DevOrSysAdminScripts

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Abstract

Some "small" useful scripts for enhancing development or system-administrators tasks

Current version: 2024-05-16 Current number of commits: 77

Current git SHA1: 4398ebc30aef54ce96d6fa0f17c88db5af29b917 Code lines: 3328 total lines, 2951 not empty lines, 377 empty lines.

1 Files tree

```
- build_and_checks_dependencies
  — build_and_checks.sh.tpl
    - build_md_from_printable_md.sh
    - check_shell_scripts_beginnings.sh
    - check_URLs.sh
    - common_build_and_checks.sh
    - common_build_and_checks.sh.tpl
    - comparisons.sh
    - create_PDF.sh
    - generate_from_template.sh
    - get_common_text_glob_patterns.sh
     licenses_templates
       build_licenses_templates.sh
        - license_file_header_GPLv3+.c.tpl
        - license_file_header_GPLv3+.py.tpl
       — license file header GPLv3+.sh.tpl
       — license_file_header_GPLv3+.tex.tpl
        - license_file_header_GPLv3+.tpl
        - license_file_header_LGPLv3+.c
        - license_file_header_LGPLv3+.c.tpl
```

```
— license_file_header_LGPLv3+.py
         — license_file_header_LGPLv3+.py.tpl
          - license_file_header_LGPLv3+.sh
         — license_file_header_LGPLv3+.sh.tpl
        — license_file_header_LGPLv3+.tex
          - license_file_header_LGPLv3+.tex.tpl
       license_file_header_LGPLv3+.tpl
    — lines_counts.sh
     — lines filters.sh
     - overwrite_if_not_equal.sh
      python_black_complement.sh
    — python_isort_complement.sh
      - too_long_code_lines.sh
   update_common_build_and_checks.sh
  build_and_checks.sh
 — COPYING
 - COPYING.LESSER
  - DevOrSysAdminScripts.html
 — DevOrSysAdminScripts.pdf
 - git_checks.sh
 — latex
     — DevOrSysAdminScripts.tex
   DevOrSysAdminScripts.tex.tpl
 — LiensUtiles.txt
 — pre-commit
  - README.md
 - README.md.tpl
  repository_data.txt
 - wget_sha512.sh
4 directories, 46 files
[ 12K May 16 15:36] ./
— [4.0K May 16 15:36] build_and_checks_dependencies/
     — [1.4K May 16 03:01] build_and_checks.sh.tpl*
     — [1.7K May 16 13:46] build_md_from_printable_md.sh*
     - [1.1K May 16 15:34] check_shell_scripts_beginnings.sh
     — [1.9K May 16 15:23] check_URLs.sh
     - [7.5K May 16 15:36] common_build_and_checks.sh*
     - [5.1K May 16 14:03] common_build_and_checks.sh.tpl
     — [2.9K May 16 15:28] comparisons.sh
      - [6.6K May 16 15:26] create_PDF.sh*
      - [1.5K May 16 15:33] generate_from_template.sh
     — [1.7K May 16 02:42] get_common_text_glob_patterns.sh
      - [4.0K May 16 15:36] licenses_templates/
      - [5.0K May 16 15:36] build_licenses_templates.sh*
```

```
[ 713 May 16 14:58] license_file_header_GPLv3+.c.tpl
          [ 715 May 16 14:58] license_file_header_GPLv3+.py.tpl
          [ 747 May 16 14:58] license_file_header_GPLv3+.sh.tpl
         [ 747 May 16 14:58] license_file_header_GPLv3+.tex.tpl
         - [ 707 May 14 23:23] license_file_header_GPLv3+.tpl
         - [ 782 May 16 14:58] license_file_header_LGPLv3+.c
         - [ 734 May 16 14:58] license_file_header_LGPLv3+.c.tpl
            784 May 16 14:58] license_file_header_LGPLv3+.py
         - [ 736 May 16 14:58] license_file_header_LGPLv3+.py.tpl
         - [ 816 May 16 14:58] license_file_header_LGPLv3+.sh
         - [ 768 May 16 14:58] license_file_header_LGPLv3+.sh.tpl
        - [ 816 May 16 14:58] license_file_header_LGPLv3+.tex
         - [ 768 May 16 14:58] license_file_header_LGPLv3+.tex.tpl
       — [ 728 May 14 23:24] license_file_header_LGPLv3+.tpl
     - [1.7K May 16 15:15] lines_counts.sh
     - [5.4K May 16 15:17]
                           lines filters.sh
     - [1.1K May 16 15:32] overwrite_if_not_equal.sh
     - [1.3K May 16 02:43] python_black_complement.sh
     - [1.5K May 16 15:27] python_isort_complement.sh
     - [1.2K May 16 15:32] too_long_code_lines.sh
    — [2.4K May 16 13:58] update_common_build_and_checks.sh*
 - [1.6K May 16 15:36] build_and_checks.sh*
 - [ 34K May 6 00:49] COPYING
- [7.5K May 6 00:49] COPYING.LESSER
 - [ 15K May 14 18:40] DevOrSysAdminScripts.html
 - [141K May 16 15:35] DevOrSysAdminScripts.pdf
 - [2.5K May 16 15:31] git_checks.sh
- [4.0K May 16 15:36]
                     latex/
    — [ 13K May 16 15:36] DevOrSysAdminScripts.tex
  [ 13K May 16 14:06] DevOrSysAdminScripts.tex.tpl
— [ 424 May 6 00:49] LiensUtiles.txt
- [1.1K May 16 02:44] pre-commit
 - [1.6K May 16 14:58] README.md
 - [1.6K May 15 18:00] README.md.tpl
 - [ 566 May 16 13:59] repository_data.txt
— [1.2K May 16 15:27] wget_sha512.sh
```

4 directories, 46 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/DevOrSysAdminScripts/.

2.1 build_and_checks_dependencies/build_and_checks.sh.tpl

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
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  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  source ./wget_sha512.sh
  mkdir -p build_and_checks_dependencies/licenses_templates
  subdir="build_and_checks_dependencies"
 personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build and checks dependencies"
  URL_beginning="$personal_github$dependencies"
  script="$URL_beginning/common_build_and_checks.sh"
  @sha512_common_build_and_checks.sh@
  wget_sha512 "./$subdir/common_build_and_checks.sh" "$script"\
    "$correct sha512"
  chmod +x "./$subdir/common_build_and_checks.sh"
  cwd="."
  if [[ -n "$1" ]];
42 then
    cwd="$1"
 fi
```

2.2 build_and_checks_dependencies/build_md_from_printable_md.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  subdir="build and checks dependencies"
  source "./$subdir/overwrite_if_not_equal.sh"
28 sed_expression='s/(\[[a-zA-Z0-9:-]*\]: [^\n\\]*)\\\n/\1/Mg'
29 sed_expression+=';s/(<http[^\n\\]*)\\n/\1/Mg'</pre>
  sed_expression+='; s/(- < http[^\n\\]*)\\n/\1/Mg'
32 pushd.
33 if [[ -n "$1" ]];
  then
     cd "$1"
  fi
  if [[ -n "$2" ]];
39 then
    file name="$2"
41 else
```

```
file_name="README"
fi
if [[ -f "${file_name}.md.tpl" ]];
  sed -Ez "$sed_expression" "${file_name}.md.tpl"\
    > "${file_name}_temp1.md"
  sed -Ez "$sed_expression" "${file_name}_temp1.md"\
    > "${file name} temp2.md"
  sed -Ez "$sed_expression" "${file_name}_temp2.md"\
    > "${file_name}_temp3.md"
  sed -Ez "$sed_expression" "${file_name}_temp3.md"\
    > "${file_name}_temp4.md"
  overwrite if not equal "${file name}.md" "${file name} temp4.md"
  rm "${file_name}_temp1.md" "${file_name}_temp2.md"\
    "${file name} temp3.md"
else
  echo "No file ${file_name}.md.tpl"
fi
popd
```

2.3 build_and_checks_dependencies/check_shell_scripts_beginnings.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
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# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
# You should have received a copy of
# the GNU Lesser General Public License
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```

2.4 build_and_checks_dependencies/check_URLs.sh

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
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  # of the GNU Lesser General Public License
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  # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
 # but WITHOUT ANY WARRANTY;
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  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
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  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  subdir="build_and_checks_dependencies"
  source "./$subdir/get_common_text_glob_patterns.sh"
 check URLs() {
     get_common_text_files_glob_patterns
```

```
declare -A LFBFL_substitutions
     LFBFL substitutions=(\
32
       ["http://www.gnu.org/licenses/"]="https://www.gnu.org/licenses/"\
34
     for LFBFL_pattern in "${common_file_patterns[@]}"; do
       [ "$1" != "-v" ] || echo "Iterating on pattern: $LFBFL_pattern"
       find . -type f -name "$LFBFL_pattern" -printf '%P\n'\
         | xargs grep -H 'http:'\
         | grep -v "^[^:]*check_URLs.sh:"
       for LFBFL_file_name in $LFBFL_pattern; do
         [ -f "$LFBFL_file_name" ] || continue
         LFBFL base file name=$(basename "$LFBFL file name")
         [ "$LFBFL_base_file_name" != "check_URLs.sh" ] || continue
         [ "$1" != "-v" ] || echo "Handling the file: $LFBFL file name"
         for LFBFL_substitution in "${!LFBFL_substitutions[@]}"; do
          LFBFL_substitution2=\
   ${LFBFL_substitutions[$LFBFL_substitution]}
           if grep -q "$LFBFL_substitution" "$LFBFL_file_name"; then
49
             sed -i "s|$LFBFL_substitution|$LFBFL_substitution2|g"\
               "$LFBFL file name"
           fi
         done
      done
    done
  }
```

2.5 build_and_checks_dependencies/common_build_and_checks.sh

