
Local development cli - LCLI

Release 1.0.0

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GENERAL

1	This are few examples	3
2	Features	5
2.1	Fire mode	5
2.2	Interactive mode	5
3	Getting Started	7
3.1	Installation process	7
3.2	Software dependencies	7
3.3	Latest releases	8
3.4	API references	8
4	Build and Test	9
4.1	Build	9
4.2	Test	9
5	Use cases	11
6	Usage	13
6.1	Configuration	13
7	Author	15
8	Contribute	17
9	Useful links	19
9.1	Installation	19
9.2	Configuration	20
9.3	Contributing	20
9.4	Changelog	21
9.5	Structural Elements	21
9.6	Structural Elements 2	23
9.7	Plugins for LCIL	24
9.8	Demo	24
9.9	Build your own cli application	25

Local development productivity tools meant to smooth and ease developers day to day work. It is meant to be cross-platform but for now is tested using MacOS and Ubuntu

THIS ARE FEW EXAMPLES

- unified command line interfaces for multiple cli tools
- interactive command line mode
 - this act as an interactive wrapper on top of existing cli tools
 - also allow extending the existing cli tools with auto-completion, input enhanced wizard or description
 - allow switching between command namespaces in the same terminal
- Implement custom CLI tools using Python, fully integrate with all LCLI tool features:
 - just write some code class or function and configure them to be wired in application
- use Fire to auto document Python objects, so all you should do is to focus on business logic

FEATURES

2.1 Fire mode

In fire mode the application allow user to configure a hierarchy of objects that fit its needs for various project. The user can navigate and execute the hierarchy using Fire library by Google. “Python Fire is a library for automatically generating command line interfaces (CLIs) from absolutely any Python object.” <https://github.com/google/python-fire>

2.2 Interactive mode

Most often during the development process developers are using various tools for various projects. The interactive mode purpose is to improve productivity by offering auto-completion details on the spot. This is implemented on top of python cmd package: <https://docs.python.org/3/library/cmd.html>

GETTING STARTED

3.1 Installation process

Install from source

```
# Using invoke
invoke install
#from project root directory
./install
#or
python3 -m pip install -r requirements.txt
python3 -m pip install . --user
```

3.2 Software dependencies

This is a Python package available as MIT License and is depending on following packages:

- fire <https://github.com/google/python-fire/releases>
- pinject <https://github.com/google/pinject/releases>
- PyYAML
- prompt_toolkit
- pyfiglet
- blessings
- tk
- appJar
- jsonschema

3.3 Latest releases

- V-0.2.2 - First released version.

3.4 API references

BUILD AND TEST

4.1 Build

```
# Using invoke
invoke build
```

4.2 Test

```
# Using invoke
invoke test
invoke coverage
# Using pytest
py.test
pytest --cov=src/lcli/ .
```


USE CASES

:raw-html-m2r: ` <<https://youtu.be/L9orYXE1nlU>>`_

USAGE

6.1 Configuration

CHAPTER
SEVEN

AUTHOR

George Babarus

CONTRIBUTE

Feel free to contribute to this project and make developer life easier:

- by submitting new ideas as a github issue [here](#)
- by making pull request with specific bug fixes
- for new features or architectural change please contact [George Babarus](#) to avoid double work on any way.

USEFUL LINKS

- <https://mypy.readthedocs.io/en/latest/generics.html#generics>
- <https://code-maven.com/interactive-shell-with-cmd-in-python>
- <https://www.journaldev.com/16140/python-system-command-os-subprocess-call>
- <https://stackoverflow.com/questions/3262569/validating-a-yaml-document-in-python>
- <https://github.com/oclif/oclif#-cli-types>
- <https://medium.com/the-z/getting-started-with-oclif-by-creating-a-todo-cli-app-b3a2649adbcf>

9.1 Installation

Install the package (or add it to your `requirements.txt` file):

```
# From source
$ invoke install

# or
# install in user space
$ ./install -u

#install it globally
$ ./install

# From repository
$ pip install lcli

# or simply install it using python in root of the repository
$ python -m pip install -r requirements.txt
$ python -m pip install . --user
```

Note: Note that from this point on there are two options to use lcli

- Configure the build in cli to support your custom cli commands, and expose better API for the existing commands. See [Configuration](#)
 - Build your own cli application by extending python package as in example bellow
-

```
# Build your own cli application
import os
from lcli.app import App

class YourOwnApp(App):
    pass

def main():
    try:
        project_root_path = os.path.realpath(os.path.dirname(__file__))
        app = YourOwnApp(app_path=project_root_path)
        app.run()
    except Exception as error:
        # process errors

if __name__ == '__main__':
    main()
```

9.2 Configuration

9.2.1 Configuration files

9.3 Contributing

9.3.1 How you can contribute

Set up your environment

1. Install dependencies

```
$ pip install -e '.[dev]'
```

Making changes

Test your changes

```
$ invoke test
```

This script will do the following:

1. Run unit tests

Reporting bugs

Report bugs on github

Bring some ideas

Feel free to share your ideas about the project.

9.4 Changelog

9.4.1 main

Removed dependencies

prod deps

six = “^1.14.0”

decorator = “^4.3.0”

semver = “*”

New Features

Fixes

Other Changes

9.4.2 v0.1.1

New Features

- Command configuration cache added
- Config schema validation

Other Changes

- Created documentation [#215](#).

9.5 Structural Elements

Table of Contents

- *Structural Elements*
 - *Document Section*
 - * *Document Subsection*

- *Document Subsubsection*
- *Document Paragraph*
- *Structural Elements 2*
 - *Document Section*
 - * *Document Subsection*

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9.6 Structural Elements 2

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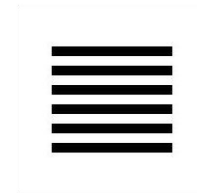


Fig. 1: This is a caption for a figure. Text should wrap around the caption.

9.7 Plugins for LCIL

Table of Contents

- *Plugins for LCIL*
 - *Document Section*

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9.8 Demo

Table of Contents

- *Demo*
 - *Document Section*

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9.8.1 Document Section

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9.9 Build your own cli application

Table of Contents

- *Build your own cli application*
 - *Extend lcli object*
 - * *Simple example*

9.9.1 Extend lcli object

Simple example

```
# Build your own cli application
import os
from lcli.app import App

class YourOwnApp(App):
    pass

def main():
    try:
        project_root_path = os.path.realpath(os.path.dirname(__file__))
        app = YourOwnApp(app_path=project_root_path)
        app.run()
    except Exception as error:
        # process errors

if __name__ == '__main__':
    main()
```