Doctor

Elliott Phillips

/ellsphillips/doctor

24/03/2022

Head's up! I'm a full-time senior Data Scientist, currently on secondment and juggling projects as I go...

But more on that later...

Introduction

– **About**

– **Users**

– **Design**

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

About – Mission statement

4/24

Introduction
○●○○○○

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

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

Transparent and opinionated, without the WYSIWYG faff.

About – Journey

5/24

Introduction
○○●○○

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

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

About – Journey

5/24

Introduction
○○●○○

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

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About – Journey

5/24

Introduction
○○●○○

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

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Introduction
○○○●○

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

BRR demo

Introduction
○○○○●

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

Elliott Phillips

Data Scientist
BSc OR III

Better Python
Software development & design
introductory handbook

Last updated: January 22, 2022

Introduction
○○○○●

Examples
○○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

Model – Feature branches

16/21

About
○○○○

Basics
○○○○○

Branches
○○○●○○

Closing
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Time

git merge --no-ff

develop

feature

feature

git merge

develop

feature
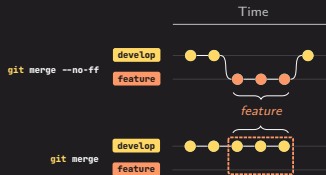
Git Good
Elliott Phillips · 10/11/2021

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

Examples

- **Table**

- **Plot**

Table – Containers

9/24

Introduction
○○○○○

Examples
●○○○

Usage
○○○○○

Next steps
○○

Contribution
○○

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

Table − Flexibility

10/24

Introduction
○○○○○

Examples
○●○○

Usage
○○○○○

Next steps
○○

Contribution
○○

Plot – line

11/24

Introduction
○○○○○

Examples
○○●○
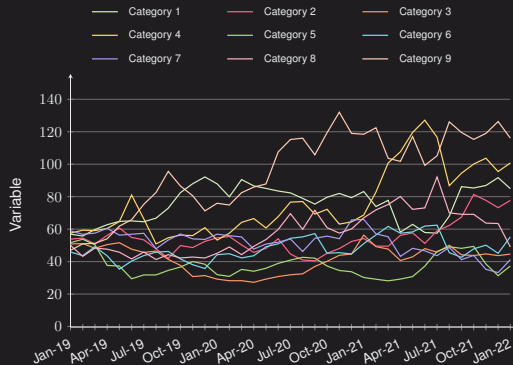
Usage
○○○○○

Next steps
○○

Contribution
○○

Introduction
○○○○○

Examples
○○●○

Usage
○○○○○

Next steps
○○

Contribution
○○

Source: company

Plot – bar

12/24

Introduction
○○○○○

Examples
○○○●

Usage
○○○○○

Next steps
○○

Contribution
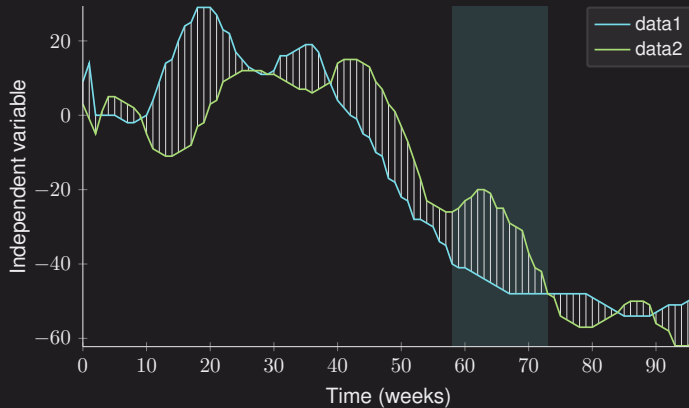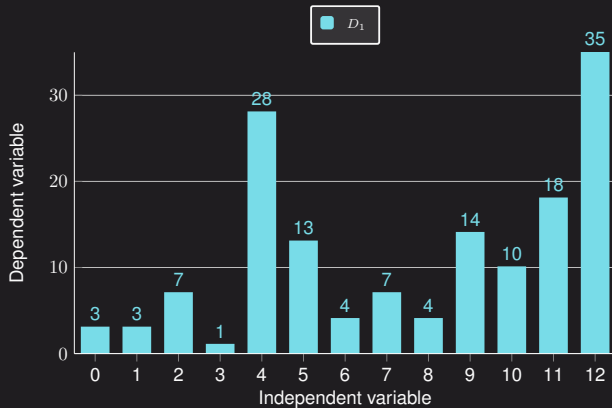○○

