Doctor

Elliott Phillips

/ellsphillips/doctor

23/03/2022

Introduction
Examples
Usage
Next steps
Contribution

Introduction

- About
- Users
- Design

An automated documentation assistant built in Python and TEX for procedural, data-driven reporting.

About – Mission statement

Doctor provides services to simplify the reporting of data-oriented, beautiful, lightweight documents.

Transparent and opinionated, without the WYSIWYG faff.

About – Journey

Personal side project

- LaTeX University requirement
- Self-taught Python at ONS
- Wanted to inject flair whilst automating corporate documents

Business-critical application

- Lead project to deliver real-time financial estimates
- Complex data to visualise and communicate
- Templated cohesion between report releases

Internal collaborative platform

- SCS requested S&T to National Statistician
- Delivered demoes, assembled cross-ONS development team
- Coach colleagues in software design and effective versioning

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About – Styled components

C_1	C_2	C_3	C_4
a	b	c	d
e	f	g	h
i	j	k	l

C_1	C_2	C_3	C_4
a	b	c	d
e	f	g	h
i	j	k	l

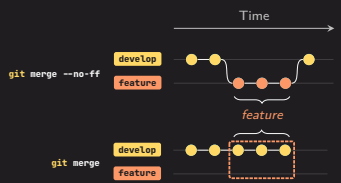
BRR demo

Elliott Phillips
Data Scientist
BSc OR III
Better Python
Software development & design
introductory handbook
Last updated: January 22, 2022

PATTERNS
Factories 5
4.1 Analysing the Factory pattern
4.2 Factories
4.2.1 A more Pythonic Factory pattern
AbstractFactory
Product1
Product2
Client
ConcreteFactory
ConcreteProduct1
ConcreteProduct2

Model – Feature branches

16/21




```
$ git clone https://github.com/ellsphillips/git-book git-good
```

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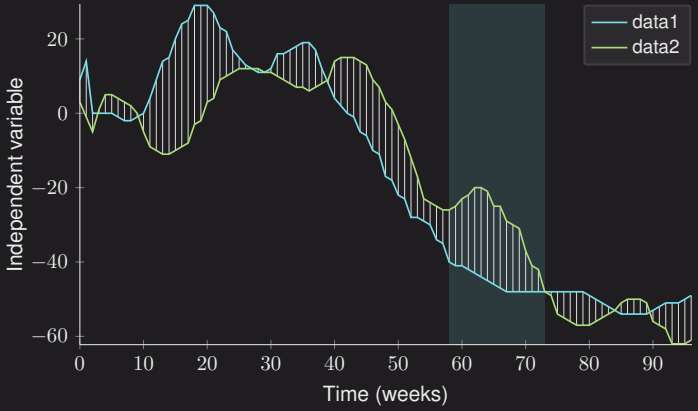
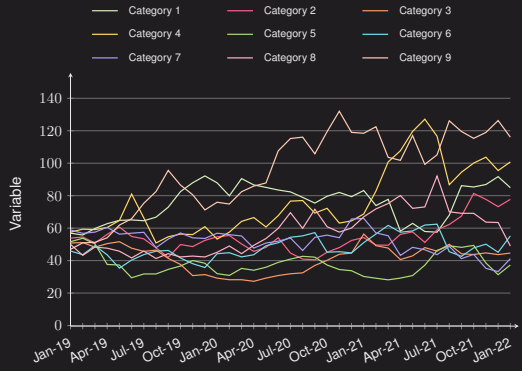
Examples

- Table
- Plot

Plot – line

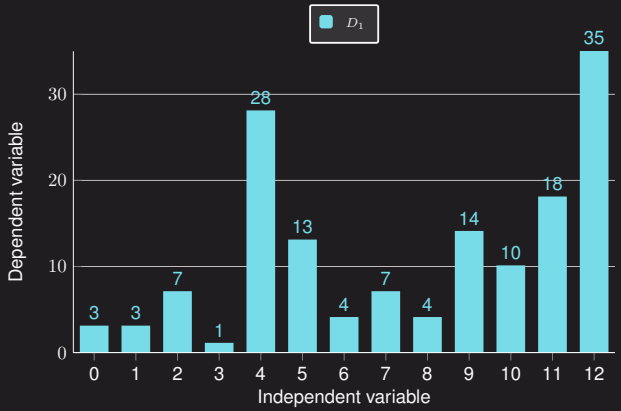

data1
data2
Independent variable
Time (weeks)
20
0
−20
−40
−60
0
10
20
30
40
50
60
70
80
90

