domdf-spreadsheet-tools

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Tools for creating and formatting spreadsheets with Python and OpenPyXL

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Chapter

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Installation

1.1 from PyPI

\$ python3 -m pip install domdf_spreadsheet_tools --user

1.2 from Anaconda

First add the required channels

```
$ conda config --add channels https://conda.anaconda.org/conda-forge
$ conda config --add channels https://conda.anaconda.org/domdfcoding
```

Then install

\$ conda install domdf_spreadsheet_tools

1.3 from GitHub

\$ python3 -m pip install git+https://github.com/domdfcoding/domdf_spreadsheet_tools@master --user

1.4 API Reference

Tools for creating and formatting spreadsheets with Python and OpenPyXL.

Functions:

append_to_xlsx(csv_input_file, xlsx_output_file)	Add CSV file to xlsx file as a new worksheet.	
col_width_from_cm(width)	Returns an estimate of the width of the column in pixels,	
	given the size in centimeters.	
format_header(ws, alignment_list[,])	Format the alignment of the header rows of a worksheet.	
<pre>format_sheet(ws[, number_format_list,])</pre>	Format columns of an xlsx worksheet.	
<pre>make_column_property_dict(indict[, outdict,</pre>	Generate property lists from integer values.	
])		

Parameters

• csv_input_file (Union[str, Path, PathLike]) - filepath of CSV file.

- xlsx_output_file (Union[str, Path, PathLike]) filepath of xlsx file.
- **sheet_title** (Optional[str]) Title of sheet to append. Default is the value of csv_input_file.
- **separator** (str) Separator for reading CSV file. Default ', '.
- **overwrite** (bool) Whether to overwrite the xlsx output file (i.e. create a new file containing iust the new sheet). Default False.
- to floats (bool) Whether to read strings with thousand separators as floats. Default False.
- encoding (str) The encoding to read the file as. Default 'UTF-8'.

col_width_from_cm (width)

Returns an estimate of the width of the column in pixels, given the size in centimeters.

Parameters width (float) – The width in centimeters.

New in version 0.2.0.

Return type float

format_header (ws, alignment_list, start_row=1, end_row=1)

Format the alignment of the header rows of a worksheet.

Parameters

- ws (openpyxl.worksheet.worksheet.Worksheet.) The worksheet to format.
- alignment_list (Dict[str, str]) dictionary of alignments (left, right, center) for each column letter.
- **start_row** (int) The row to start formatting on. Default 1.
- end_row (int) The row to end formatting on. Default 1.

format_sheet (ws, number_format_list=None, width_list=None, alignment_list=None)
Format columns of an xlsx worksheet.

Parameters

- ws (openpyxl.worksheet.worksheet.) The worksheet to format.
- number_format_list (Optional[Dict[str, str]]) dictionary of number format strings for each column letter. Default None.
- width_list (Optional[Dict[str, float]]) dictionary of widths for each column letter. Default None.
- alignment_list (Optional[Dict[str, str]]) dictionary of alignments (left, right, or center) for each column letter. Default None.

make_column_property_dict (indict, outdict=None, offset_dict=None, repeat=1, length=1)
Generate property lists from integer values.

Parameters

- indict (Mapping) Property values to add to the property dict.
- outdict (Optional[Dict[str, Any]]) Dictionary of properties for each column letter. Default None.

```
• offset_dict (Optional[Mapping]) - Default None.
```

- repeat (int) Default 1.
- length (int) Default 1.

Return type Dict[str, Any]

1.5 Contributing

domdf_spreadsheet_tools uses tox to automate testing and packaging, and pre-commit to maintain code quality.

Install pre-commit with pip and install the git hook:

```
$ python -m pip install pre-commit
$ pre-commit install
```

1.5.1 Coding style

formate is used for code formatting.

It can be run manually via pre-commit:

```
$ pre-commit run formate -a
```

Or, to run the complete autoformatting suite:

```
$ pre-commit run -a
```

1.5.2 Automated tests

Tests are run with tox and pytest. To run tests for a specific Python version, such as Python 3.6:

```
$ tox -e py36
```

To run tests for all Python versions, simply run:

\$ tox

1.5.3 Type Annotations

Type annotations are checked using mypy. Run mypy using tox:

```
$ tox -e mypy
```

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1.5.4 Build documentation locally

The documentation is powered by Sphinx. A local copy of the documentation can be built with tox:

\$ tox -e docs

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1.7 Downloading source code

The domdf_spreadsheet_tools source code is available on GitHub, and can be accessed from the following URL: https://github.com/domdfcoding/domdf_spreadsheet_tools

If you have git installed, you can clone the repository with the following command:

\$ git clone https://github.com/domdfcoding/domdf_spreadsheet_tools

```
Cloning into 'domdf_spreadsheet_tools'...
remote: Enumerating objects: 47, done.
remote: Counting objects: 100% (47/47), done.
remote: Compressing objects: 100% (41/41), done.
remote: Total 173 (delta 16), reused 17 (delta 6), pack-reused 126
Receiving objects: 100% (173/173), 126.56 KiB | 678.00 KiB/s, done.
Resolving deltas: 100% (66/66), done.
```

Alternatively, the code can be downloaded in a 'zip' file by clicking: Clone or download -> Download Zip

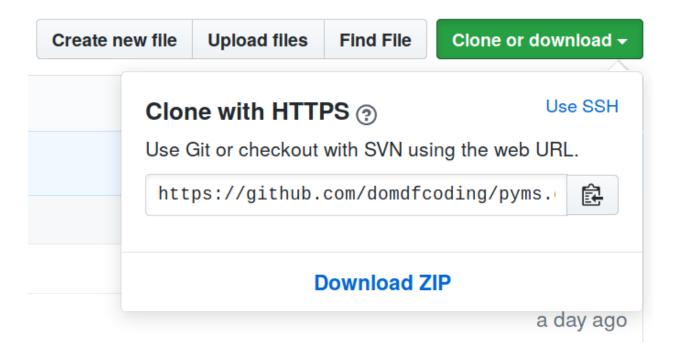


Fig. 1: Downloading a 'zip' file of the source code

1.7.1 Building from source

The recommended way to build domdf_spreadsheet_tools is to use tox:

```
$ tox -e build
```

The source and wheel distributions will be in the directory dist.

If you wish, you may also use pep517.build or another PEP 517-compatible build tool.

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