```
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
# DevOrSysAdminScripts is free software:
# you can redistribute it and/or modify it under the terms
# of the GNU Lesser General Public License
# as published by the Free Software Foundation,
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# DevOrSysAdminScripts is distributed in the hope
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# but WITHOUT ANY WARRANTY;
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# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
# See the GNU Lesser General Public License for more details.
```

```
# You should have received a copy of
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# along with DevOrSysAdminScripts.
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
# @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
source ./wget sha512.sh
personal_github="https://raw.githubusercontent.com/LLyaudet/"
dependencies="DevOrSysAdminScripts/main/build_and_checks_dependencies"
URL_beginning="$personal_github$dependencies"
subdir="build and checks dependencies"
script="$URL_beginning/build_md_from_printable_md.sh"
correct_sha512='5231a90246a58da4bb27440edd3281c02b05e29cd9b1bfe340a25'
correct_sha512+='7eefcf7df82f70ed3ce95a112bc03710839b2dfde066317c938f'
correct_sha512+='302bc599f8d293d45910b8a'
wget_sha512 "./$subdir/build_md_from_printable_md.sh" "$script"\
   "$correct sha512"
chmod +x "./$subdir/build_md_from_printable_md.sh"
script="$URL_beginning/check_shell_scripts_beginnings.sh"
correct sha512='bf66ef4a9084fe6166d087bb295939d48bd7f8ff57373fbdb359f'
correct sha512+='fedb02171f21d8edf0b46359ec32aacd33c2d6e8410be62a43aa'
correct sha512+='44e439cdf2f2fc68c382e74'
wget_sha512 "./$subdir/check_shell_scripts_beginnings.sh" "$script"\
   "$correct sha512"
script="$URL beginning/check URLs.sh"
correct sha512='d83cac890cc02fabaed5612ff59dd581e4e42e4f9de5710ad80bb'
correct sha512+='41db46f9e2ec6f5bddb6006e209e81d45432a908717d10188ebc'
correct_sha512+='a623b1493e4098dd78cd80b'
wget_sha512 "./$subdir/check_URLs.sh" "$script" "$correct_sha512"
script="$URL_beginning/comparisons.sh"
correct sha512='df5bfe91de1fb948601776c2205f313fca6fabc1703ec94c36d77'
correct_sha512+='4c623f1d694de26eff0e6b950000ff84c12f2747c9403b7981b2'
correct sha512+='92aa2bd06a9e74fa0beb798'
wget_sha512 "./$subdir/comparisons.sh" "$script" "$correct_sha512"
script="$URL beginning/create PDF.sh"
correct sha512='dea932f06ab14e3ee2d1c2142fe76e901bf1d42c80629b7e41e7a'
correct sha512+='6ebd8bdf4a12bfd023ad7bb7732ff0f9243f198c0fe529dd139f'
```

```
correct_sha512+='ea38ed235c0c7267bc25c54'
   wget_sha512 "./$subdir/create_PDF.sh" "$script" "$correct_sha512"
   chmod +x "./$subdir/create PDF.sh"
  script="$URL_beginning/generate_from_template.sh"
  correct_sha512='5a7732f2f93ce4020cbaea76dfd94cdaf313dd2f472d5ab0d9361'
  correct sha512+='7b3e6bf1bdea2a4475989689cbf1f50e8dac50c49b0ea7c385d7'
   correct_sha512+='00999336dd0bd03483fba64'
   wget sha512 "./$subdir/generate from template.sh" "$script"\
     "$correct sha512"
  script="$URL_beginning/get_common_text_glob_patterns.sh"
  correct sha512='cd341e8fd1074d53f6ea88b332fc4375f06af0e4c0b56e1ddb39c'
  correct sha512+='8ab988ea5f0c21ec4088fe1946ae44f3ea7ba394f558c03a446f'
  correct sha512+='0971482a4a7a8d6fe041153'
   wget sha512 "./$subdir/get common text glob patterns.sh" "$script"\
     "$correct sha512"
  URL_beginning2="$URL_beginning/licenses_templates"
  subdir2="$subdir/licenses_templates"
  script="$URL_beginning2/build_licenses_templates.sh"
  correct sha512='b29883e375cb9c0af6056941a3d0e8e1a8d63a346f0276cb8701a'
   correct_sha512+='b18b04f8a7511fa3f5b82b56f6add0bcda7e40ca381c2cbff1ce'
  correct sha512+='e0838986c2387a4d7e6ea4a'
   wget_sha512 "./$subdir2/build_licenses_templates.sh" "$script"\
     "$correct sha512"
   chmod +x "./$subdir2/build licenses templates.sh"
  script="$URL beginning2/license file header GPLv3+.tpl"
  correct sha512='2bdef9a729a5a9ca5ed87ef8a518877c5ee6b31b4533608660316'
   correct sha512+='a4e595fb31465a4847f4d53a2f7264118bd4eab7c1d1892e00bc'
  correct sha512+='1861455ed02898f194db067'
   wget sha512 "./$subdir2/license file header GPLv3+.tpl" "$script"\
     "$correct_sha512"
  script="$URL_beginning2/license_file_header_LGPLv3+.tpl"
  correct_sha512='265fd0d086b48ab798f35a072335a4976e4eda8c256febba6c77c'
   correct_sha512+='98ca86cdd844c6ac150c3445c80debbb3fc2574b5fceeeaf79ec'
   correct sha512+='734a759bdef5fe798067c62'
   wget_sha512 "./$subdir2/license_file_header_LGPLv3+.tpl" "$script"\
     "$correct_sha512"
103
  script="$URL beginning/lines counts.sh"
105
  correct sha512='4aa984d1a3709d3ed6ad5a4accc5e1d9cee2f174730ef232dbcd6'
  correct sha512+='1d3661191e1904a0072fdb818c96e4aff5e58d5d7b0b024a874f'
   correct sha512+='17acb35d98bbde10fb6dacd'
```

```
wget_sha512 "./$subdir/lines_counts.sh" "$script" "$correct_sha512"
109
  script="$URL beginning/lines filters.sh"
111
   correct sha512='692bea2719639e37d761ac5330633f31cfe4252cf3c114e51b5e2'
   correct sha512+='0f57fa3ff6385e9a792ad6e701f0e33be45db30a38470507a995'
   correct_sha512+='eda016e2755b9f05dba0d08'
   wget sha512 "./$subdir/lines filters.sh" "$script" "$correct sha512"
115
116
   script="$URL beginning/overwrite if not equal.sh"
117
   correct_sha512='afabf6f384e61920dbc575afb1519173ac2654b6180b9a28c5ffc'
   correct sha512+='173a05c6e6d4011d7bc8912da15caee923c9033d8355967920e4'
119
   correct sha512+='d05e2cd575c3cf065fc8e40'
   wget_sha512 "./$subdir/overwrite_if_not_equal.sh" "$script"\
     "$correct sha512"
122
123
   script="$URL beginning/python black complement.sh"
   correct sha512='7152e9d01cc3c72371695635cd6866b2e13ce25f4842afb8e4e87'
   correct sha512+='b6447b26abafbdbc850f69946913b5b2c423b265c9066a2b4655'
126
   correct sha512+='6dea19c04a5416588423a74'
   wget_sha512 "./$subdir/python_black_complement.sh" "$script"\
128
     "$correct sha512"
130
   script="$URL_beginning/python_isort_complement.sh"
   correct sha512='770e5ed16e4b5f6d61577794033161d361bc2eacea6d08a5c7b9a'
   correct_sha512+='1577666cf655d1c947108adb9151d87f937471d30716a6d50d76'
   correct sha512+='f84bbcf1f1620fb9ede4575'
134
   wget sha512 "./$subdir/python isort complement.sh" "$script"\
     "$correct sha512"
136
   script="$URL_beginning/too_long_code_lines.sh"
138
   correct sha512='a8716971f22a14160701b6e801c4f66220e2e1dd174f24e43775e'
   correct sha512+='e743aeaa4ee66dadae185e134c3554f8c37d8ee457d051336ed3'
   correct sha512+='430b734bcf80e8d5704064b'
   wget_sha512 "./$subdir/too_long_code_lines.sh" "$script"\
142
     "$correct_sha512"
143
  shopt -s globstar
145
   source "./$subdir/check_shell_scripts_beginnings.sh"
   source "./$subdir/check URLs.sh"
  source "./$subdir/comparisons.sh"
  source "./$subdir/generate_from_template.sh"
   source "./$subdir/get_common_text_glob_patterns.sh"
  source "./$subdir/lines counts.sh"
  source "./$subdir/lines filters.sh"
  source "./$subdir/overwrite if not equal.sh"
   source "./$subdir/python_black_complement.sh"
```

```
source "./$subdir/python_isort_complement.sh"
   source "./$subdir/too_long_code_lines.sh"
157
   cwd="."
   if [[ -n "$1" ]];
   then
     cwd="$1"
161
   fi
163
   echo "Building license headers"
   ./$subdir2/build_licenses_templates.sh "$cwd"
165
   echo "Building README.md"
   ./$subdir/build md from printable md.sh "$cwd"
168
   pushd .
   cd "$cwd"
172
   echo "Running isort"
   isort .
   python_isort_complement
   echo "Running black"
   black .
   python_black_complement
180
   find . -name "pyproject.toml" | relevant_find\
     | while read -r file_name;
182
   do
     if grep -q "Typing :: Typed" "$file_name"; then
184
       echo "Running mypy"
185
       mypy $(dirname "$file_name")
     fi
187
   done
188
   echo "Analyzing too long lines"
   too_long_code_lines | relevant_grep | not_license_grep
191
   echo "Analyzing shell scripts beginnings"
193
   check_shell_scripts_beginnings | relevant_grep
195
   echo "Analyzing URLs"
   check_URLs | relevant_grep
197
   echo "Creating the PDF file of the listing of the source code"
199
   ./build_and_checks_dependencies/create_PDF.sh
```

