

Construire un outil de CLI userfriendly

Inventons la Command Line eXperience !



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 **Disclaimer** 


```
$ ps aux
```

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.0	0.0	165992	11536	?	Ss	12:00	0:01	/sbin/init
root	2	0.0	0.0	0	0	?	S	12:00	0:00	[kthreadd]
root	3	0.0	0.0	0	0	?	I<	12:00	0:00	[rcu_gp]
root	4	0.0	0.0	0	0	?	I<	12:00	0:00	[rcu_par_gp]
root	6	0.0	0.0	0	0	?	I<	12:00	0:00	[kworker/0:0H-events_highpri]
root	8	0.0	0.0	0	0	?	I<	12:00	0:00	[mm_percpu_wq]
...										

a : Les process de tout les utilisateurs

x : Même les process sans tty

u : Format orienté utilisateur

Conventions

Options

Options longues

```
$ grep \
  --ignore-case \
  --invert-match \
  --count \
  needle haystack.txt
```

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Options courtes

```
$ grep -i -v -c needle haystack.txt
```

```
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```

```
$ grep -ivc needle haystack.txt
```

```
21
```


Options usuelles

```
$ grep --version
grep (GNU grep) 3.6
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
```

```
Written by Mike Haertel and others; see
<https://git.sv.gnu.org/cgiit/grep.git/tree/AUTHORS>.
```

Options usuelles

```
$ grep --help
```

```
Usage: grep [OPTION]... PATTERNS [FILE]...
```

```
Search for PATTERNS in each FILE.
```

```
Example: grep -i 'hello world' menu.h main.c
```

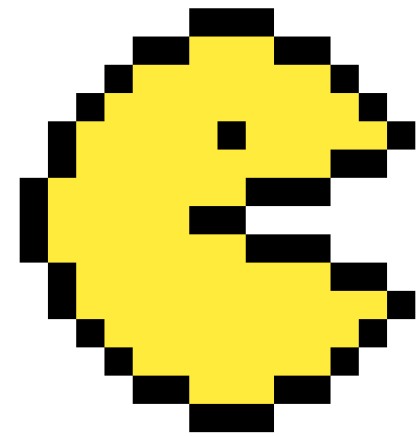
```
PATTERNS can contain multiple patterns separated by newlines.
```

```
Pattern selection and interpretation:
```

```
-E, --extended-regexp    PATTERNS are extended regular expressions
```

```
-F, --fixed-strings      PATTERNS are strings
```

```
...
```



pacman



```
$ pacman -h
usage:  pacman <operation> [ ... ]
operations:
    pacman {-h --help}
    pacman {-V --version}
    pacman {-D --database} <options> <package(s)>
    pacman {-F --files}      [options] [file(s)]
    pacman {-Q --query}      [options] [package(s)]
    pacman {-R --remove}     [options] <package(s)>
    pacman {-S --sync}      [options] [package(s)]
    pacman {-T --deptest}    [options] [package(s)]
    pacman {-U --upgrade}    [options] <file(s)>

use 'pacman {-h --help}' with an operation for available options
```



Commandes git

```
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  modified:   slides.md

no changes added to commit
$
$ git commit -am "Add slides about git"
[main 536e1f3] Add slides about git
1 file changed, 25 insertions(+), 2 deletions(-)
```

Groupes de commandes

```
$ docker image
```

```
Usage:  docker image COMMAND
```

```
Manage images
```

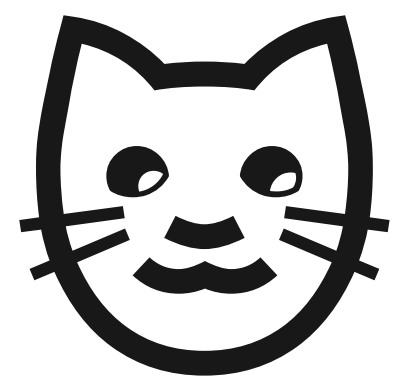
```
Commands:
```

build	Build an image from a Dockerfile
history	Show the history of an image
import	Import the contents from a tarball to create a filesystem image
inspect	Display detailed information on one or more images
load	Load an image from a tar archive or STDIN
ls	List images
prune	Remove unused images
pull	Pull an image or a repository from a registry
push	Push an image or a repository to a registry
rm	Remove one or more images
save	Save one or more images to a tar archive (streamed to STDOUT by default)
tag	Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE

```
Run 'docker image COMMAND --help' for more information on a command.
```

git checkout ?

Switch branches or restore working tree files



catption



```
$ catpTION -h
Cat caption generator tool
```

Usage:

```
catpTION [flags] <input file>
```

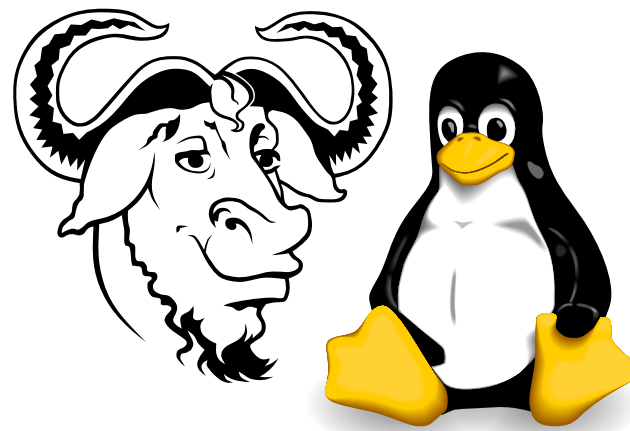
Flags:

-b, --bottom string	Bottom text
--fontSize float	Font in points (default 96)
-h, --help	help for catpTION
--margin float	Top/bottom text margin (default 20)
-o, --out string	Output file (default "out.jpg")
-s, --size float	Output image size (default 1024)
-t, --top string	Top text
-v, --version	version for catpTION

[nico Pictures] 🍺

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Intégration avec l'OS



Ouvrir le fichier généré

Ouvrir le fichier généré

- Windows : start
- macOS : open
- Linux : xdg-open

[nico Pictures] 🍺

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(Ne pas) Ouvrir le fichier généré

```
$ catption -h
Cat caption generator CLI
```

Usage:

```
catption [flags] <input file>
```

Flags:

-b, --bottom string	Bottom text
--fontSize float	Font in points (default 96)
-h, --help	help for catption
--margin float	Top/bottom text margin (default 20)
--open	Open file with system viewer (default true)
-o, --out string	Output file (default "out.jpg")
-s, --size float	Output image size (default 1024)
-t, --top string	Top text
-v, --version	version for catption

Configurable

Configurer mes répertoires
d'images de chats

Configurer mes répertoires d'images de chats

```
$ catption help dir
```

```
Manages input files directories
```

```
Usage:
```

```
catption dir [command]
```

```
Available Commands:
```

add	Adds an input files directory
list	Lists input files directories
remove	Removes an input files directory

```
Flags:
```

```
-h, --help help for dir
```

```
Use "catption dir [command] --help" for more information about a command.
```

Un peu d'interactivité

[nico Pictures] 🍺

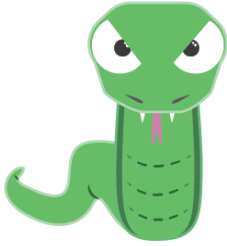
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Idées en plus

- Conseiller / guider l'utilisateur
- Autocomplétion personnalisée
- Logs sympas (couleur, émojis, ...)
- Intégration presse-papier

 github.com/nlepage/catption



 cobra / viper 

Bibliothèque standard 

github.com/matttn/go-isatty

github.com/golang-

design/clipboard

Autres langages

- NodeJS : commander
- Java : picocli
- Python : click
- Et bien d'autres

Références

- <https://man.archlinux.org/man/ps.1.en>
- https://www.gnu.org/software/libc/manual/html_node/Argument-Syntax.html
- <https://man.archlinux.org/man/grep.1.en>
- <https://man.archlinux.org/man/pacman.8.en>
- <https://git-scm.com/docs>
- <https://docs.docker.com/engine/reference/commandline/image/>
- <https://www.freedesktop.org/wiki/Software/xdg-utils/>
- <https://github.com/spf13>
- <https://pkg.go.dev/std>
- <https://github.com/mattn/go-isatty>
- <https://github.com/golang-design/clipboard>

Slides : nlepage.github.io/build-userfriendly-cli-tool-talk/osxp