
41
42 from types import MappingProxyType
43 from typing import (
44     Any,
45     Collection,
46     Container,
47     Iterable,
48     Mapping,
49     Never,
50 )
51
52 NoneCollection: Collection[Never] = ()
53 NoneIterable: Iterable[Never] = NoneCollection
54 NoneContainer: Container[Never] = NoneCollection
55 NoneMapping: Mapping[Any, Never] = MappingProxyType({})

```

2.7 src/python_none_objects/py.typed

2.8 typing_test/__init__.py

```

1 """
2 This file is part of python-none-objects library.
3
4 python-none-objects is free software:
5 you can redistribute it and/or modify it under the terms
6 of the GNU Lesser General Public License
7 as published by the Free Software Foundation,
8 either version 3 of the License,
9 or (at your option) any later version.
10
11 python-none-objects is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 See the GNU Lesser General Public License for more details.
17
18 You should have received a copy of
19 the GNU Lesser General Public License
20 along with python-none-objects.
21 If not, see <https://www.gnu.org/licenses/>.
22
23 ©Copyright 2023–2024 Laurent Lyaudet
24 """

```



```

25
26 import sys
27 from typing import Collection, Container, Iterable, Mapping
28
29 sys.path.insert(0, "../src/")
30 # pylint: disable-next=wrong-import-position
31 from python_none_objects import (
32     NoneCollection,
33     NoneContainer,
34     NoneIterable,
35     NoneMapping,
36 )
37
38
39 def foo_collection(x: Collection[str] = NoneCollection) -> bool:
40     """
41     Check typing for NoneCollection.
42     """
43     for y in x:
44         print(f"foo {y}")
45     return "toto" in x
46
47
48 def foo_iterable(x: Iterable[str] = NoneIterable) -> None:
49     """
50     Check typing for NoneIterable.
51     """
52     for y in x:
53         print(f"foo {y}")
54
55
56 def foo_container(x: Container[str] = NoneContainer) -> bool:
57     """
58     Check typing for NoneContainer.
59     """
60     return "toto" in x
61
62
63 def foo_mapping(x: Mapping[str, str] = NoneMapping) -> None:
64     """
65     Check typing for NoneMapping.
66     """
67     for y, z in x.items():
68         print(f"foo {y} bar {z}")
69
70

```

```

71  foo_collection()
72  foo_iterable()
73  foo_container()
74  foo_mapping()

```

2.9 wget_sha512.sh

```

1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU Lesser General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU Lesser General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU Lesser General Public License
20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023–2024 Laurent Lyaudet
24
25 wget_sha512() {
26     # $1 filename
27     # $2 download_URL
28     # $3 correct_sha512
29     if [[ ! -f "$1" ]];
30     then
31         wget -O "$1" "$2"
32     fi
33     present_sha512=$(sha512sum "$1" | cut -f1 -d' ')
34     if [[ "$present_sha512" != "$3" ]];
35     then
36         echo "$1 does not have correct sha512"
37         echo "wanted $3"
38         echo "found $present_sha512"
39         exit

```

40 f i
41 }

Merci Dieu ! Merci Père ! Merci Seigneur ! Merci Saint Esprit !