```
201
202 popd
```

2.6 build_and_checks_dependencies/common_build_and_checks.sh.tpl

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
   # DevOrSysAdminScripts is free software:
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  # as published by the Free Software Foundation,
  # either version 3 of the License,
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  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
   # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  source ./wget_sha512.sh
  personal github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build and checks dependencies"
  URL_beginning="$personal_github$dependencies"
  subdir="build_and_checks_dependencies"
31
  script="$URL_beginning/build_md_from_printable_md.sh"
  @sha512_build_md_from_printable_md.sh@
  wget_sha512 "./$subdir/build_md_from_printable_md.sh" "$script"\
     "$correct_sha512"
  chmod +x "./$subdir/build_md_from_printable_md.sh"
script="$URL_beginning/check_shell_scripts_beginnings.sh"
40 @sha512 check shell scripts beginnings.sh@
  wget_sha512 "./$subdir/check_shell_scripts_beginnings.sh" "$script"\
```

```
"$correct_sha512"
42
43
  script="$URL beginning/check URLs.sh"
  @sha512_check_URLs.sh@
  wget_sha512 "./$subdir/check_URLs.sh" "$script" "$correct_sha512"
  script="$URL_beginning/comparisons.sh"
  @sha512_comparisons.sh@
  wget sha512 "./$subdir/comparisons.sh" "$script" "$correct sha512"
script="$URL_beginning/create_PDF.sh"
  @sha512_create_PDF.sh@
s4 wget_sha512 "./$subdir/create_PDF.sh" "$script" "$correct_sha512"
  chmod +x "./$subdir/create PDF.sh"
  script="$URL beginning/generate from template.sh"
  @sha512_generate_from_template.sh@
  wget_sha512 "./$subdir/generate_from_template.sh" "$script"\
    "$correct_sha512"
  script="$URL_beginning/get_common_text_glob_patterns.sh"
  @sha512_get_common_text_glob_patterns.sh@
  wget_sha512 "./$subdir/get_common_text_glob_patterns.sh" "$script"\
    "$correct sha512"
 URL beginning2="$URL beginning/licenses templates"
  subdir2="$subdir/licenses templates"
  script="$URL_beginning2/build_licenses_templates.sh"
  @sha512_build_licenses_templates.sh@
  wget_sha512 "./$subdir2/build_licenses_templates.sh" "$script"\
    "$correct_sha512"
  chmod +x "./$subdir2/build licenses templates.sh"
  script="$URL_beginning2/license_file_header_GPLv3+.tpl"
  @sha512_license_file_header_GPLv3+.tpl@
  wget_sha512 "./$subdir2/license_file_header_GPLv3+.tpl" "$script"\
    "$correct_sha512"
  script="$URL_beginning2/license_file_header_LGPLv3+.tpl"
  @sha512_license_file_header_LGPLv3+.tpl@
  wget_sha512 "./$subdir2/license_file_header_LGPLv3+.tpl" "$script"\
    "$correct_sha512"
ss script="$URL beginning/lines counts.sh"
 @sha512 lines counts.sh@
  wget_sha512 "./$subdir/lines_counts.sh" "$script" "$correct_sha512"
```

```
88
   script="$URL_beginning/lines_filters.sh"
  @sha512 lines filters.sh@
   wget_sha512 "./$subdir/lines_filters.sh" "$script" "$correct_sha512"
  script="$URL_beginning/overwrite_if_not_equal.sh"
  @sha512_overwrite_if_not_equal.sh@
   wget_sha512 "./$subdir/overwrite_if_not_equal.sh" "$script"\
     "$correct sha512"
   script="$URL_beginning/python_black_complement.sh"
   @sha512_python_black_complement.sh@
   wget_sha512 "./$subdir/python_black_complement.sh" "$script"\
     "$correct sha512"
101
102
   script="$URL beginning/python isort complement.sh"
103
   @sha512_python_isort_complement.sh@
   wget_sha512 "./$subdir/python_isort_complement.sh" "$script"\
105
     "$correct_sha512"
106
107
   script="$URL_beginning/too_long_code_lines.sh"
   @sha512_too_long_code_lines.sh@
109
   wget_sha512 "./$subdir/too_long_code_lines.sh" "$script"\
     "$correct_sha512"
111
112
  shopt -s globstar
113
  source "./$subdir/check shell scripts beginnings.sh"
source "./$subdir/check_URLs.sh"
  source "./$subdir/comparisons.sh"
  source "./$subdir/generate_from_template.sh"
   source "./$subdir/get_common_text_glob_patterns.sh"
  source "./$subdir/lines counts.sh"
  source "./$subdir/lines filters.sh"
  source "./$subdir/overwrite_if_not_equal.sh"
  source "./$subdir/python_black_complement.sh"
source "./$subdir/python_isort_complement.sh"
   source "./$subdir/too_long_code_lines.sh"
124
  cwd="."
126
  if [[ -n "$1" ]];
  then
128
    cwd="$1"
  fi
130
echo "Building license headers"
   ./$subdir2/build_licenses_templates.sh "$cwd"
```

```
134
   echo "Building README.md"
   ./$subdir/build_md_from_printable_md.sh "$cwd"
   pushd .
138
   cd "$cwd"
   echo "Running isort"
   isort .
  python_isort_complement
   echo "Running black"
  black .
   python black complement
   find . -name "pyproject.toml" | relevant_find\
     | while read -r file_name;
151
     if grep -q "Typing :: Typed" "$file_name"; then
152
       echo "Running mypy"
153
       mypy $(dirname "$file_name")
     fi
155
   done
157
   echo "Analyzing too long lines"
   too_long_code_lines | relevant_grep | not_license_grep
159
   echo "Analyzing shell scripts beginnings"
   check_shell_scripts_beginnings | relevant_grep
   echo "Analyzing URLs"
   check_URLs | relevant_grep
166
   echo "Creating the PDF file of the listing of the source code"
   ./build_and_checks_dependencies/create_PDF.sh
168
  popd
170
```

2.7 build_and_checks_dependencies/comparisons.sh

```
#!/usr/bin/env bash
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```

```
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  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  equal(){
    # Returns 1 if all the arguments strings are equal.
     # Renvoie 1 dans $? si toutes les chaînes en arguments sont égales.
     # J'ai rerepensé au 3-way-merge
     # et à mon article sur le principe de première différence
     \# appliqué à la largeur modulaire, de clique ou de rang avec
     # l'idée d'un principe de première différence ternaire.
     equal_var_all_args="'$*'"
     equal_var_current="$equal_var_all_args"
     for equal_var_arg in $0; do
       if [[ "$equal_var_current" == "$equal_var_all_args" ]]; then
         equal_var_current="$equal_var_arg"
         continue
       if [[ "$equal var current" != "$equal var arg" ]]; then
         return 0
       fi
     done
     return 1
43
  }
44
45
  max(){
    # Returns the maximum string among the arguments.
     # Renvoie la chaîne la plus grande parmi celles proposées.
    # $1=$sort command with the flags you want to be applied.
     # $ max sort a b c
    # C
    if [["$\#" == 0]]; then
```

```
return 1
    printf "%s\n" "${@:2}" | eval "$1 -r" | head -1
57
  min(){
    # Returns the minimum string among the arguments.
     # Renvoie la chaîne la plus petite parmi celles proposées.
    # $1=$sort command with the flags you want to be applied.
    # $ min sort a b c
    # a
    if [["$\#" == 0]]; then
      return 1
    printf "%s\n" "${@:2}" | eval "$1" | head -1
68
  is_substring() {
    # $1=$string
    # $2=$substring
72
    is_substring_var_1=$(\
       echo "$1" | sed -e 's/\\\^{q'} -e "s/'\\\^{q'}
74
    is_substring_var_2=$(\
       echo "$2" | sed -e 's/\\\&/g' -e "s/'\\\&/g"\
78
    is_substring_var_3="\$a = '$is_substring_var_1';"
    is_substring_var_3+=" \$b = preg_quote('$is_substring_var_2');"
    is_substring_var_3+=" \c = '/'.addcslashes(\$b, '/').'/';"
    is_substring_var_3+=" die(preg_match(\$c, \$a));"
    php -r "$is_substring_var_3"
  }
84
85
  is_subfile(){
    # $1=$file_name
    # $2=$sub_file_name
    is_subfile_var_1="\$a = file_get_contents('$1');"
    is_subfile_var_1+=" \$b = preg_quote(file_get_contents('$2'));"
    is_subfile_var_1+=" \c = '/'.addcslashes(\b , '/').'/';"
    is_subfile_var_1+=" die(preg_match(\$c, \$a));"
    php -r "$is_subfile_var_1"
  }
```

2.8 build_and_checks_dependencies/create_PDF.sh

```
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  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  current path=$(pwd)
  main_directory=$(basename "$current_path")
  subdir="build_and_checks_dependencies"
  source "./$subdir/lines counts.sh"
  source "./$subdir/lines_filters.sh"
  cp "./latex/$main_directory.tex.tpl"\
      "./latex/$main_directory.tex"
  # We need a variant of the template with long lines.
  cp "./latex/$main_directory.tex.tpl"\
      "./latex/$main_directory.tex.tpl2"
  sed -i -Ez "s/%\n//Mg" "./latex/$main_directory.tex.tpl2"
  current_date=$(date -I"date")
  sed -i "s|@current_date@|$current_date|q"\
     "./latex/$main directory.tex"
41
43 current_git_SHA1=$(git rev-parse HEAD)
  sed -i "s|@current_git_SHA1@|$current_git_SHA1|g"\
```

