Using Python to organise my physical paper

Alex Chan · alexwlchan.net · they/she

Slides: alexwlchan.net/files/2021/campug.pdf

container

How to vote

1. When you receive your postal vote, read the instructions carefully.
2. Your postal vote includes your ballot paper and a postal voting statement.
3. Complete both of these and return them immediately.
4. We need to receive your postal vote by **10pm on Thursday 12 December 2019.**

If you need information in another format, please call our helpline below.

If you need help to vote, you can ask someone you know or get independent help by calling our helpline.

Helpline:
01438 242213

E-mail:
electoral@stevenage.gov.uk

Web:

If you lose your postal vote or make a mistake

- Please phone the helpline immediately
- We can only issue a replacement postal vote **before 5pm on Thursday 12 December 2019.**

If you would rather vote in person, or ask someone else to vote on your behalf, you must cancel your postal vote **before 5pm on Tuesday 26 November 2019**. For more information, please call the helpline

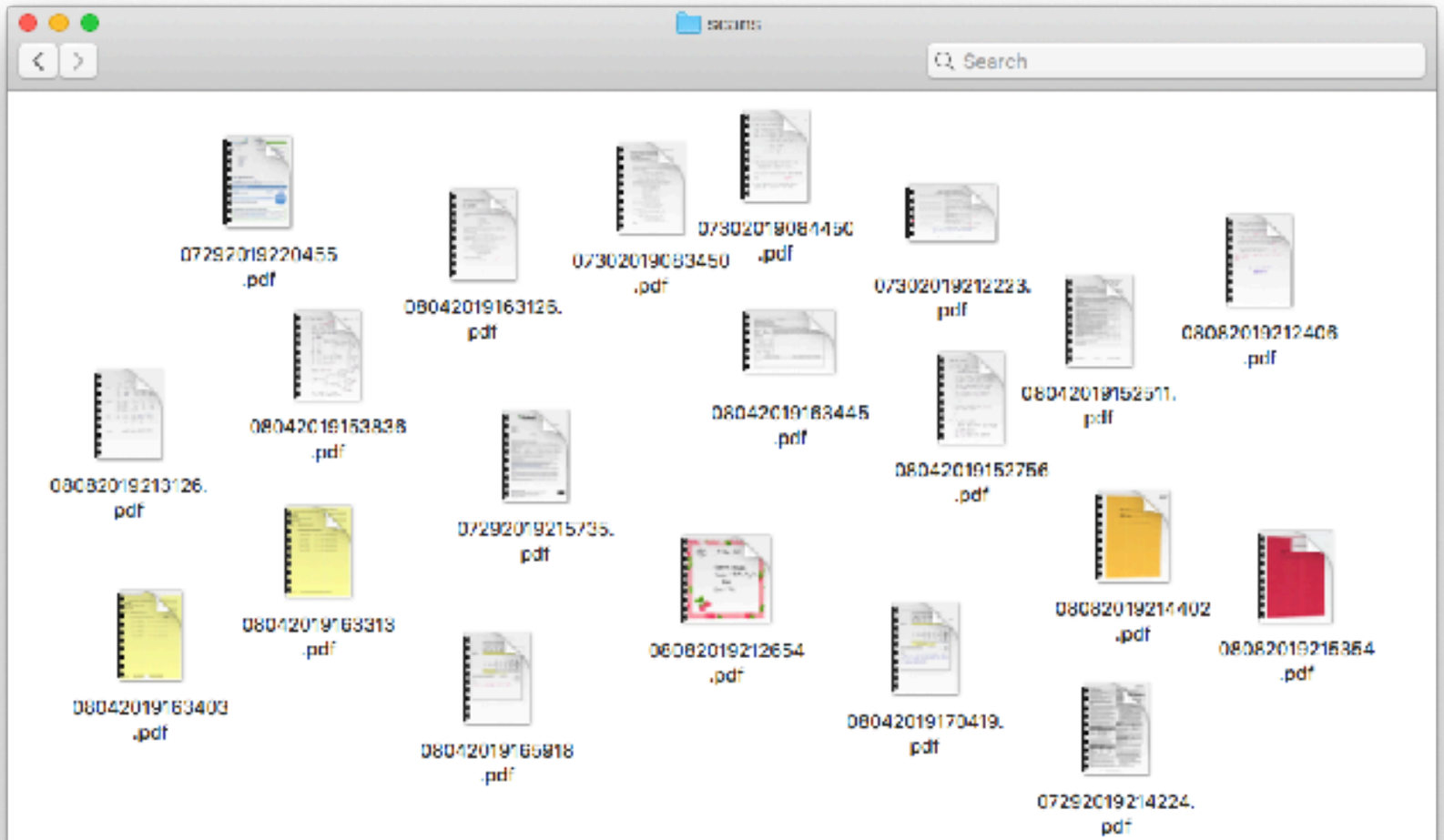
It is an offence to:

- vote using a ballot paper that was not sent for your use or interfere with another voter's ballot paper
- vote more than once at this election, unless you are voting on your own behalf and as a proxy for another person
- vote as a proxy at this election for more than two people, unless you are their spouse, civil partner, parent, grandparent, brother, sister, child or grandchild
- vote as a proxy for someone if you know that by law they are not allowed to vote

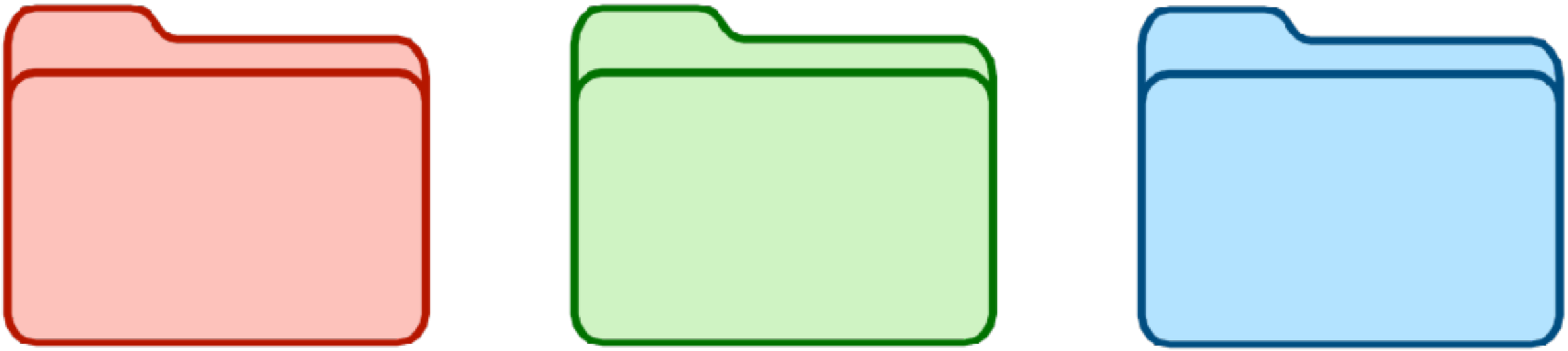
The Acting Returning Officer issued 6A card.

