
toucan Documentation

toucan

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Tools and utilities that we find pretty helpful. **This library only supports Python 3.6+.**

CHAPTER 1

Setup

You should have Python 3.6+.

Install the ‘package’ by cloning the repo and running *setup.py*. This is likely to be constantly updated, so I personally go *python setup.py develop*. ``console $ git clone git@github.com:OMaraLab/toucan.git``
`$ cd toucan $ python setup.py develop``

Some of the utilities use information such as your Raijin account details, or your GitHub username. To set this up, use the *make_user_profile* script to write a *\$HOME/.usr_profile* that provides these details.

I usually just clone this repository and add *toucan/toucan/utilities* to my path. You can do this by adding the line below to your *~/.bashrc*:

```
`console export PATH=/path/to/dir/toucan/toucan/utilities:$PATH`
```

You may also have to add execute permissions to the files. ``console $ chmod a+x *``

CHAPTER 2

Toucan command-line utilities

Toucan mostly consists of command-line fun times to make your life easier.

CHAPTER 3

binlink

binlink symlinks scripts to \$HOME/bin.

Here's the binlink help text.

```
$ binlink -h
usage: binlink [-h] [--force] source [target]

symlink to $HOME/bin

positional arguments:
  source      source
  target      target

optional arguments:
  -h, --help  show this help message and exit
  --force     overwrite an existing target in $HOME/bin
```


CHAPTER 4

gclone

`gclone` clones a repository from GitHub. It's a shortcut to save you from actually finding the repo and copying the address. If you are cloning your own repository and you have set up your `~/.usr_profile`, you don't have to specify the username.

Here's the `gclone` help text.

```
$ gclone -h
usage: gclone [-h] [-f] [user] repo [dest]

Clone repos from GitHub.

positional arguments:
  user      username (default: lilyminium)
  repo      repository name
  dest      destination directory

optional arguments:
  -h, --help  show this help message and exit
  -f, --force  Skip command check
```


CHAPTER 5

randomize

Marking, and your Learning Management System can't anonymize student submissions? Use `randomize` to hash submissions while you mark and unhash them when you're done with one easy line. The hashes are freely available in the file, but you can just drag the file out for safekeeping.

This module uses default libraries but likely requires Python 3. It's not the most robustly written as we didn't need it to be.

Here's the `randomize` help text.

```
$ randomize -h
usage: randomize [-h] [--back] [path]

hash paths

positional arguments:
  path                path to folder of Wattle submissions

optional arguments:
  -h, --help          show this help message and exit
  --back              unhash things
```

Usage

```
$ ls *
+-- examples/
|   +-- camel/
|       +-- camel.png
|       +-- camel_data.csv
|       +-- camel_report.docx
|
|   +-- goat/
|       +-- lab2.docx
|
|   +-- okapi/
|       +-- psych_report.pdf
```

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```
+-- toucan/
|   +-- toucan_graphs.csv
|   +-- toucan_submission.pdf
```

```
$ randomize
$ ls *
+-- examples/
|   +-- hashed-4534227490278080168/
|       +-- hashed-5268810318780526497.pdf
|       +-- hashed7240516292622205258.csv
|
|   +-- hashed-5807559932020193675/
|       +-- hashed9023048498483281096.pdf
|
|   +-- hashed-8635424089026415006/
|       +-- hashed-8352870137889654378.docx
|
|   +-- hashed1862819106113257637/
|       +-- hashed-4325006337967117557.csv
|       +-- hashed-892738159033623075.docx
|       +-- hashed1862819106113257637.png
```

```
$ randomize --back
$ ls *
+-- examples/
|   +-- camel/
|       +-- camel.png
|       +-- camel_data.csv
|       +-- camel_report.docx
|
|   +-- goat/
|       +-- lab2.docx
|
|   +-- okapi/
|       +-- psych_report.pdf
|
|   +-- toucan/
|       +-- toucan_graphs.csv
|       +-- toucan_submission.pdf
```


CHAPTER 6

String-related operations

Useful string-related functions.

`chunk_list`

`columns_of_strings`

`print_columns`

CHAPTER 7

License

Toucan is licensed under the Lesser GNU General Public License (LGPL v3+).