```
"./latex/$main_directory.tex"
45
  number of commits=$(git shortlog | space starting lines | wc -1)
  sed -i "s|@number_of_commits@|$number_of_commits|g"\
    "./latex/$main_directory.tex"
  number_of_lines="$(code_lines_count_all) total lines,"
  number_of_lines+=" $(code_lines_count_not_empty) not empty lines,"
  number_of_lines+=" $(code_lines_count_empty) empty lines."
  sed -i "s|@number_of_lines@|$number_of_lines|g"\
     "./latex/$main_directory.tex"
  tree -a --gitignore\
    -I "$main directory.aux"\
    -I "$main directory.log"\
    -I "$main directory.out"
    -I "$main_directory.tex.tpl2"\
    -I current_tree.txt\
    -I current_tree_light.txt\
    -I "node_modules/"\
    -I "__pycache__/"\
    -I ".mypy_cache/"\
    -I ".git/"\
    > current_tree_light.txt
  tree -a -DFh --gitignore\
    -I "$main directory.aux"\
    -I "$main directory.log"\
72
    -I "$main_directory.out"\
    -I "$main_directory.tex.tpl2"\
    -I current_tree.txt\
    -I current tree light.txt\
    -I "node modules/"
    -I "__pycache__/"\
    -I ".mypy_cache/"\
    -I ".git/"\
    > current_tree.txt
  shopt -s dotglob
   find . -type f -printf '%P\n' | relevant_find | sort\
     | while read -r file_name;
  do
    git check-ignore -q "$file_name" && continue
    base file name=$(basename "$file name")
     [ "$base_file_name" != "current_tree_light.txt" ] || continue
     [ "$base_file_name" != "current_tree.txt" ] || continue
```

```
[ "$base_file_name" != "COPYING" ] || continue
     [ "$base_file_name" != "COPYING.LESSER" ] || continue
     [ "$base file name" != "$main directory.pdf" ] || continue
     [ "$base_file_name" != "$main_directory.tex" ] || continue
     [ "$base_file_name" != "$main_directory.tex.tpl2" ] || continue
     if [[ "$base_file_name" == *.md ]]; then
       if [ -f "$file_name.tpl" ]; then
         # in_place_grep -v "$base_file_name$" current_tree.txt
         # in_place_grep -v "$base_file_name$" current_tree_light.txt
         continue
       fi
101
     fi
     cleaned_path1=\$(sed -e 's/_/\\_/g' <(echo "\$file_name"))
103
     cleaned path2=\{(sed -e 's/)/:/q' -e 's/)./q' < (echo "$file name"))
104
     if grep -q " $file_name\$" "./latex/$main_directory.tex.tpl2"; then
105
       echo ""
106
       # sed -i -Ez\
107
           "s/$file_name\n/\
108
           file_name/./\./g}\\proof{file_name/./\./g}\] \n/Mg"
           "current_tree_light.txt"
110
     else
111
       echo "The file $file_name is not listed"\
112
             " in ./latex/$main_directory.tex.tpl"
       echo "TODO:\subsection{"
114
       echo "TODO: $cleaned_path1"
115
       echo "TODO:}"
116
       echo "TODO:\label{"
       echo "TODO: $cleaned path2"
118
       echo "TODO:}"
119
       echo "TODO:"
120
       echo "TODO:\VerbatimInput[numbers=left,xleftmargin=-5mm]{"
121
       echo "TODO: $file name"
122
       echo "TODO: }"
123
       echo "TODO:"
124
       echo "TODO:"
125
     fi
126
   done
127
   shopt -u dotglob
   shopt -s globstar
129
   split_last_line() {
131
     # $1=$new_lines
132
     # $2=$prefix
133
     split_last_line_result="$1"
     if echo "$1" | sed -e 's/\\n/\s'; then
135
       LFBFL start=$(\
```

```
echo "$1" | sed -e 's/\n/\n/g' | head --lines=-1\
137
          \mid sed -z 's/\n/\n/g'
       )
139
        # echo "start: $LFBFL_start"
       LFBFL_last_line=$(\
141
          echo "$1" | sed -e 's/\n/\n/g' | tail --lines=1\
       )
143
        # echo "last_line: $LFBFL_last_line"
       split_last_line_result=""
145
        if [[ -n "$LFBFL_start" ]]; then
          split_last_line_result="$LFBFL_start\n"
147
        fi
       split_last_line_result+="${LFBFL_last_line:0:69}\n"
149
        split last line result+="$2${LFBFL last line:69}"
150
     fi
151
152
153
   # We verify if some lines are beyond 70 characters
154
   # in current_tree_light.txt et current_tree.txt.
   trees=("current_tree_light.txt" "current_tree.txt")
   for some_tree in "${trees[@]}"; do
     grep '.\{71}\}' "$some_tree" | while read -r some_line; do
158
        # echo "some_line: $some_line"
       prefix=$(\
160
          echo "$some_line"\
161
            | sed -E -e 's/(.*)-[^-]+$/\1/q' -e 's/[^ ]+$//q' \
162
       prefix+="| "
164
        # echo "prefix: $prefix"
165
        file name=$(\
          echo "$some_line"\
167
            | sed -E 's|.* (([a-zA-Z0-9\.\_/-]+).)$|\1|g'\
168
169
        # echo "file_name: $file_name"
170
       line_start=$(\
171
          echo "$some_line"\
172
            | sed -E "s/(.*)[] *file_name/\1/q"
173
            | sed -e 's/ *$//q'
175
        # echo "line_start: $line_start"
       some_line=$(\
177
          echo "$some_line"\
            | sed -E -e 's/[/\[/g' -e 's/\]/\]/g'
179
       new lines="$prefix$file name"
181
        split_last_line "$new_lines" "$prefix"
```

```
new_lines=$split_last_line_result
183
       split_last_line "$new_lines" "$prefix"
184
       new_lines=$split_last_line_result
185
       split_last_line "$new_lines" "$prefix"
       new_lines=$split_last_line_result
187
       split_last_line "$new_lines" "$prefix"
       new_lines=$split_last_line_result
       sed -i -e "s/$some_line/$line_start\n$new_lines/q" "$some_tree"
     done
191
   done
193
   sed -i -e '/@current_tree_light@/{r current_tree_light.txt' -e 'd}'\
     "./latex/$main_directory.tex"
195
   sed -i -e '/@current tree@/{r current tree.txt' -e 'd}'\
196
     "./latex/$main_directory.tex"
197
198
   pdflatex "./latex/$main_directory.tex" > /dev/null
   pdflatex "./latex/$main_directory.tex" > /dev/null
   pdflatex "./latex/$main_directory.tex" > /dev/null
202
   files_to_delete=(\
     "$main_directory.aux"\
204
     "$main_directory.log"\
     "$main_directory.out"\
206
     "current_tree.txt"
     "current_tree_light.txt"
208
     "./latex/$main_directory.tex.tpl2"
210
   # Comment the following line if you need to debug.
   for file_name in "${files_to_delete[@]}"; do
     rm -f "$file_name"
   done
```

2.9 build_and_checks_dependencies/generate_from_template.sh

```
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  generate from template with block comments(){
    # $1=base_file_name
    # $2=target file name
    # $3=enter_block_comment
    # $4=exit_block_comment
    LFBFL_temp=".generate_from_template_with_block_comments.temp"
     echo "$3" > "$2$LFBFL_temp"
     cat "$1" >> "$2$LFBFL_temp"
     echo "$4" >> "$2$LFBFL temp"
     overwrite_if_not_equal "$2" "$2$LFBFL_temp"
  }
35
  generate from template with line comments() {
    # $1=base file name
     # $2=target file name
     # $3=line_comment_prefix
     # $4=optional_post_processing
     LFBFL_temp=".generate_from_template_with_line_comments.temp"
     sed -e "s/^/$3/g" "$1" > "$2$LFBFL temp"
     if [[ -n "$4" ]]; then
       eval "$4"
     overwrite_if_not_equal "$2" "$2$LFBFL_temp"
  }
48
```

2.10 build_and_checks_dependencies/get_common_text_glob_patterns.sh

```
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   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  get_common_text_paths_glob_patterns() {
     export common_patterns=(\
26
       ' **/*.C'\
       '**/*.css'\
       '**/*.h'\
       '**/*.htm'\
       '**/*.html'\
       '**/*.js'\
       '**/*.json'\
       '**/*.md'\
       '**/*.php'\
       '**/*.py'\
       '**/*.sh'\
       '**/*.sql'\
       '**/*.tex'\
       '**/*.toml'\
       '**/*.tpl'\
       '**/*.ts'\
       '**/*.txt'\
43
       '**/*.yml'\
       '**/COPYING'\
45
       '**/COPYING.LESSER'\
       '**/pre-commit'\
       '**/.gitignore'\
       '**/py.typed'\
   }
51
```

```
53
  get_common_text_files_glob_patterns() {
     export common_file_patterns=(\
      '*.C'\
       '*.css'\
       '*.h'\
       ' * .htm' \
       '*.html'\
       '*.js'\
       '*.json'\
       ' * .md' \
       '*.php'\
       '*.py'\
       '*.sh'\
       '*.sql'\
       '*.tex'\
       '*.toml'\
       '*.tpl'\
       '*.ts'\
       '*.txt'\
72
       ' * . yml' \
       'COPYING' \
       'COPYING.LESSER' \
       'pre-commit'\
       '.gitignore'\
       'py.typed'\
     )
  }
```

2.11 build_and_checks_dependencies/licenses_templates/build_licenses_templates.sh