If undelivered return to:
The [illegible] Returning Officer, Stevenage Borough Council,

Canon


scans
Search
07292019220455
.pdf
08042019163125.
pdf
07302019083450
.pdf
07302019084150
.pdf
07302019212223.
pdf
08082019212408
.pdf
08042019153838
.pdf
08042019163445
.pdf
08042019152511.
pdf
08042019152756
.pdf
08082019213126.
pdf
07292019215735.
pdf
08042019163313
.pdf
08042019163403
.pdf
08042019165818
.pdf
08082019212654
.pdf
08042019170419.
pdf
08082019214402
.pdf
08082019216364
.pdf
07292019214224.
pdf

How do I want to find documents?

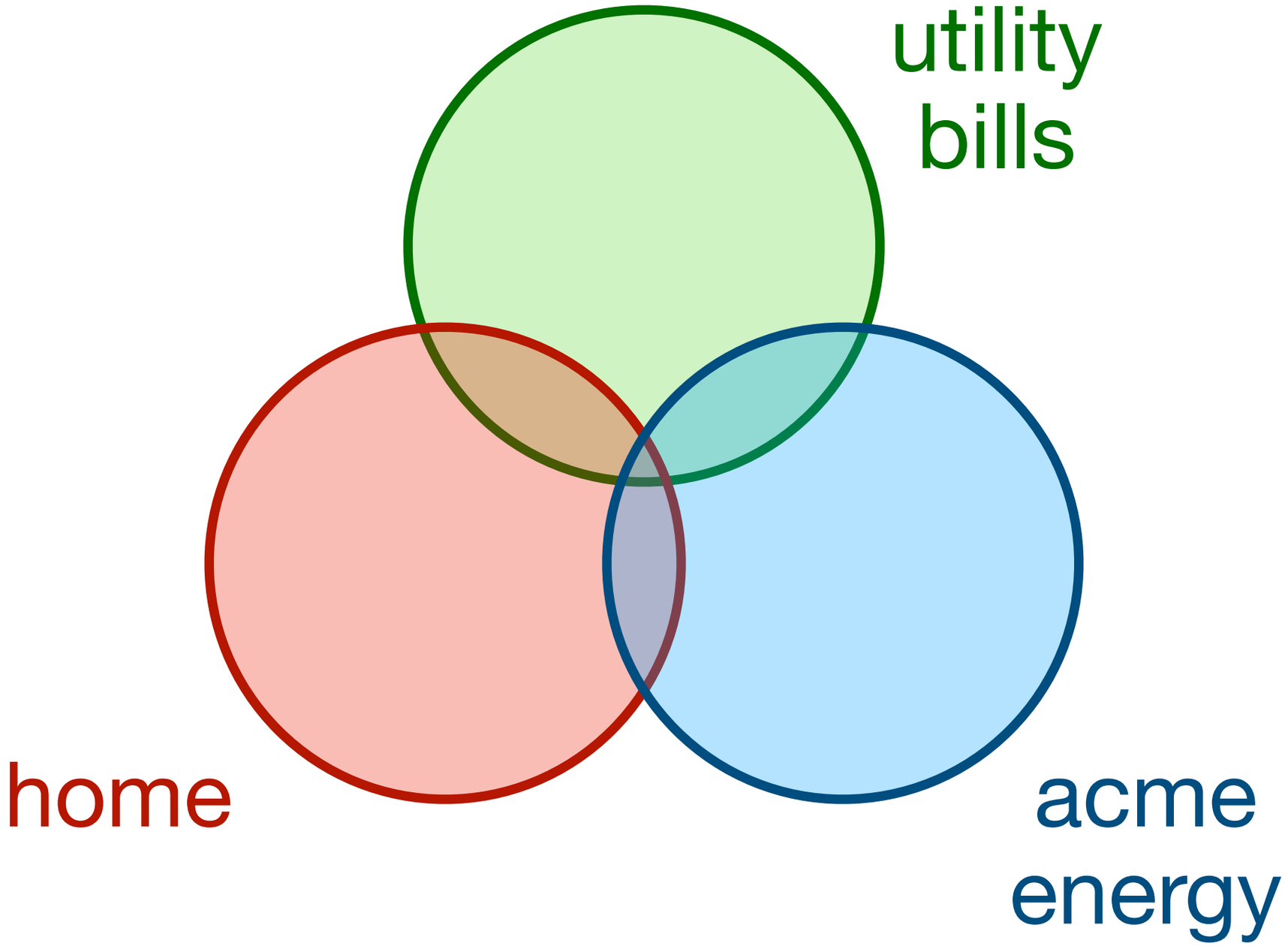


home

utility
bills

acme
energy

How do I want to find documents?



```
docstore add 'BillJul21.pdf' \
  --source_url='https://acme.co/gas' \
  --title='2021-07: Gas bill for 2021' \
  --tags='home,utility-bills,acme-energy'
```

showing documents 1–54 of 54.

▶ tag list

▶ tag cloud

For All Mankind Lunar Surface Access Module (LSAM) LEGO instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs welcome

Papers from “Making IT Work” conference

showing documents 1–54 of 54.

▶ tag list

▼ tag cloud

archives aws by:CrossStitchMari by:Happinest by:James Clear by:Mathysphere by:SpaceXplorer by:The Duckbill Group by:ZAnnaCrossStitch chinese community-safety conferences cross-stitch-patterns elasticsearch esu family file-format-specs for-all-mankind from:Gendered Intelligence gsk languages lego lgbtq-network music org:mhfa-england org:open-university org:prospect-union personal pride-planets recipes rpg sci-fi self-improvement sketchnotes stonewall talks trans-awareness-training trans-inclusion-policies wellcome write-the-docs

For All Mankind Lunar Surface Access Module (LSAM) LEGO Instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs wellcome

showing documents **1–10 of 10.**

by:CrossStitchMari by:Happinest by:Mathysphere by:ZAnnaCrossStitch **cross-stitch-patterns** music pride-planets

filtering to tag **cross-stitch-patterns** [x]

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

Math Sampler pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

showing documents 1–6 of 6.

by:Mathysphere cross-stitch-patterns pride-planets

filtering to tags **cross-stitch-patterns** [x] **by:Mathysphere** [x]