Introduction
○○○○○

Examples
○○○●

Usage
○○○○○

Next steps
○○

Contribution
○○

Plot – bar

12/24
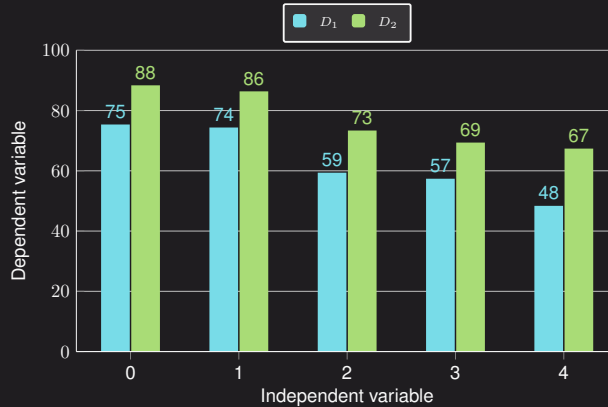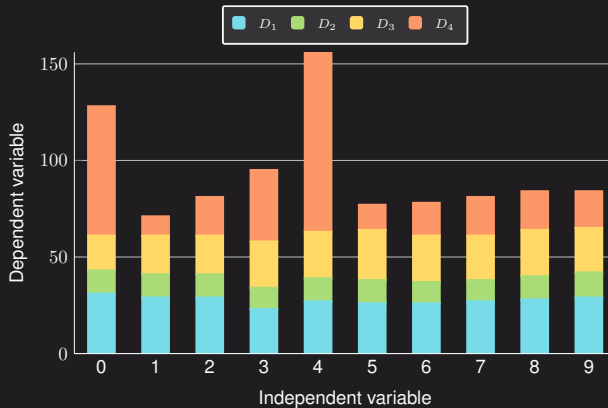
Introduction
○○○○○

Examples
○○○●

Usage
○○○○○

Next steps
○○

Contribution
○○

Usage

– **Installation**

– **API**

Installation – Project

14/24

Introduction
OOOOO

Examples
OOOO

Usage
●OOOO

Next steps
OO

Contribution
OO

```python
1  import doctor as dr
2
3
4  def main() → None:
5      ...
6
7
8  if __name__ == "__main__":
9      main()
```

```
~/repo
  └ 📁 /doctor
       └ 📄 ...
  └ 📁 /document
            └ 📄 main.tex
            └ 📄 ...
            └ 📄 book.pdf
            └ 📄 slides.pdf
  └ 📁 /tests
       └ 📄 ...
  └ app.py
  └ venv
```

API – Tables

16/24

Introduction
OOOOO

Examples
OOOO

Usage
OO●OO

Next steps
OO

Contribution
OO

```python
1  tabular = dr.table(
2      dr.data.table(
3          [
4                  dr.data.numeric.rand(10),
5                  dr.data.text.lorem(10),
6          ]
7      ),
8      columns=["numbers", "words"]
9  )
```

API – Plot

17/24

Introduction
○○○○○

Examples
○○○○

Usage
○○○●○

Next steps
○○

Contribution
○○

```
 1   figure = dr.plot(
 2       "line",
 3       data={
 4           "timeseries_2020": dr.data.series.brownian(),
 5           "timeseries_2021": dr.data.series.brownian(),
 6           "timeseries_2022": dr.data.series.brownian(),
 7       },
 8       options={
 9           "plot type": "ybar",
10           "data source": "src/plots/example.dat",
11           "caption": "Demonstration of the doctor-plot env",
12           "label": "example-plot",
13       },
14   )
```

Document class API

Next steps

– **Package**

Introduction
ooooo

Examples
oooo

Usage
ooooo

Next steps
●o

Contribution
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▶ Refine and publish existing PoC test library

▶ Deliver testing fundamentals workshop
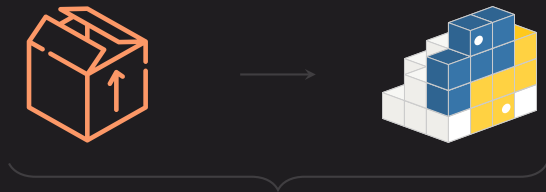
▶ Build robust testing suite for **Doctor**

Introduction
○○○○○

Examples
○○○○

Usage
○○○○○

Next steps
○●

Contribution
○○

```
$ pip install doctor
```

Contribution

– **GitHub**

GitHub – Public repo

23/24

Introduction	Examples	Usage	Next steps	Contribution
ooooo	oooo	ooooo	oo	●o

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

 /ellsphillips/doctor

●TeX ●Python

GitHub – Sharing is caring

24/24

Introduction
ooooo

Examples
oooo

Usage
ooooo

Next steps
oo

Contribution
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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!

Doctor

Elliott Phillips

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24/03/2022