```
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   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24
  subdir="build_and_checks_dependencies"
  source "./$subdir/comparisons.sh"
  source "./$subdir/generate_from_template.sh"
  source "./$subdir/lines_filters.sh"
  source "./$subdir/overwrite if not equal.sh"
  license subdir="./$subdir/licenses templates/"
  license_prefix="$license_subdir""license_file_header_"
  licenses=(\
     "GPLv3+"\
     "LGPLv3+"
35
  )
   # Various language definitions for text file formats
  block_comment_languages=(\
     "c"\
41
     "py"\
43
  block_comment_enters=(\
     '/*'\
     / " " " / \
  )
47
  block comment exits=(\
     ' * / ' \
     / """/
50
   equal "${#block_comment_languages[@]}"\
         "${#block_comment_enters[@]}"\
         "${#block_comment_exits[@]}"
54
   if [[ \$? == 0 ]]; then
     echo '/!\'"Problème de définition des tableaux de langages 1"'/!\'
  line_comment_languages=(\
     "sh"\
     "tex"\
```

```
line_comment_prefixes=(\
    '# '\
     / 응 / \
   equal "${#line_comment_languages[@]}"\
        "${#line_comment_prefixes[@]}"
   if [[ \$? == 0 ]]; then
     echo '/!\'"Problème de définition des tableaux de langages 2"'/!\'
   # We generate the license header templates adapted to various text
  # files formats.
   # Kamoulox do endfor, Jacques Beauregard XD
  # (C'est toujours mieux que l'inverse :) !)
  # for do endfor -> for do done (Fort Doux Donne).
  for license in "${licenses[@]}"; do
     license_prefix2="$license_prefix$license"
     for ((i=0; i<${#block_comment_languages[@]}; i++)); do</pre>
       extension=${block_comment_languages[i]}
       license_file_name="$license_prefix2.$extension"
       enter_string=${block_comment_enters[i]}
       exit_string=${block_comment_exits[i]}
       generate from template with block comments\
         "$license_prefix2.tpl"\
         "$license file name.tpl"
         "$enter_string" "$exit_string"
     done
     LFBFL_temp2=".generate_from_template_with_line_comments.temp"
     for ((i=0; i<${#line_comment_languages[@]}; i++)); do</pre>
       extension=${line comment languages[i]}
       license_file_name="$license_prefix2.$extension"
       prefix_string=${line_comment_prefixes[i]}
       generate_from_template_with_line_comments\
         "$license_prefix2.tpl"\
         "$license_file_name.tpl"
100
         "$prefix_string"\
         "sed -i -E -e 's/\s*$//g' '$license_file_name.tpl$LFBFL_temp2'"
102
     done
   done
104
106
   file_name=repository_data.txt
```

```
grep_variable "$file_name" repository_name
   grep_variable "$file_name" license
   grep variable "$file name" author full name
   license_prefix2="$license_prefix$license"
   # First year according to current state of git repository.
   first_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | tail -1)"
   # Last year according to current state of git repository.
   last_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | head -1)"
   copyright_string="$first_year-$last_year $author_full_name"
   for ((i=0; i<${#block_comment_languages[@]}; i++)); do
     extension=${block_comment_languages[i]}
118
     license_file_name="$license_prefix2.$extension"
     sed -e "s/@repository_name@/$repository_name/g"\
120
       -e "s/@copyright string@/$copyright string/g"\
121
       "$license_file_name.tpl" > "$license_file_name.temp"
122
     overwrite if not equal "$license file name" "$license file name.temp"
123
     head --lines=-1 "$license_file_name" | tail --lines=-1
124
       > "$license_file_name.temp"
125
     find . -type f -name "*.$extension" -printf '%P\n' | relevant_find\
       | while read -r file_name;
127
     do
128
       if is_subfile "$file_name" "$license_file_name.temp"
129
       then
         echo "File $file_name has no/wrong license header?"
131
       fi
132
     done
133
     rm "$license_file_name.temp"
135
   for ((i=0; i<${#line_comment_languages[@]}; i++)); do</pre>
     extension=${line_comment_languages[i]}
137
     license file name="$license prefix2.$extension"
138
     sed -e "s/@repository_name@/$repository_name/g"\
139
       -e "s/@copyright string@/$copyright string/g"\
140
       "$license_file_name.tpl" > "$license_file_name.temp"
141
     overwrite_if_not_equal "$license_file_name"\
142
       "$license_file_name.temp"
143
     find . -type f -name "*.$extension" -printf '%P\n' | relevant_find\
144
       | while read -r file_name;
146
       if is_subfile "$file_name" "$license_file_name"
148
         echo "File $file_name has no/wrong license header?"
       fi
150
     done
   done
152
```

2.12 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.c.tpl

```
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24 */
```

${\bf 2.13} \quad build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.py.tpl$

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2.14 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.sh.tpl

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$2.15 \quad build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tex.tpl$

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2.16 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tpl

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```

2.17 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.c

```
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3
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*/
```

2.18 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.c.tpl

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24 */
```

2.19 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.py

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  @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  11 11 11
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2.20 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.py.tpl

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2.21 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.sh

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```

2.22 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.sh.tpl

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2.23 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tex

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2.24 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tex.tpl

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2.26 build_and_checks_dependencies/lines_counts.sh

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23
  subdir="build_and_checks_dependencies"
  source "./$subdir/get_common_text_glob_patterns.sh"
  source "./$subdir/lines_filters.sh"
  all code lines() {
    get_common_text_files_glob_patterns
    for LFBFL_pattern in "${common_file_patterns[@]}"; do
      [ "$1" != "-v" ] || echo "Iterating on pattern: $LFBFL_pattern"
       find . -type f -name "$LFBFL_pattern" -printf '%P\n'\
         | xargs grep -H -v 'a(?!a)a'
     done
  }
  all_self_code_lines(){
    all_code_lines | relevant_grep\
       | not_license_grep | not_main_tex_grep
   }
41
  all_self_empty_code_lines(){
    all_self_code_lines | empty_lines_after_file_name
  all_self_not_empty_code_lines() {
     all_self_code_lines | not_empty_lines_after_file_name
```