Math Sampler pattern, by Mathysphere

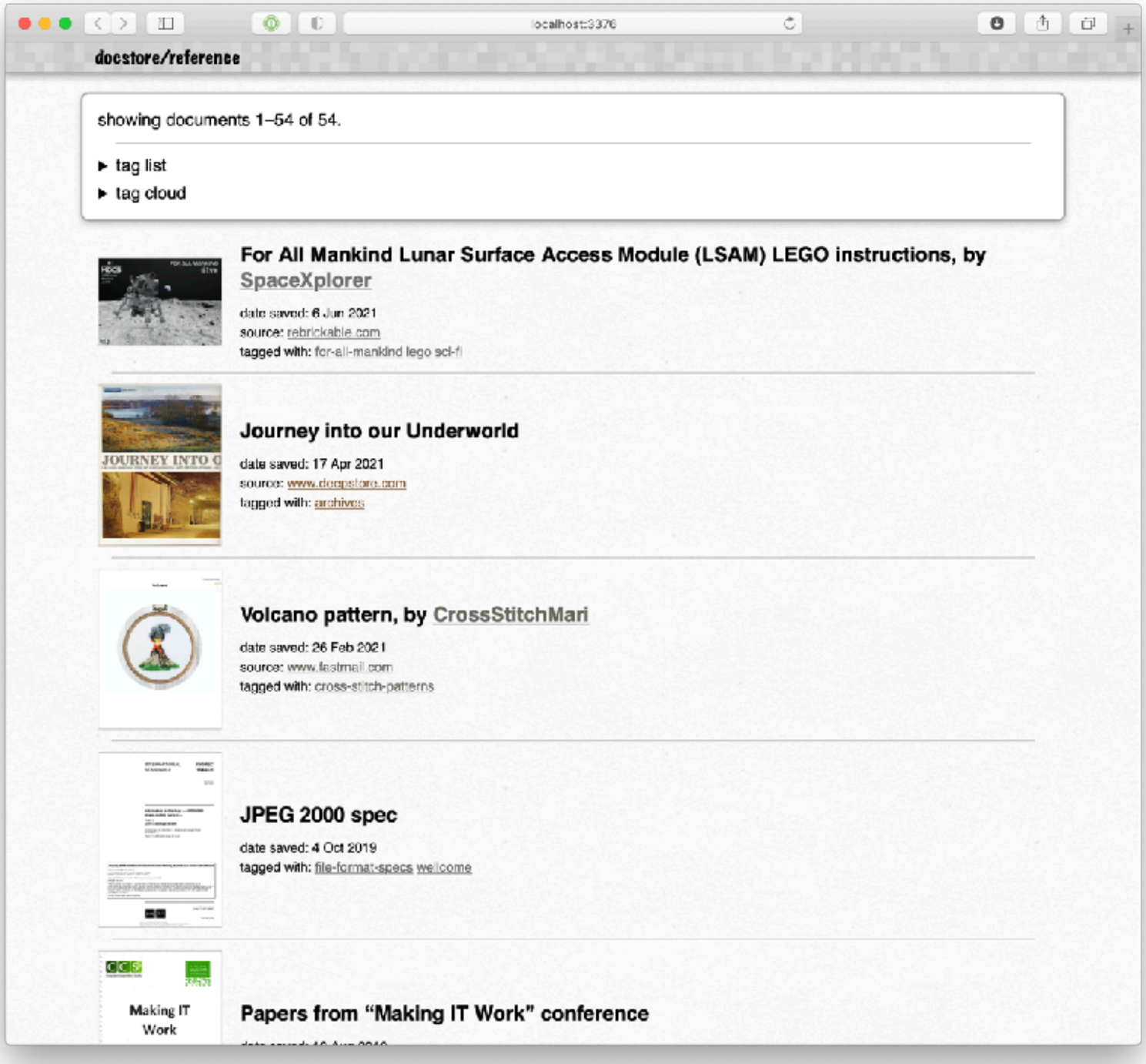
date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Trans Pride Planet pattern, by Mathysphere

date saved: 19 Apr 2019
tagged with: cross-stitch-patterns pride-planets



alexwlchan/docstore

Storing the files

Storing the metadata

Previewing the files

Wrangling the tags

1/

Storing the files

VolcanoPattern.pdf

Alex Chan_5312.pdf

Statement.pdf

alex.chan@metaswitch.com›Alexander Chan›Payslip November 2014–2015.PDF

V5C:3 scrappage note.pdf

What should I save these files as?

UUIDs?

```
VolcanoPattern.pdf
 ↳ volcanopattern.pdf

Alex Chan_5312.pdf
 ↳ alex_chan_5312.pdf

Statement.pdf
 ↳ statement.pdf, statement_aea1.pdf, …
```

I don't store files under their original filenames

```
alex.chan@metaswitch.com›Alexander Chan›Payslip
November 2014-2015.PDF
 ↳ alex_chan_metaswitch_com_alexander_chan_payslip_
   november_2014-2015.pdf

V5C:3 scrappage note.pdf
 ↳ v53_c_scrappage_note.pdf
```

unidecode

```
>>> import unidecode

>>> unidecode.unidecode("Statement.pdf")
"Statement.pdf"

>>> unidecode.unidecode("ACME™ Corp Shipping note")
"ACME(tm) Corp Shipping note"

>>> unidecode.unidecode("Alex Chan›Payslip Nov.PDF")
"Alex Chan>Payslip Nov.PDF"

>>> unidecode("北京")
"Bei Jing "
```

open()

```
>>> with open("greeting.txt", mode="w") as outfile:
...     outfile.write("Hello world!")
12

>>> with open("greeting.txt", mode="r") as infile:
...     print(infile.read())
"Hello world!"

>>> if not os.path.exists("important.txt"):
...     with open("important.txt", mode="w"):
...
```

open(..., "x")

```
>>> with open("name.txt", mode="x") as outfile:
...     outfile.write("My name is Alex!")
16

>>> with open("name.txt", mode="x") as outfile:
...     outfile.write("My name is Tibs!")
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
FileExistsError: [Errno 17] File exists: 'name.txt'
```

<a>

```
<a href="/files/beijing.pdf">
 ↳ downloads "beijing.pdf"

Content-Disposition: attachment; filename="北京.pdf"
<a href="/files/beijing.pdf">
 ↳ downloads "北京.pdf"

<a href="/files/beijing.pdf" download="北京.pdf">
 ↳ downloads "北京.pdf"
```

Storing the files:

- You don’t have to store a file under its original name
- Exclusive creation mode “x” can avoid filename collision
- unidecode can create ASCII-safe strings
- The Content-Disposition header or download attribute can suggest a filename

2/

Storing the metadata

- How do I model the metadata?
- How do I save the metadata to disk?

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )
```

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )

>>> doc.path
"scanned_doc.pdf"

>>> doc.tags
["home", "bills", "acme energy"]
```

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )

>>> repr(doc)
Document(path="scanned_doc.pdf", tags=["home",
"bills", "acme energy"])
```

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )

>>> eval(repr(doc)) == doc
True

>>> doc == Document(path="cat.jpg", tags=["pets"])
False
```

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )

>>> attr.asdict(doc)
{"path": "scanned_doc.pdf", "tags": ["home", "bills",
"acme energy"]}
```

attrs

```
>>> import attr

>>> @attr.s
... class Document:
...     path = attr.ib()
...     tags = attr.ib()

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )
```

```python
@attr.s
class Document:
    id = attr.ib()
    title = attr.ib()
    date_saved: datetime.datetime = attr.ib()
    tags: List[str] = attr.ib()
    files: List[File] = attr.ib()


@attr.s
class File:
    id = attr.ib()
    filename = attr.ib()
    path = attr.ib()
    size: int = attr.ib()
    checksum = attr.ib()
    thumbnail: Thumbnail = attr.ib()
    source_url = attr.ib()
    date_saved: datetime.datetime = attr.ib()
```

```
{
  "date_saved": "2020-10-21T23:22:56.878358",
  "files": [
    {
      "checksum": "sha256:3a6d3bc8641bc43530bb3e6cd183d26a5a05c69b3b74c38e99d5ef9fb2c01253",
      "date_saved": "2020-10-21T23:22:56.878358",
      "filename": "THE_HAUNTING_OF_TRAM_CAR_015_MOBI.mobi",
      "id": "0eb55943-26c7-4a94-99d0-c1fe39318fdf",
      "path": "files/t/the-haunting-of-tram-car-015-mobi.mobi",
      "size": 2267910,
      "source_url": "https://ebookclub.tor.com/",
      "thumbnail": {
        "dimensions": {
          "height": 400,
          "width": 250
        },
        "path": "thumbnails/t/the-haunting-of-tram-car-015-mobi.mobi.png",
        "tint_color": "#9b642c"
      }
    }
  ],
  "id": "9f9bb56e-35ab-451c-81a6-f5ee95fce912",
  "tags": [
    "fantasy",
    "historical-fantasy",
    "fiction",
    "by:P. Dj\u00e8l\u00ed Clark",
    "format:mobi"
  ],
  "title": "The Haunting of Tram Car 015"
}
```

attrs

cattrs

.json

cattrs

