
gensty
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GenSty is a LaTeX style package generator for OpenType fonts (otf/ttf) which supports W3C SMuFL notation. With gensty you can generate your LaTeX package based on any OpenType font; the generator parses ttf/otf files and creates LaTeX commands for all Unicode Symbols. In the case of SMuFL fonts, you can also include the glyphnames.json file, so it will create friendlier names and include “Private Use” symbols.

[SMuFL specifications](#)

GENSTY

GenSty is a LaTeX style package generator for OpenType fonts (otf/ttf) which supports W3C SMuFL notation. With gensty you can generate your LaTeX package based on any OpenType font; the generator parses ttf/otf files and creates LaTeX commands for all Unicode Symbols. In the case of SMuFL fonts, you can also include the glyphnames.json file, so it will create friendlier names and include “Private Use” symbols.

1.1 Installation

Use the package manager [pip](#) to install foobar.

```
pip install gensty
```

1.2 Installation (manual)

Clone the repository

```
git clone git@github.com:tsotsos/genSty.git
```

and then use from the top folder. Eg.

```
python3 -m gensty -h
```

1.3 Usage

As referred above, the package can be used directly, installed from pip, and as a module. In case of command line the script can be used :

```
gensty -h

usage: genSty [-h] [--version] [--all] [--smufl SMUFL]
              [--one-package ONE_PACKAGE] [--author AUTHOR] [--ver VER]
              path

LaTeX Style file generator for fonts

positional arguments:
  path                  Font(s) path. It can be either a directory in case of
                        multiple fonts or file path.

optional arguments:
  -h, --help            show this help message and exit
  --version, -v         show program's version number and exit
  --all, -a             If choosed genSty will generate LaTeX Styles for all
                        fonts in directory
  --smufl SMUFL, -s SMUFL
                        If choosed genSty will generate LaTeX Styles for all
                        fonts in directory based on glyphnames provided.
  --one-package ONE_PACKAGE
                        Creates one package with name provided by this
                        argument.
  --author AUTHOR       Author's name.
  --ver VER             LaTeX package version.
```

1.3.1 Use as a module

```
import gensty

# To create all style packages from a folder or fontfile (path). use
# makePackage().
# Optional arguments: version, author and smufl.
# smufl is path to glyphnames.json which is defined according to Specifications
# https://www.w3.org/2019/03/smufl13/specification/glyphnames.html

fontpaths, files = gensty.makePackage(path, version, author, smufl)

# if you want to save style packages in a folder use:
gensty.savePackage(fontpaths,files)
```


1.4 Contributing

Pull requests are welcome. For major changes, please open an issue first to discuss what you would like to change.

2.1 Info Class

2.2 LatexStyle Class

HELPERS

Gensty helpers. A collection of functions to manipulate strings, search for files and create folders.

`gensty.helpers.ReplaceToken(dict_replace, target)`

ReplaceToken. Based on dict, replaces key with the value on the target.

Parameters

- **dict_replace** (*dict*) – Dictionary includes tokens to replace.
- **target** (*str*) – String to be replced.

Returns String with provided parameters from tokens.

Return type `str`

`gensty.helpers.checkExtension(path, ext)`

checkExtension. Defines if a file exists and having the given *extension*.

Parameters

- **path** (*str*) – File path to check.
- **ext** (*str*) – File extension.

Returns True in case extension is correct.

Return type `bool`

`gensty.helpers.checkFont(path, supported_fonts=[])`

checkFont. Checks the provided file has one fo the supported extensions.

Parameters

- **path** (*str*) – File path to check.
- **supported_fonts** (*list*) – Supported fonts *extensions*

Returns True in case font exists.

Return type `bool`

`gensty.helpers.createDir(dir)`

createDir. Forces directory creation by removing any pre-existing folder with same name.

Parameters **dir** (*str*) – Directory to create.

`gensty.helpers.findByExt(path, ext)`

findByExt.Finds file by extension. Returns list.

Parameters

- **path** (*str*) – File path to check.

- **ext** (*str*) – File extension.

Returns A list of files having the given *ext* or False.

Return type Union[List[str], bool]

gensty.helpers.**fixString** (*s*)

fixString. Changes a string usually package or font name, so it can be use in LaTeX and parsed without issue.

Parameters **s** (*str*) – String to be fixed.

Return type str

gensty.helpers.**getFontsByType** (*path*, *supported_fonts=[]*)

getFontsByType. Gets supported fonts by file extension in a given folder.

Parameters

- **path** (*str*) – Directory includes fonts.
- **supported_fonts** (*list*) – A list of supported fonts (extensions)

Returns File paths of supported fonts.

Return type List[str]

gensty.helpers.**isFontPath** (*path*)

Checks if the path is file or folder. In case of folder returns all included fonts.

gensty.helpers.**writePackage** (*filename*, *content*)

writePackage. Writes Style file.

Parameters

- **filename** (*str*) – Filename for newly created file.
- **content** (*str*) – Content of the LaTeX package.

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