```
50
51    code_lines_count_all() {
52        all_self_code_lines | wc -l
53    }
54
55    code_lines_count_empty() {
56        all_self_empty_code_lines | wc -l
57    }
58
59    code_lines_count_not_empty() {
60        all_self_not_empty_code_lines | wc -l
61    }
61
```

2.27 build_and_checks_dependencies/lines_filters.sh

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  # The goal of ths file is to have some common line filters
  # for bash processing and pipes.
  # As is the case for other .sh files in this repository,
  # it can be copied somewhere in your home directory
  # and sourced in your .bashrc.
current_path=$(pwd)
```

```
main_directory=$(basename "$current_path")
  ll wc() {
34
    # current options to wc:
     # -c --bytes
     # -m --chars
     # -l --lines
     # --files0-from # Incompatible with cat,
                     # another thing intentional by ?
                     # I don't see the meaning of "files0".
     # -L --max-line-length
     # -w --words
     # --help
     # --version
     # New option by Laurent Lyaudet (and probably other before):
     # -n --no-filenames display only number(s)
     # I think I did that the first time many years ago (Teliae ?).
     ll_wc_var_args=""
     11_wc_var_number_only=0
     for ll_wc_var_arg in $@; do
51
       if [[ $ll_wc_var_arg == "-n" ]]; then
         ll_wc_var_number_only=1
       elif [[ $ll_wc_var_arg == "--no-filenames" ]]; then
         ll_wc_var_number_only=1
55
       else
         if [[ $ll_wc_var_number_only == 0 ]]; then
           ll_wc_var_args+=" ""$ll_wc_var_arg"
           continue
59
         fi
         if [[ "$ll_wc_var_arg" == "-*" ]]; then
           ll_wc_var_args+=" ""$ll_wc_var_arg"
         fi
       fi
     done
     # echo "$11_wc_var_args"
     # echo "$11_wc_var_number_only"
     if [[ $ll_wc_var_number_only -gt 0 ]]; then
       # Too simple code, only the base use case is handled now.
       # Convenient but incomplete.
       # With more time,
       # the simpler would be to submit a patch to GNU coreutils,
       # unless blockade from assholes.
       # Otherwise, it may be more simply handled in PHP or Python
74
       # (argparse, etc.).
       # You'll need to start by improving cat first,
       # with --files0-from handling.
```

```
# echo "hack cat '${!#}' | wc $args"
       cat "${!#}" | wc "${ll_wc_var_args[@]}"
     else
       # echo "normal"
       wc "${ll_wc_var_args[@]}"
     fi
   }
84
   # I submitted a patch for wc:).
   # echo "https://domain/list-path/2024-05/msq00013.html" | \
       sed -e 's|domain|lists.gnu.org|' \
            -e 's|list-path|archive/html/bug-coreutils|'
   # I found another way to have a long URL fit on 70 characters.
  # If it is merged, the following would be better:
  # If --no-filenames option available,
   # we redefine ll wc command as an alias.
  wc_help_text=$(wc --help)
   if [[ "\$wc_help_text" == *" --no-filenames "* ]]; then
    alias ll_wc='wc'
   fi
   in_place_grep() {
     LFBFL_temp=".in_place_grep.temp"
     grep $@ > "${!#}""$LFBFL_temp"
101
     LFBFL_lines_before=$(ll_wc -l -n "${!#}")
102
     LFBFL lines after=$(ll wc -l -n "${!#}""$LFBFL temp")
103
     # echo "$LFBFL lines before"
     # echo "$LFBFL lines after"
105
     if [[ "$LFBFL_lines_before" == "$LFBFL_lines_after" ]]; then
       rm "${!#}""$LFBFL temp"
107
       return
108
     mv "${!#}""$LFBFL temp" "${!#}"
110
111
112
   grep_variable(){
     # $1=$file
114
     # $2=$variable_name
     LFBFL_regexp="(?<=^$2=).*$"
116
     # echo $LFBFL_regexp
     LFBFL_variable_value="$(grep -oP "$LFBFL_regexp" "$1")"
118
     # echo $LFBFL_variable_value
     declare -q "$2"="$LFBFL variable value"
120
122
   empty_lines(){
```

```
grep '^$'
124
    }
125
126
   not_empty_lines() {
127
      grep -v '^$'
128
129
130
   space_starting_lines() {
131
      grep '^[ ]'
132
133
134
   not_space_starting_lines(){
135
      grep '^[^]'
136
137
138
   empty_lines_after_file_name() {
139
      grep '^[^:]\+:$'
140
141
142
   not_empty_lines_after_file_name() {
143
      grep -v '^[^:]\+:$'
   }
145
146
   space_starting_lines_after_file_name() {
147
      grep '^[^:]\+: '
148
149
150
   not_space_starting_lines_after_file_name(){
151
      grep '^[^:]\+:[^ ]'
152
    }
153
154
   not JS dependencies find() {
155
      grep -vE "(^|/)node_modules/" | grep -vE "(^|/)package-lock\.json$"
156
157
158
   not_JS_dependencies_grep() {
      grep -v "^[^:]*node_modules/" | grep -v "^[^:]*package-lock\.json:"
160
    }
161
162
   not_dependencies_find(){
      not_JS_dependencies_find
164
165
166
   not_dependencies_grep(){
      not_JS_dependencies_grep
168
```

```
170
   not_python_cache_find() {
      grep -vE "(^|/) __pycache__/" | grep -vE "(^|/) \.mypy_cache/"
173
174
   not_python_cache_grep() {
175
      grep -v "^[^:]*__pycache__/" | grep -v "^[^:]*\.mypy_cache/"
176
177
178
   not_cache_find() {
      not_python_cache_find
180
181
   not_cache_grep() {
183
      not_python_cache_grep
185
186
   not_git_find() {
187
      grep -vE "(^|/)\.git/"
189
   not_git_grep() {
191
      grep -v "^[^:]*\.git/"
192
193
194
   not_archive_find() {
195
      grep -vE "(\.gz|\.rar|\.tar|\.tgz|\.whl)$"
196
197
198
   not_archive_grep() {
199
      grep -vE "^[^:]*(\.gz|\.rar|\.tar|\.tgz|\.whl):"
200
201
202
   not_license_find() {
      grep -vE "(^|/)COPYING$" | grep -vE "(^|/)COPYING\.LESSER$"
204
   }
205
206
   not_license_grep() {
      grep -v "^[^:]*COPYING:" | grep -v "^[^:]*COPYING\.LESSER:"
208
209
210
   not_main_tex_find() {
211
      grep -vE "(^|/)$main_directory\.tex$"
212
213
214
   not_main_tex_grep() {
```

```
grep -v "^[^:]*$main_directory\.tex:"

217  }

218

219  relevant_find() {
    not_dependencies_find | not_cache_find | not_git_find\
221    | not_archive_find

222  }

223

224  relevant_grep() {
    not_dependencies_grep | not_cache_grep | not_git_grep\
226    | not_archive_grep

227  }
```

2.28 build_and_checks_dependencies/overwrite_if_not_equal.sh

```
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# the GNU Lesser General Public License
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# @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
overwrite_if_not_equal(){
 # $1=$target_file_name
  # $2=$temp_file_name
  if [[ ! -f "$1" ]]; then
   mv "$2" "$1"
    return
  fi
```

```
diff -q "$1" "$2"

overwrite_if_not_equal_var_is_equal=$?

if [[ $overwrite_if_not_equal_var_is_equal == 0 ]]; then

rm "$2"

else

mv "$2" "$1"

fi

9
```

2.29 build_and_checks_dependencies/python_black_complement.sh

```
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  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  # It was rejected to enhance black with this currently.
 # And moreover, at some point, I saw the reverse rule
 # in black or pylint to add an empty line...
  # This regexp may give false positives,
 # but that's not the end of the world.
 check_no_empty_line_after_python_function_docstring() {
    echo "Checking empty lines after Python function docstrings"
   pcreqrep -M $'def [^"]*"""([^"]|"(?!""))*"""\n\n(?!\s*def)'\
      -- **/*.py
 }
```

```
python_black_complement() {
    check_no_empty_line_after_python_function_docstring
}
```

2.30 build_and_checks_dependencies/python_isort_complement.sh

```
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  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  subdir="build_and_checks_dependencies"
  source "./$subdir/lines filters.sh"
  source "./$subdir/overwrite if not equal.sh"
  check_collections_abc_place() {
    echo "Checking import of _collections_abc is at the right place"
    LFBFL_temp=".check_collections_abc_place.temp"
    find . -name "*.py" | relevant_find\
       | while read -r LFBFL_file_name; do
       [ -f "$LFBFL_file_name" ] || continue
       sed -Ez 's/\n(\nfrom _collections_abc[^\n]*)/\1\n/Mg'\
         "$LFBFL_file_name" > "$LFBFL_file_name$LFBFL_temp"
       overwrite_if_not_equal "$LFBFL_file_name"\
         "$LFBFL_file_name$LFBFL_temp"
     done
  }
```

```
python_isort_complement() {
    check_collections_abc_place
}
```

2.31 build_and_checks_dependencies/too_long_code_lines.sh

```
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   # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  subdir="build and checks dependencies"
  source "./$subdir/get_common_text_glob_patterns.sh"
  too_long_code_lines(){
   get_common_text_files_glob_patterns
29
    for LFBFL_pattern in "${common_file_patterns[@]}"; do
       [ "$1" != "-v" ] || echo "Iterating on pattern: $LFBFL_pattern"
       find . -type f -name "$LFBFL_pattern" -printf '%P\n'\
         | xargs grep -H '.\{71\}'
     done
  }
```

2.32 build_and_checks_dependencies/update_common_build_and_checks.sh

```
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  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  cp ./common_build_and_checks.sh.tpl ./common_build_and_checks.sh
  file names=(\
    "build_md_from_printable_md.sh"\
     "check shell scripts beginnings.sh"
    "check URLs.sh"
    "comparisons.sh"
31
     "create_PDF.sh"\
     "generate_from_template.sh"\
     "get_common_text_glob_patterns.sh"\
     "licenses_templates/build_licenses_templates.sh"
     "licenses_templates/license_file_header_GPLv3+.tpl"
     "licenses_templates/license_file_header_LGPLv3+.tpl"
    "lines_counts.sh"\
     "lines_filters.sh"\
     "overwrite_if_not_equal.sh"\
     "python_black_complement.sh"\
    "python_isort_complement.sh"\
     "too long code lines.sh"\
```

```
for file_name in "${file_names[@]}"; do
    file sha512=\$(sha512sum "./\$file name" | cut -f1 -d'')
    file_sha512_1="correct_sha512='${file_sha512:0:53}'"
    file_sha512_2="correct_sha512\+='${file_sha512:53:52}'"
    file_sha512_3="correct_sha512\+='${file_sha512:105}'"
    file_sha512_all="$file_sha512_1\n"
    file_sha512_all+="$file_sha512_2\n"
    file sha512 all+="$file sha512 3"
    base_file_name=$(basename "$file_name")
    sed -i "s|@sha512_$base_file_name@|$file_sha512_all|g"\
         ./common_build_and_checks.sh
  done
  cp ./build_and_checks.sh.tpl ../build_and_checks.sh
 file_sha512=$(sha512sum common_build_and_checks.sh | cut -f1 -d' ')
62 file_sha512_1="correct_sha512='${file_sha512:0:53}'"
63 file_sha512_2="correct_sha512\+='${file_sha512:53:52}'"
 file_sha512_3="correct_sha512\+='${file_sha512:105}'"
file_sha512_all="file_sha512_1\n"
 file\_sha512\_all+="$file\_sha512\_2\n"
  file_sha512_all+="$file_sha512_3"
  sed -i "s|@sha512_common_build_and_checks.sh@|$file_sha512_all|g"\
       ../build_and_checks.sh
```

2.33 build_and_checks.sh

```
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2 # This file is part of DevOrSysAdminScripts library.
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17 #
18 # You should have received a copy of
```

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  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  source ./wget_sha512.sh
  mkdir -p build_and_checks_dependencies/licenses_templates
   subdir="build_and_checks_dependencies"
  personal_github="https://raw.githubusercontent.com/LLyaudet/"
  dependencies="DevOrSysAdminScripts/main/build_and_checks_dependencies"
  URL beginning="$personal github$dependencies"
  script="$URL beginning/common build and checks.sh"
35 correct_sha512='d623f5bfd60f4205e4a62a7d64ec8b3bcd42c4937d2de2961577d'
  correct_sha512+='52d8535a46c8c6afa39ef1fa3ca559b59a0606749d8b1578dc86'
  correct_sha512+='c44b327a2dc2228f9b2a87c'
  wget_sha512 "./$subdir/common_build_and_checks.sh" "$script"\
     "$correct_sha512"
  chmod +x "./$subdir/common_build_and_checks.sh"
  cwd="."
  if [[ -n "$1" ]];
44 then
     cwd="$1"
   ./build_and_checks_dependencies/common_build_and_checks.sh "$cwd"
```

2.34 git_checks.sh