```
>>> import cattr

>>> doc = Document(
...     path="scanned_doc.pdf",
...     tags=["home", "bills", "acme energy"]
... )

>>> cattr.unstructure(doc)
{"path": "scanned_doc.pdf", "tags": ["home", "bills",
"acme energy"]}

>>> cattr.structure(
...     {"path": "cat.jpg", "tags": ["pets"]},
...     Document)
Document(path="cat.jpg", tags=["pets"])
```

Storing the metadata:

- How do I model the metadata?
  Use the attrs library.
- How do I save the documents to disk?
  JSON is fine for small N. Often better than a traditional database.
- How do I serialise attrs models to JSON?
  Use cattrs.

3/

Previewing the files

showing documents 1–54 of 54.

▶ tag list

▶ tag cloud

For All Mankind Lunar Surface Access Module (LSAM) LEGO Instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs wellcome

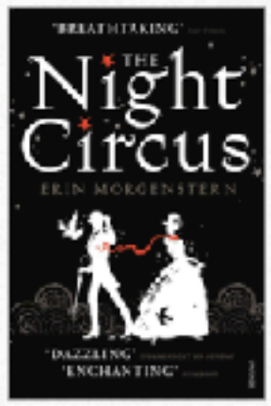
Papers from “Making IT Work” conference

date saved: 18 Aug 2019

showing documents 1–49 of 49.

▶ tag list

▶ tag cloud



The Night Circus, by Erin Morgenstern

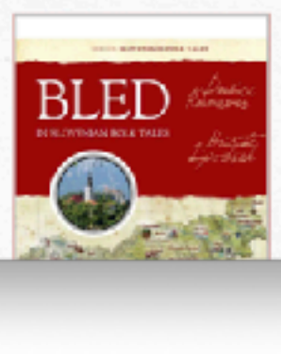
date saved: 5 Jul 2020
tagged with: fantasy fiction format:epub

Porting to Python 3 (phone)

date saved: 27 Jul 2019
source: gumroad.com
tagged with: format:pdf programming python

Intentional Friendships: A Gentle Guide (landscape)

date saved: 27 Jul 2019
source: gumroad.com
tagged with: format:pdf zines



Bled in Slovenian folk tales, by Dusica Kunaver

date saved: 1 Jul 2019
source: www.amazon.co.uk

showing documents 1–36 of 36.

filtering to tag **council-tax** [x]

2016-03: Council tax bill 2016/2017

date saved: 8 Mar 2019
tagged with: council-tax

2018-03: Council Tax bill 2018/2019

date saved: 24 Feb 2019
tagged with: council-tax

2017-06: Council tax bill 2017/2018

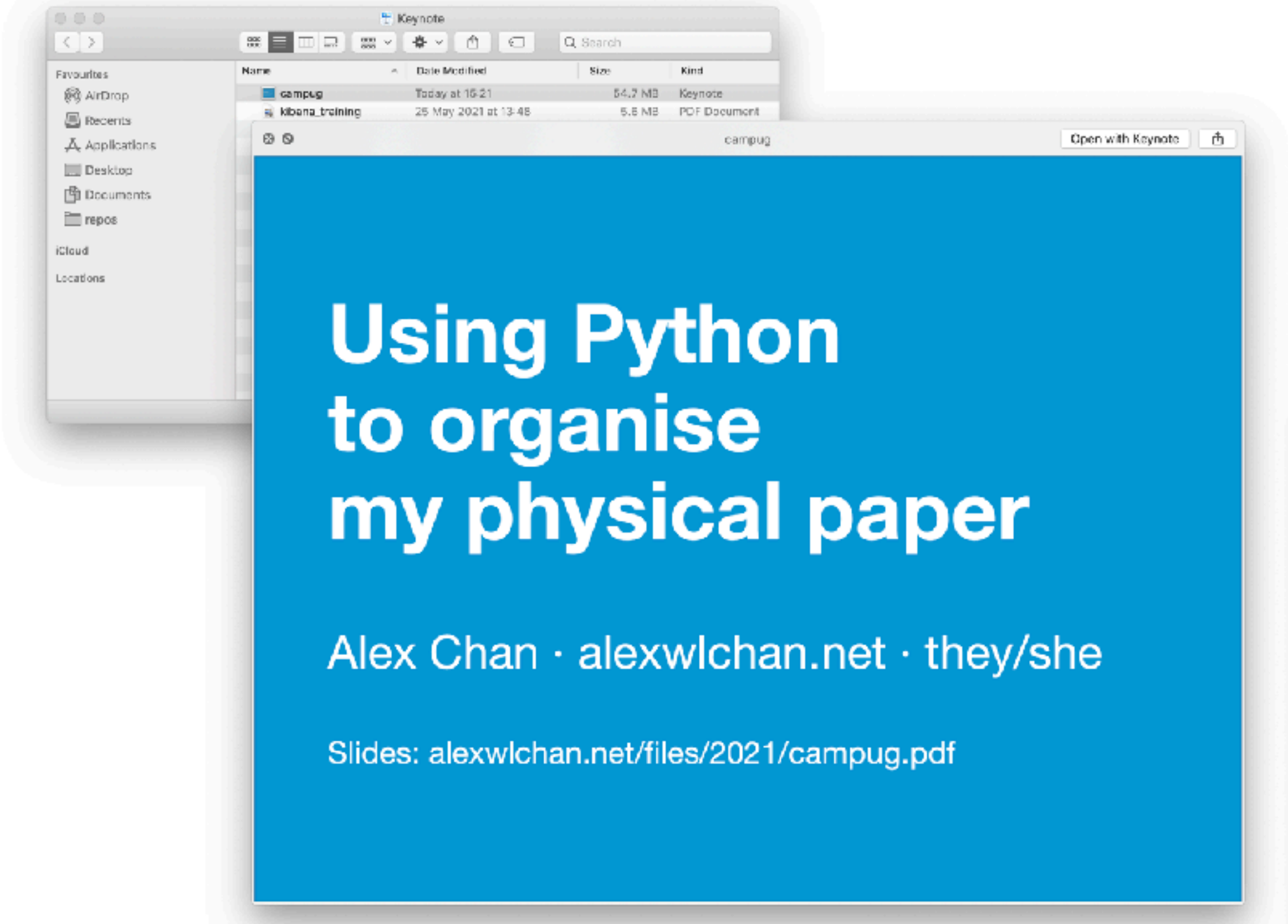
date saved: 24 Feb 2019
tagged with: council-tax

2015-03: Council tax bill 2015/2016

date saved: 23 Feb 2019
tagged with: council-tax

```
pdftocairo document.pdf \
  -jpeg \
  -singlefile \
  -scale-to-x 400
```

qlmanage -t -s 400 document.jpeg