Plot – line

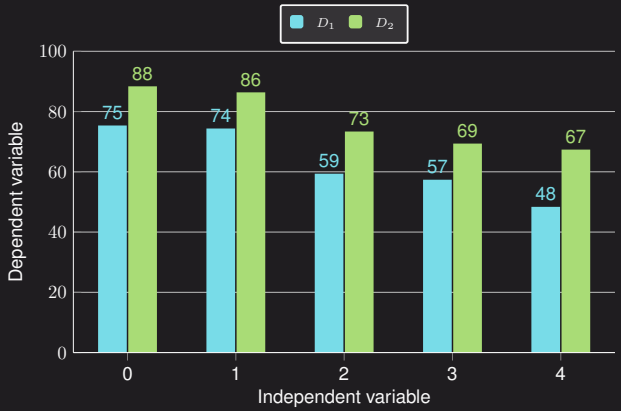


Source: company

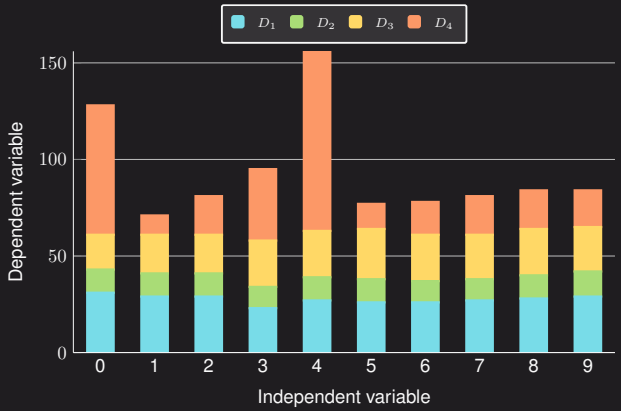
Plot – bar


D_1
Dependent variable
Independent variable
0
10
20
30
0 1 2 3 4 5 6 7 8 9 10 11 12
3 3 7 1 28 13 4 7 4 14 10 18 35

Plot – bar


D_1
D_2
100
80
60
40
20
0
Dependent variable
75
88
74
86
59
73
57
69
48
67
0
1
2
3
4
Independent variable

Plot – bar


D_1
D_2
D_3
D_4
150
100
50
0
Dependent variable
0
1
2
3
4
5
6
7
8
9
Independent variable

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Usage

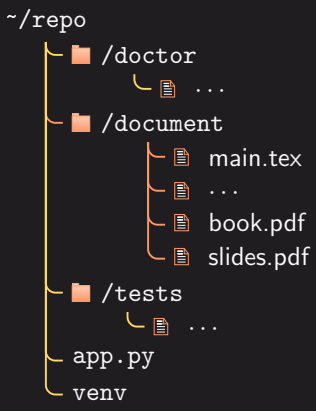
- Installation
- API

Installation – Project


```python
import doctor as dr


def main() -> None:
    ...


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


~/repo
/doctor
...
/document
main.tex
...
book.pdf
slides.pdf
/tests
...
app.py
venv

API – Tables


```python
tabular = dr.table(
    dr.data.table(
        [
            dr.data.numeric.rand(10),
            dr.data.text.lorem(10),
        ]
    ),
    columns=["numbers", "words"]
)
```

API – Plot


```
figure = dr.plot(
    "line",
    data={
        "timeseries_2020": dr.data.series.brownian(),
        "timeseries_2021": dr.data.series.brownian(),
        "timeseries_2022": dr.data.series.brownian(),
    },
    options={
        "plot type": "ybar",
        "data source": "src/plots/example.dat",
        "caption": "Demonstration of the doctor-plot env",
        "label": "example-plot",
    },
)
```

Document class API

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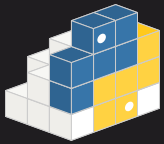
- Package

Build test suite

Package – Deployment



```
$ pip install doctor
```

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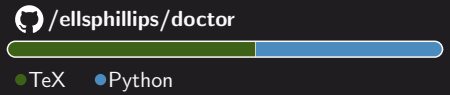
Contribution

- GitHub

Interested in contributing? Doctor is developed open source! Get it touch via email or create a pull request



You're welcome to retain a copy and share this material with anyone who may benefit.

Please ★ this repository if you have found this material useful and to follow its development!

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