```
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   # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
  check_files() {
     check_files_var_send_summary_1="ATTENTION : models modifiés"
     check files var send body 1="Vérifiez si besoin de migrations"
     check_files_var_send_body_2=\
   "Pensez aussi aux contraintes d'unicités"
     check_files_var_send_body_2+=" dès la création du modèle"
     check_files_var_send_summary_2="ATTENTION : serializers modifiés"
     check_files_var_send_body_3=\
   "Les nouveaux preloadings sont interdits -> #Prefetch()"
     if git diff --cached --name-only | grep models;
     then
       notify-send "$check_files_var_send_summary_1"\
         "$check_files_var_send_body_1"
       notify-send "$check_files_var_send_summary_1"\
         "$check_files_var_send_body_2"
     fi
     if git diff --cached --name-only | grep serializer;
41
     then
       notify-send "$check_files_var_send_summary_2"\
43
         "$check_files_var_send_body_3"
     fi
     return 0
47
48
  check_no_abusive_trailing_comma() {
     LFBFL_send_summary_1="ATTENTION"
     LFBFL_send_body_1="Il semblerait que vous affectiez un tuple"
52
     LFBFL_send_body_1+=" au lieu d'une autre valeur dans une variable."
     if git diff --cached -r | grep ' = .*, \s*$';
       notify-send "$LFBFL_send_summary_1" "$LFBFL_send_body_1"
       return 1
     fi
58
     return 0
```

```
}
check_black_code_formatting() {
  # attention ça ne marche que sur les fichiers "stagés" avec git add
  LFBFL_files_string=$(\
    git diff --cached --name-only | grep '\.py'\
  echo "$LFBFL files string"
  mapfile -t LFBFL_some_files <<< "$LFBFL_files_string"</pre>
  LFBFL error=0
  for LFBFL_file in ${LFBFL_some_files[@]}; do
    echo "Black will check formatting on file $LFBFL_file"
    if ! black --check --diff "$LFBFL file";
    then
      LFBFL error=1
    fi
  if [ $LFBFL_error -eq '1' ];
    return 1
  fi
  return 0
}
```

2.35 latex/DevOrSysAdminScripts.tex.tpl

```
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```

```
% If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
   % @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
22
   \documentclass{article}
24
  \usepackage[utf8]{inputenc}
   \usepackage{subfigure}
  \usepackage{amsmath}
  \usepackage{amssymb}
  \usepackage{amsthm}
   \usepackage[pdftex] {hyperref}
  \usepackage{tikz}
  \usepackage{caption}
34 \usepackage[round]{natbib}
   \usepackage{fancyhdr}
  \usepackage{amsfonts}
  \usepackage{times}
  \usepackage{ifpdf}
  \usepackage{latexsym}
  \usepackage{graphicx}
  \usepackage{enumerate}
   \usepackage{pmboxdraw}
   \usepackage{fancyvrb}
   % *** les environnements ***
  %\theoremstyle{break}
  \newtheorem{definition}{Definition}[section]
  \newtheorem{proposition} [definition] {Proposition}
  \newtheorem{theorem} [definition] {Theorem}
   \newtheorem{lemma}[definition]{Lemma}
  \newtheorem{corollary} [definition] {Corollary}
   \newtheorem{remark}[definition]{Remark}
   \newtheorem{openproblem}[definition]{Open problem}
   \begin{document}
   \author{
     Laurent Lyaudet\\
     \url{https://lyaudet.eu/laurent/}\\
     laurent.lyaudet@gmail.com
   \title{DevOrSysAdminScripts}
62
  \maketitle
   \begin{abstract}
```

```
Some ''small'' useful scripts
   for enhancing development or system-administrators tasks
   \end{abstract}
   Current version: @current_date@
   Current number of commits: @number_of_commits@
   Current git SHA1: @current_git_SHA1@
   Code lines: @number_of_lines@
   \section{Files tree}
   \label{section:tree}
  \begin{verbatim}
82 @current_tree_light@
  \end{verbatim}
   \begin{verbatim}
  @current_tree@
  \end{verbatim}
   \section{Listing of files}
  \label{section:listing}
  The following source code is covered by LGPLv3+.
   The text of the license is available at:
   \url{https://www.gnu.org/licenses/}.
   The git repository of this source code is also available at:
   \url{https://github.com/LLyaudet/DevOrSysAdminScripts/}.
   \subsection{
     build\_and\_checks\_dependencies/build\_and\_checks.sh.tpl
100
   \label{
102
     build_and_checks_dependencies:build_and_checksshtpl
104
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/build_and_checks.sh.tpl
   }
108
110
  \subsection{
```

```
build\_and\_checks\_dependencies/build\_md\_from\_printable\_md.sh
112
   }
113
   \label{
114
     build_and_checks_dependencies:build_md_from_printable_mdsh
116
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
118
     build_and_checks_dependencies/build_md_from_printable_md.sh
120
122
   \subsection{
     build\_and\_checks\_dependencies/%
124
   check\ shell\ scripts\ beginnings.sh
125
   }
126
   \label{
127
     build_and_checks_dependencies:check_shell_scripts_beginningssh
128
129
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
131
     build_and_checks_dependencies/check_shell_scripts_beginnings.sh
   }
133
135
   \subsection{
136
     build\ and\ checks\ dependencies/check\ URLs.sh
137
   \label{
139
     build_and_checks_dependencies:check_URLssh
   }
141
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
143
     build and checks dependencies/check URLs.sh
144
145
146
147
   \subsection{
148
     build\_and\_checks\_dependencies/common\_build\_and\_checks.sh
150
   \label{
     build_and_checks_dependencies:common_build_and_checkssh
152
153
154
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/common build and checks.sh
156
```

```
158
   \subsection{
160
     build\_and\_checks\_dependencies/common\_build\_and\_checks.sh.tpl
162
   \label{
     build_and_checks_dependencies:common_build_and_checksshtpl
164
165
166
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/common_build_and_checks.sh.tpl
168
169
170
171
   \subsection{
172
     build\ and\ checks\ dependencies/comparisons.sh
173
   }
174
   \label{
175
     build_and_checks_dependencies:comparisonssh
177
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
179
     build_and_checks_dependencies/comparisons.sh
181
182
183
   \subsection{
     build\ and\ checks\ dependencies/create\ PDF.sh
185
186
   \label{
187
     build_and_checks_dependencies:create_PDFsh
189
190
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/create_PDF.sh
192
   }
193
194
   \subsection{
196
     build\_and\_checks\_dependencies/generate\_from\_template.sh
198
   \label{
     build and checks dependencies: generate from templatesh
200
202
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
```

```
build_and_checks_dependencies/generate_from_template.sh
204
   }
205
206
   \subsection{
208
    build\_and\_checks\_dependencies/get\_common\_text\_glob\_patterns%
   .sh
210
   }
   \label{
212
     build_and_checks_dependencies:get_common_text_glob_patternssh
214
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
216
     build and checks dependencies/get common text glob patterns.sh
217
   }
218
219
220
   \subsection{
221
     build\_and\_checks\_dependencies/licenses\_templates/%
  build\_licenses\_templates.sh
223
  \label{
225
     build_and_checks_dependencies:licenses_templates:%
   build_licenses_templatessh
229
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
231
   build_licenses_templates.sh
   }
233
235
   \subsection{
236
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_GPLv3+.c.tpl
238
239
   \label{
240
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_GPLv3+ctpl
242
244
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
   license_file_header_GPLv3+.c.tpl
   }
248
```

```
250
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
252
   license\_file\_header\_GPLv3+.py.tpl
254
   \label{
     build_and_checks_dependencies:licenses_templates:%
256
   license_file_header_GPLv3+pytpl
258
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
260
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_GPLv3+.py.tpl
262
263
264
265
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
267
   license\_file\_header\_GPLv3+.sh.tpl
269
   \label{
     build_and_checks_dependencies:licenses_templates:%
271
   license_file_header_GPLv3+shtpl
273
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
275
     build and checks dependencies/licenses templates/%
   license file header GPLv3+.sh.tpl
277
279
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
282
   license\_file\_header\_GPLv3+.tex.tpl
283
284
   \label{
     build_and_checks_dependencies:licenses_templates:%
286
   license_file_header_GPLv3+textpl
288
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
290
     build_and_checks_dependencies/licenses_templates/%
   license file header GPLv3+.tex.tpl
292
294
```

```
\subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\ file\ header\ GPLv3+.tpl
   \label{
300
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_GPLv3+tpl
302
   }
304
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
   license_file_header_GPLv3+.tpl
   }
308
309
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.c
313
314
   \label{
315
    build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+c
317
319
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
   license_file_header_LGPLv3+.c
   }
323
325
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
327
   license\ file\ header\ LGPLv3+.c.tpl
328
329
   \label{
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+ctpl
332
   }
334
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.c.tpl
   }
338
340
   \subsection{
```

```
build\_and\_checks\_dependencies/licenses\_templates/%
   license\_file\_header\_LGPLv3+.py
344
   \label{
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+py
348
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
350
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.py
352
354
355
   \subsection{
     build\ and\ checks\ dependencies/licenses\ templates/%
   license\_file\_header\_LGPLv3+.py.tpl
359
   \label{
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+pytpl
   }
363
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
365
     build_and_checks_dependencies/licenses_templates/%
   license file header LGPLv3+.py.tpl
367
369
   \subsection{
371
     build\ and\ checks\ dependencies/licenses\ templates/%
   license\ file\ header\ LGPLv3+.sh
373
374
   \label{
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+sh
378
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
380
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.sh
382
384
   \subsection{
386
     build\_and\_checks\_dependencies/licenses\_templates/%
```

```
license\_file\_header\_LGPLv3+.sh.tpl
   }
   \label{
390
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+shtpl
392
   }
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/licenses templates/%
396
   license file header LGPLv3+.sh.tpl
398
400
   \subsection{
401
     build\_and\_checks\_dependencies/licenses\_templates/%
   license\ file\ header\ LGPLv3+.tex
403
   }
404
   \label{
405
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+tex
407
   }
409
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
   license_file_header_LGPLv3+.tex
413
415
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
417
   license\_file\_header\_LGPLv3+.tex.tpl
   }
419
   \label{
420
     build_and_checks_dependencies:licenses_templates:%
   license_file_header_LGPLv3+textpl
422
   }
423
424
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/licenses_templates/%
426
   license_file_header_LGPLv3+.tex.tpl
428
430
   \subsection{
     build\_and\_checks\_dependencies/licenses\_templates/%
432
   license\_file\_header\_LGPLv3+.tpl
```

```
\label{
     build and checks dependencies: licenses templates: %
   license_file_header_LGPLv3+tpl
438
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
440
     build_and_checks_dependencies/licenses_templates/%
   license file header LGPLv3+.tpl
442
444
   \subsection{
     build\ and\ checks\ dependencies/lines\ counts.sh
447
   }
448
   \label{
449
     build_and_checks_dependencies:lines_countssh
450
451
452
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
453
     build_and_checks_dependencies/lines_counts.sh
   }
455
457
   \subsection{
     build\ and\ checks\ dependencies/lines\ filters.sh
459
   \label{
461
     build_and_checks_dependencies:lines_filterssh
462
   }
463
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/lines filters.sh
466
467
468
469
   \subsection{
470
     build\_and\_checks\_dependencies/overwrite\_if\_not\_equal.sh
472
   \label{
     build_and_checks_dependencies:overwrite_if_not_equalsh
474
475
476
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build and checks dependencies/overwrite if not equal.sh
478
```

```
480
481
   \subsection{
482
     build\_and\_checks\_dependencies/python\_black\_complement.sh
484
   \label{
     build_and_checks_dependencies:python_black_complementsh
487
488
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/python_black_complement.sh
490
491
492
493
   \subsection{
     build\ and\ checks\ dependencies/python\ isort\ complement.sh
495
   }
496
   \label{
497
     build_and_checks_dependencies:python_isort_complementsh
499
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
501
     build_and_checks_dependencies/python_isort_complement.sh
503
504
505
   \subsection{
     build\ and\ checks\ dependencies/too\ long\ code\ lines.sh
507
   \label{
509
     build_and_checks_dependencies:too_long_code_linessh
511
512
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/too_long_code_lines.sh
514
   }
515
516
   \subsection{
     build\_and\_checks\_dependencies/update\_common\_build\_and\_checks%
   .sh
520
   \label{
     build_and_checks_dependencies:update_common_build_and_checkssh
   }
524
```

```
\VerbatimInput[numbers=left,xleftmargin=-5mm]{
     build_and_checks_dependencies/update_common_build_and_checks.sh
528
530
   \subsection{
     build\_and\_checks.sh
532
533
   \label{
534
     build_and_checkssh
536
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
538
     build and checks.sh
539
   }
540
541
542
   \subsection{
543
     git\_checks.sh
545
   \label{
     git_checkssh
547
549
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
     git_checks.sh
551
553
   \subsection{
555
      latex/DevOrSysAdminScripts.tex.tpl
557
   \label{
558
     latex:DevOrSysAdminScriptstextpl
559
560
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
562
     latex/DevOrSysAdminScripts.tex.tpl
564
566
   \subsection{
     LiensUtiles.txt
568
   \label{
570
    LiensUtilestxt
```

```
}
572
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
      LiensUtiles.txt
576
578
    \subsection{
      pre-commit
580
   \label{
582
      pre-commit
583
584
585
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
      pre-commit
587
    }
588
589
    \subsection{
591
     README.md.tpl
593
   \label{
      READMEmdtpl
595
597
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
      README.md.tpl
599
   }
600
601
602
   \subsection{
603
     repository\_data.txt
604
605
   \label{
606
      repository_datatxt
608
   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
610
      repository_data.txt
612
613
614
   \subsection{
      wget\_sha512.sh
616
```

```
618 \label{
619  wget_sha512sh
620 }
621
622 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
623  wget_sha512.sh
624 }
625
626
627 Merci Dieu ! Merci P\'ere ! Merci Seigneur ! Merci Saint Esprit !
628
629 \end{document}
```