```
ffmpeg -i animated.gif \
  -movflags faststart \
  -pix_fmt yuv420p \
  -vf scale=400:400
  out.mp4
```

showing documents 1–49 of 49.

▶ tag list
▶ tag cloud

A Visit from Eldritchbot, by Thomas Heasman-Hunt

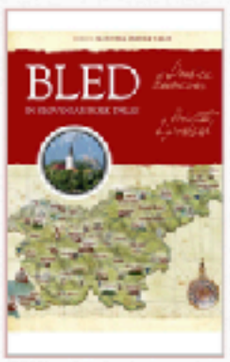
date saved: 3 Oct 2020
source: www.patreon.com
tagged with: format:pdf sci-fi smolrobots

Finn Family Moomintroll, by Tove Jansson

date saved: 2 Oct 2020
tagged with: fiction moomins format:epub

Artificial Condition, by Martha Wells

date saved: 17 May 2020
tagged with: fiction format:epub murderbot sci-fi



Bled in Slovenian folk tales, by Dusica Kunaver

date saved: 1 Jul 2019
source: www.amazon.co.uk
tagged with: folk-stories format:epub

The Life-Changing Magic of Tidying Up, by Marie Kondo

Finn Family Moomintroll, by Tove Jansson

date saved: 2 Oct 2020

tagged with: fiction moomins format:epub

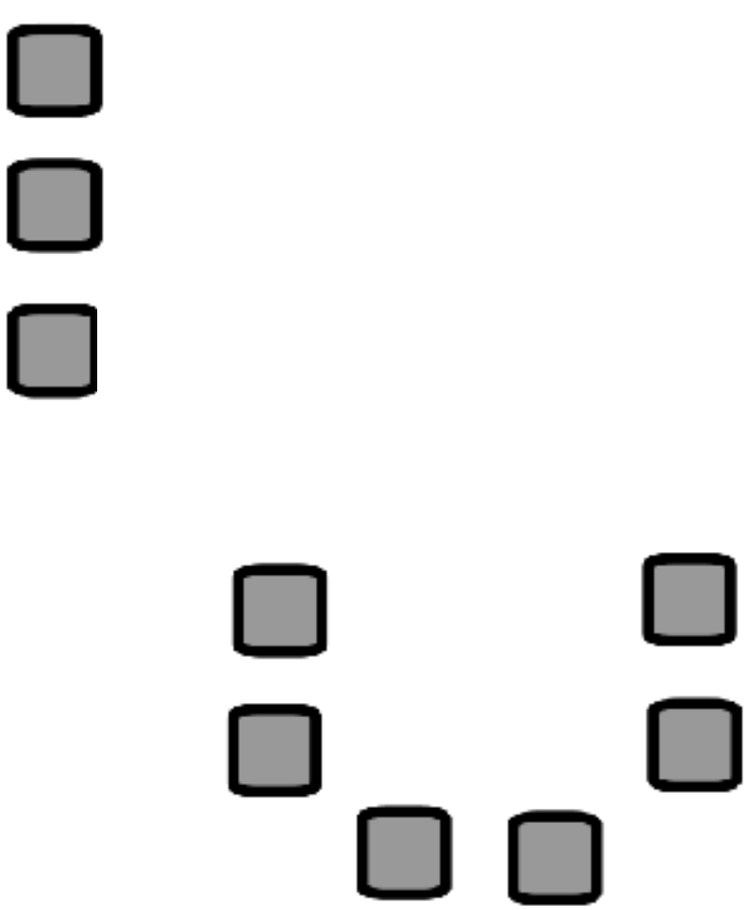
```
>>> from PIL import Image
>>> im = Image.open("cover.jpg")

>>> tally = collections.Counter(im.getdata())