2.36 LiensUtiles.txt

```
https://support.google.com/a/answer/9476255?hl=fr#zippy=%2C%C3%A9tape\
configurez-le-service-de-migration-de-donn%C3%A9es
https://stackoverflow.com/a/78413334/5796086
https://stackoverflow.com/questions/21612980/\
why-is-usr-bin-env-bash-superior-to-bin-bash/78413334
https://web.archive.org/web/20240501105801/https://stackoverflow.com\
questions/21612980/why-is-usr-bin-env-bash-superior-to-bin-bash/\
8 78413334#78413334
```

2.37 pre-commit

```
#!/usr/bin/env bash
  # This file is part of DevOrSysAdminScripts library.
  # DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
 # that it will be useful,
  # but WITHOUT ANY WARRANTY;
  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
 # the GNU Lesser General Public License
20 # along with DevOrSysAdminScripts.
```

```
# If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  . ../git_checks.sh
25
27 git_hook_error=0
  if ! check_files
  then
     git_hook_error=1
  if ! check_no_abusive_trailing_comma
33 then
   git hook error=1
  fi
  if ! check_black_code_formatting
  then
     git_hook_error=1
  fi
  if [ $qit_hook_error -eq '1' ];
41 then
   exit 1
42
43 fi
  exit 0
```

2.38 README.md.tpl

```
# DevOrSysAdminScripts
[![CodeFactor-badge]][CodeFactor-package-page]
  [![CodeClimateMaintainability-badge]][CodeClimateM13y-package-page]
5 [![Codacy-badge]][Codacy-package-page]
  ![GitHub-top-language-badge]
  ![GitHub-license-badge]
  ![GitHub-code-size-in-bytes-badge]
                  **Some "small" useful scripts**
   | **for enhancing development or system-administrators tasks** |
12
13
  Currently, the biggest part of this repository is in
  a suite of shell scripts about build and checks that
  I use in some of my other repositories.
  [CodeFactor-badge]: https://www.codefactor.io/repository/github/\
  llyaudet/DevOrSysAdminScripts/badge
```

```
[CodeFactor-package-page]: https://www.codefactor.io/repository/\
  github/llvaudet/DevOrSvsAdminScripts
  [CodeClimateMaintainability-badge]: https://api.codeclimate.com/v1/\
24
  badges/b619ce83a81cc4a55e18/maintainability
   [CodeClimateM13y-package-page]: https://codeclimate.com/
  github/LLyaudet/DevOrSysAdminScripts/maintainability
  [Codacy-badge]: https://app.codacy.com/project/badge/Grade/\
  3dd6ef85e8db4460991d1ebc404b68dd
  [Codacy-package-page]: https://app.codacy.com/qh/LLyaudet/\
  DevOrSysAdminScripts/dashboard?utm source=gh&utm medium=referral
  &utm content=&utm campaign=Badge grade
  [GitHub-top-language-badge]: https://img.shields.io/github/\
  languages/top/llyaudet/DevOrSysAdminScripts
  [GitHub-license-badge]: https://img.shields.io/github/license/
  llyaudet/DevOrSysAdminScripts
  [GitHub-code-size-in-bytes-badge]: https://img.shields.io/github/\
  languages/code-size/llyaudet/DevOrSysAdminScripts
     2.39
           repository_data.txt
```

```
repository_name=DevOrSysAdminScripts
repository_web_url=https://github.com/LLyaudet/DevOrSysAdminScripts/
repository_git_url=git@github.com:LLyaudet/DevOrSysAdminScripts.git
abstract=Some \small" useful scripts
abstract=for enhancing development or system-administrators tasks
license=LGPLv3+
author_name=Laurent Lyaudet
author_full_name=Laurent Frédéric Bernard François Lyaudet
author_email=Laurent.Lyaudet@gmail.com
author_website=https://lyaudet.eu/laurent/
acknowledgments=Merci Dieu !
acknowledgments=Merci Père ! Merci Seigneur ! Merci Saint Esprit !
```

2.40 wget_sha512.sh

```
# DevOrSysAdminScripts is free software:
  # you can redistribute it and/or modify it under the terms
  # of the GNU Lesser General Public License
  # as published by the Free Software Foundation,
  # either version 3 of the License,
  # or (at your option) any later version.
  # DevOrSysAdminScripts is distributed in the hope
  # that it will be useful,
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  # without even the implied warranty of
  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
  # See the GNU Lesser General Public License for more details.
  # You should have received a copy of
  # the GNU Lesser General Public License
  # along with DevOrSysAdminScripts.
  # If not, see <a href="https://www.gnu.org/licenses/">https://www.gnu.org/licenses/>.</a>.
  # @Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
23
  wget_sha512(){
    # $1 file_name
     # $2 download_URL
    # $3 correct_sha512
    if [[ ! -f "$1" ]];
    then
       wget -0 "$1" "$2"
     fi
     wget_sha512_var_present_sha512=$(sha512sum "$1" | cut -f1 -d' ')
     if [[ "$wget_sha512_var_present_sha512" != "$3" ]];
       echo "$1 does not have correct sha512"
       echo "wanted $3"
       echo "found $wget_sha512_var_present_sha512"
       exit
     fi
  }
```

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