>>> tally.most_common(1)
[((249, 246, 241), 2106)]
```

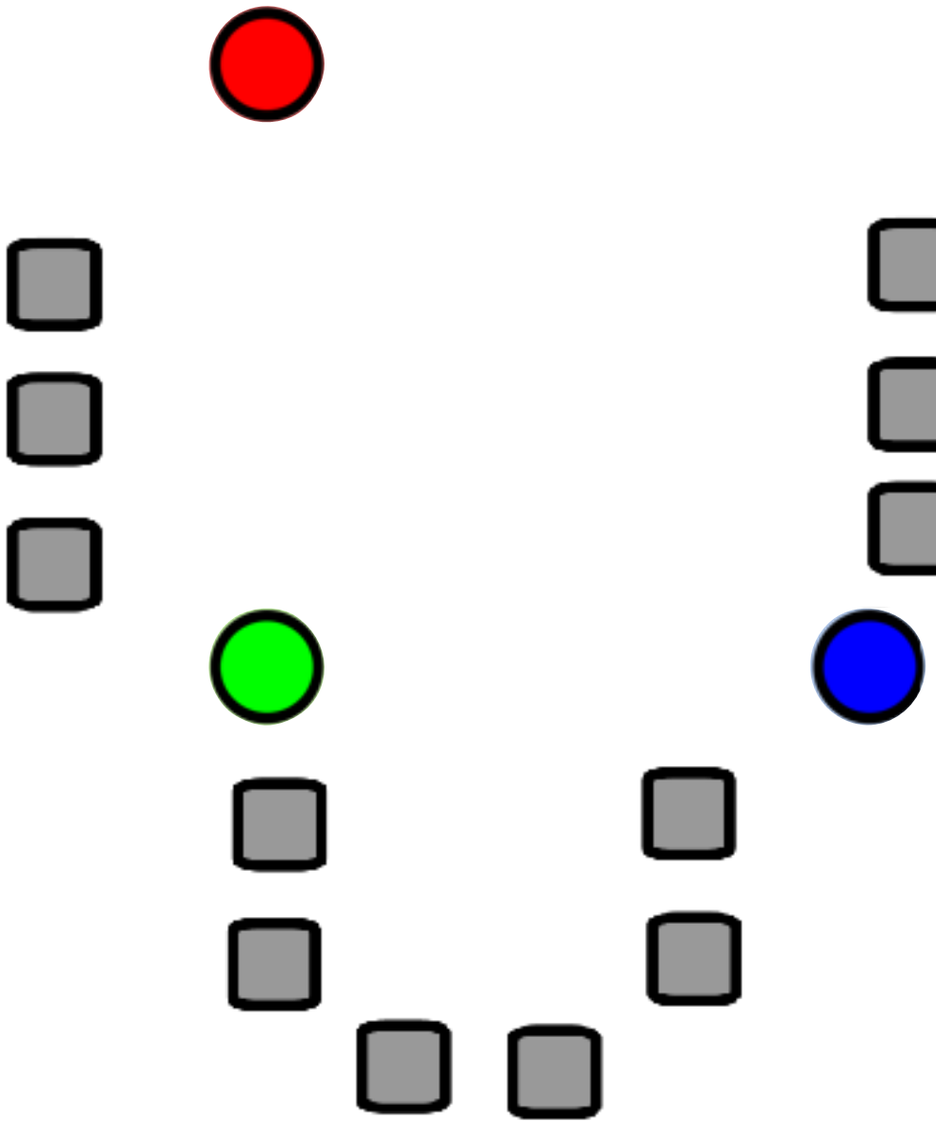
#f9f6f1

k-means



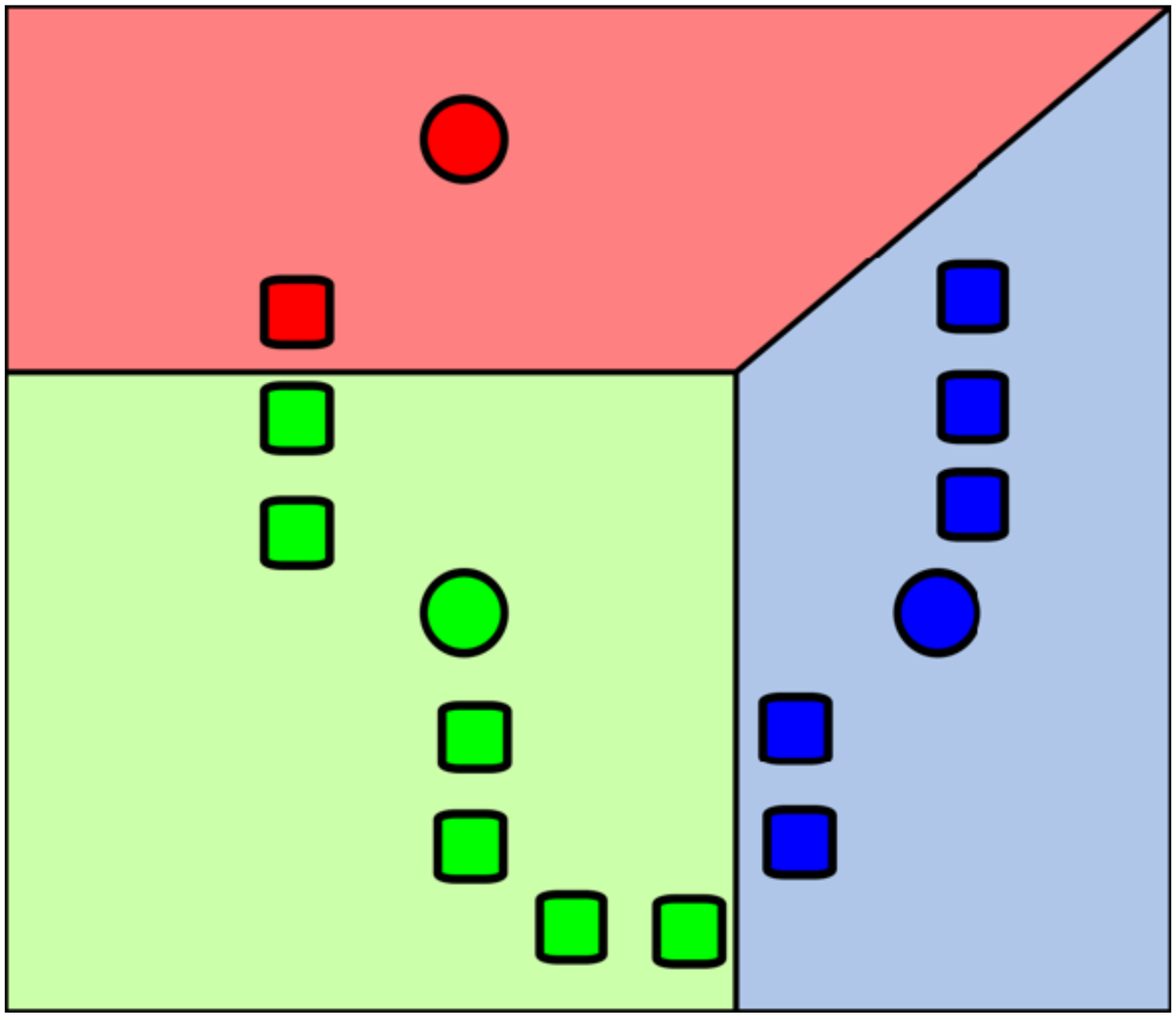
Illustrations from https://en.wikipedia.org/wiki/K-means_clustering

k-means



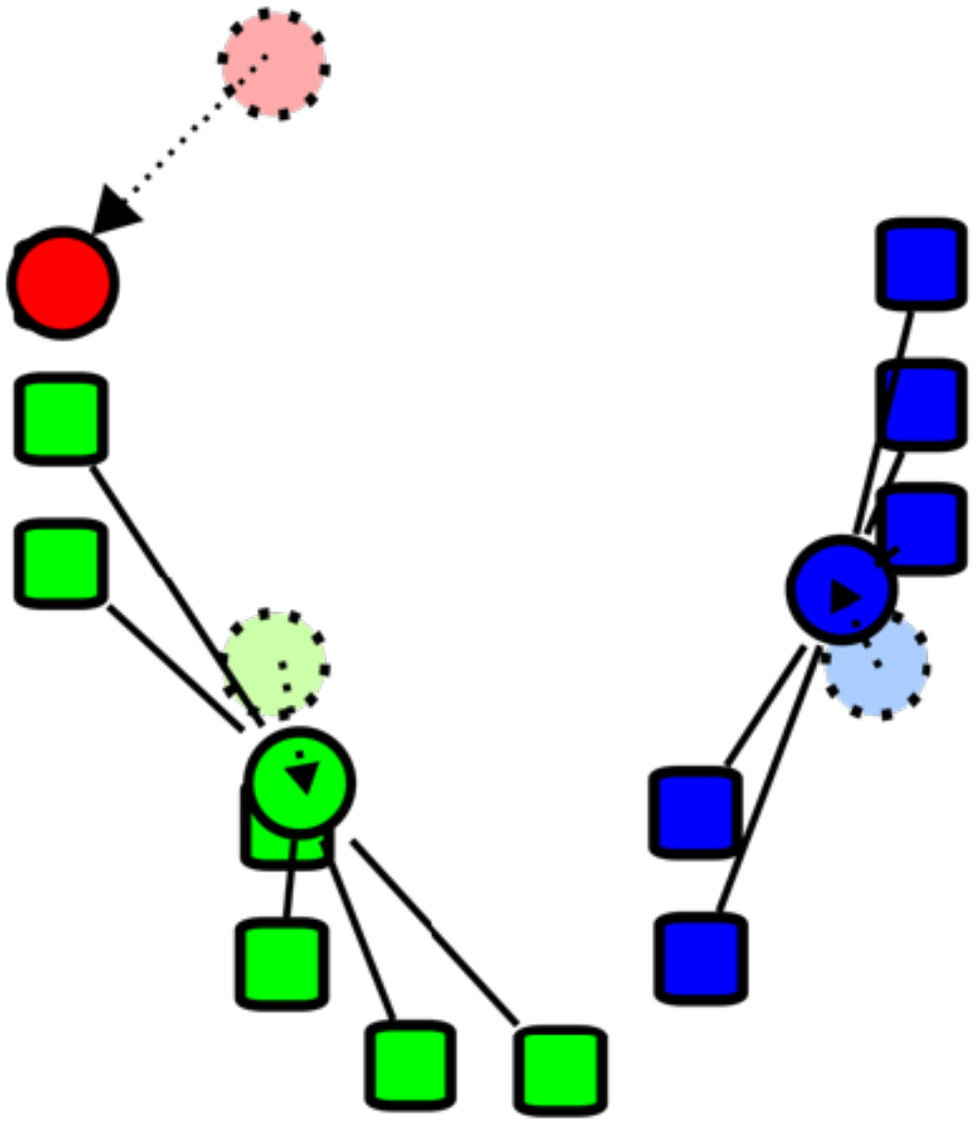
Illustrations from https://en.wikipedia.org/wiki/K-means_clustering

k-means



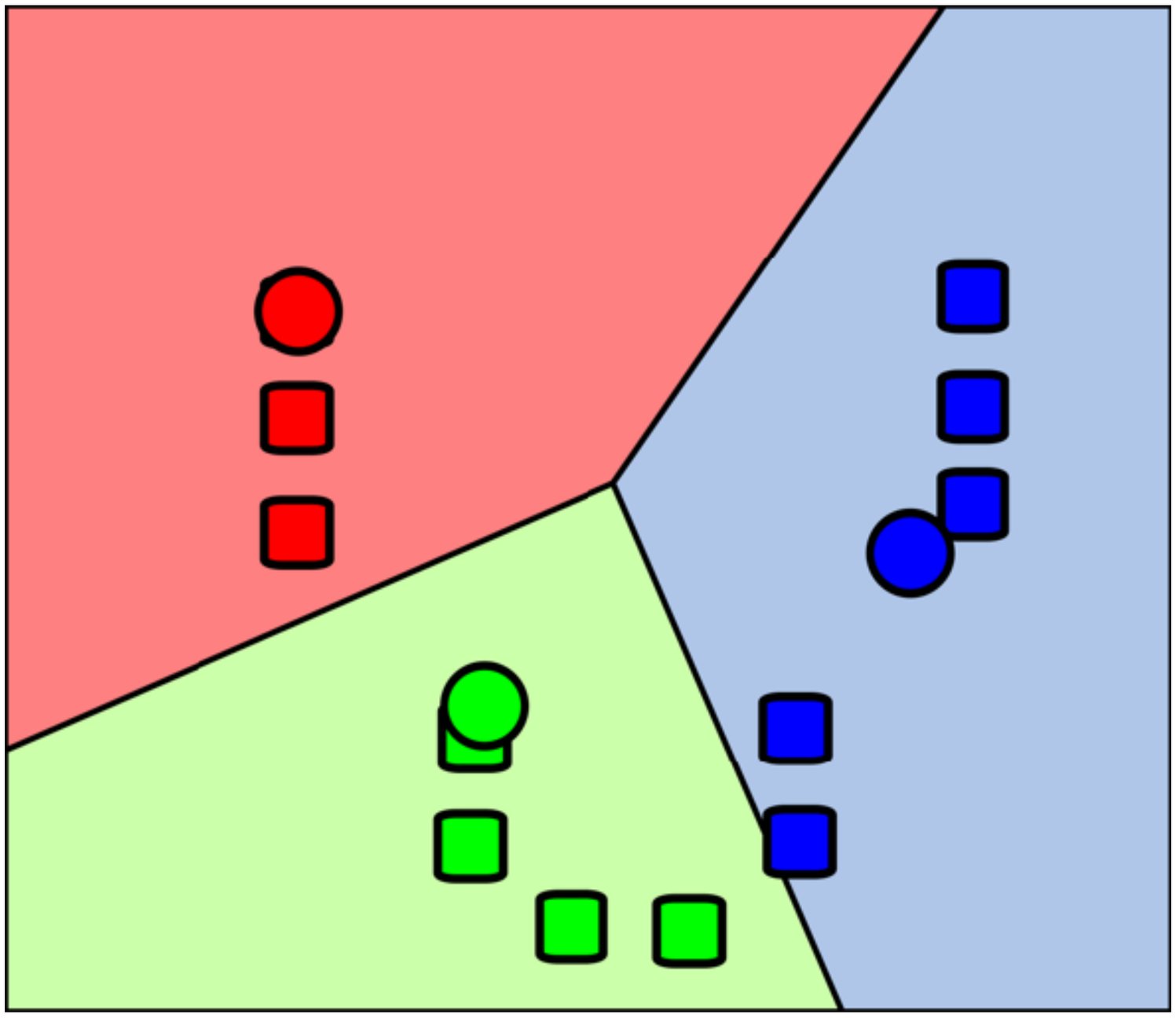
Illustrations from https://en.wikipedia.org/wiki/K-means_clustering

k-means



Illustrations from https://en.wikipedia.org/wiki/K-means_clustering

k-means



Illustrations from https://en.wikipedia.org/wiki/K-means_clustering

Finn Family Moomintroll, by Tove Jansson

date saved: 2 Oct 2020

tagged with: fiction moomins format:epub

```
>>> from sklearn.cluster import KMeans
>>> colors = im.getdata()
>>> KMeans(n_clusters=5).fit(colors).cluster_centers_
array([[129.4208, 196.3925, 195.2154],
        [ 32.2470,  98.7502,  73.7802],
        [236.5401, 170.0094,  60.9854],
        [ 25.9697, 179.8435, 200.6353],
        [229.4518, 236.1130, 227.4645]])
```

Finn Family Moomintroll, by Tove Jansson

date saved: 2 Oct 2020

tagged with: fiction moomins format:epub

```
>>> import wcag_contrast_ratio as contrast
```

```
>>> for c in candidates:
...     print(c, contrast.rgb(c, white))
```

1.9778

7.2296

2.0228

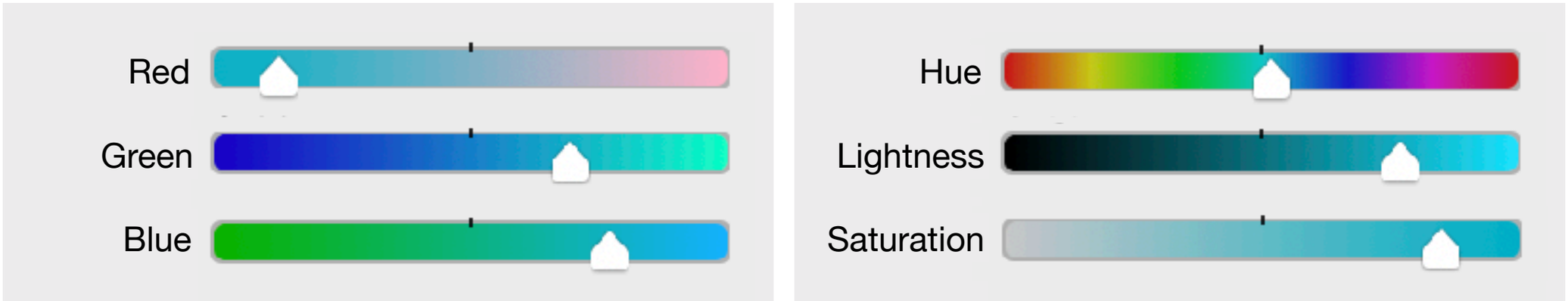
2.2523

1.2042

Finn Family Moomintroll, by Tove Jansson

date saved: 2 Oct 2020

tagged with: fiction moomins format:epub




```
>>> import colorsys

>>> max(
...     rgb_colors,
...     key=lambda col: colorsys.rgb_to_hls(*col)[2]
... )
```

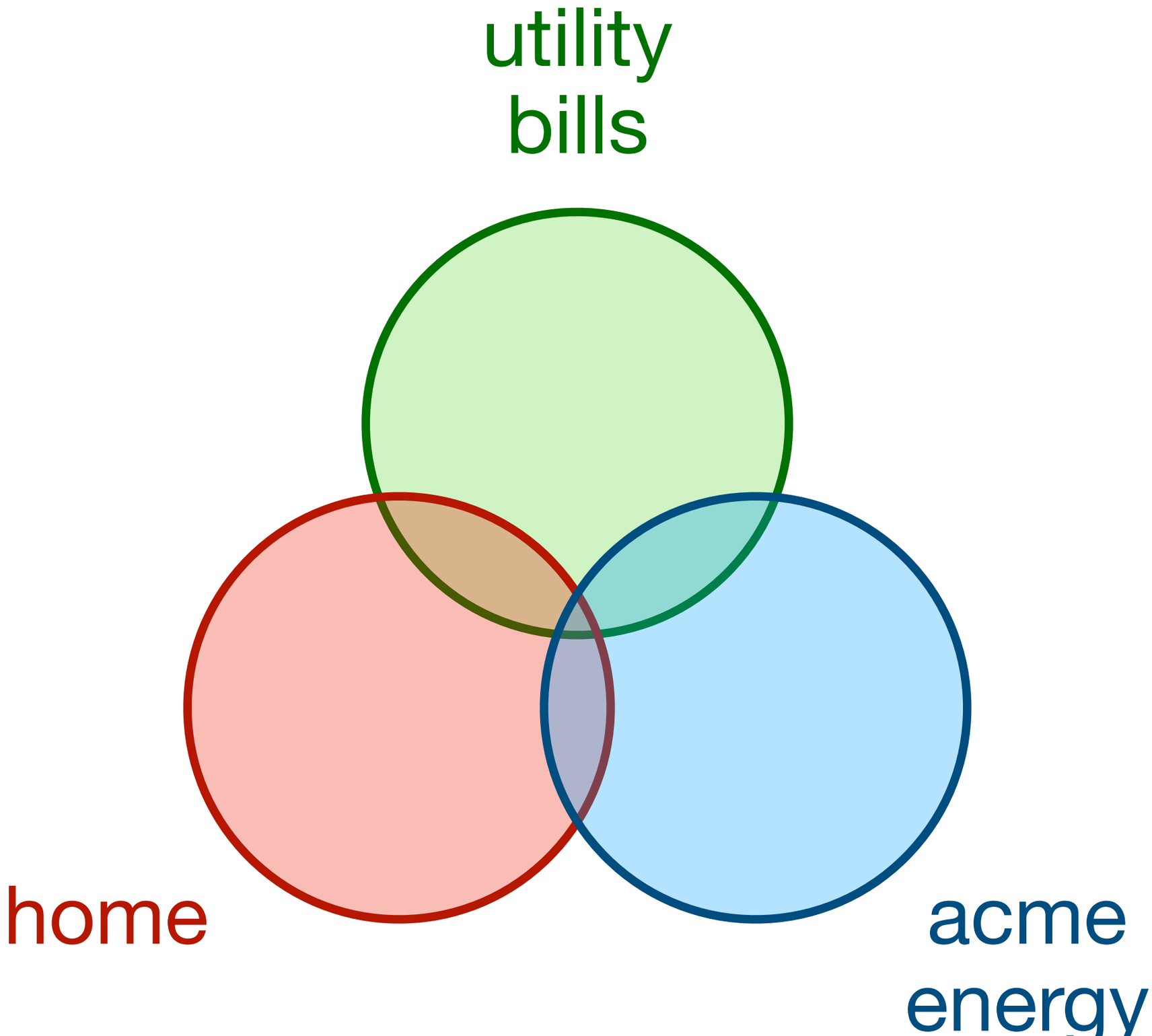
3/

Previewing the files:

- Use pdftocairo to generate thumbnails of PDFs
- Use Quick Look to generate thumbnails of still images
- Create small movies for animated GIFs
- Use Pillow, k-means (scikit-learn) and WCAG accessibility to choose tint colours

4/

Wrangling the tags


utility
bills
home
acme
energy

showing documents 1–54 of 54.

▶ tag list

▶ tag cloud

For All Mankind Lunar Surface Access Module (LSAM) LEGO instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs welcome

Papers from “Making IT Work” conference

showing documents 1–54 of 54.

▶ tag list

▼ tag cloud

archives aws by:CrossStitchMari by:Happinest by:James Clear by:Mathysphere by:SpaceXplorer by:The Duckbill Group by:ZAnnaCrossStitch chinese community-safety conferences cross-stitch-patterns elasticsearch esu family file-format-specs for-all-mankind from:Gendered Intelligence gsk languages lego lgbtq-network music org:mhfa-england org:open-university org:prospect-union personal pride-planets recipes rpg sci-fi self-improvement sketchnotes stonewall talks trans-awareness-training trans-inclusion-policies wellcome write-the-docs

For All Mankind Lunar Surface Access Module (LSAM) LEGO Instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs wellcome

showing documents **1–10 of 10.**

by:CrossStitchMari by:Happinest by:Mathysphere by:ZAnnaCrossStitch **cross-stitch-patterns** music pride-planets

filtering to tag **cross-stitch-patterns** [x]

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

Math Sampler pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

showing documents 1–6 of 6.

by:Mathysphere cross-stitch-patterns pride-planets

filtering to tags **cross-stitch-patterns** [x] **by:Mathysphere** [x]

Math Sampler pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Trans Pride Planet pattern, by Mathysphere

date saved: 19 Apr 2019
tagged with: cross-stitch-patterns pride-planets

Wrangling the tags:

- How do I find documents that match a set of tags?
- How do I get URLs to filter by tag?
- How do I find mistyped or similar tags?

find matching documents

```
>>> class Document:
...     ...
...     def matches_tags(self, query):
...         return query.issubset(self.tags)
```

```
>>> matching_documents = [
...     doc
...     for doc in documents
...     if doc.matches_tags(query)
... ]
```

URLs to tag filters

docs.python.org/3/search.html**?q=subset**

/files**?tag=books**

wellcomecollection.org/images**?query=snake&locations.license=pdm&color=e02020**

/files**?tag=books&tag=programming**

hyperlink

```
>>> import hyperlink
>>> url = hyperlink.URL.from_text("/files")

>>> url = url.add("tag", "books")
"/files?tag=books"

>>> url = url.add("tag", "programming")
"/files?tag=books&tag=programming"

>>> url = url.remove("tag", "books")
"/files?tag=programming"
```

council-tax

counciltax

conciltax

} Suspiciously similar

car-tax

cambridge-council

train-tickets

} Definitely different

rapidfuzz

```
>>> from rapidfuzz import fuzz

>>> fuzz.ratio("council-tax", "counciltax")
95.23809523809524

>>> fuzz.ratio("council-tax", "conciltax")
90.0

>>> fuzz.ratio("council-tax", "car-tax")
55.55555555555556

>>> fuzz.ratio("council-tax", "train-tickets")
25.0
```

https://chairnerd.seatgeek.com/fuzzywuzzy-fuzzy-string-matching-in-python/

We've made it our mission to pull in event tickets from every corner of the internet, showing you them all on the same screen so you can compare them and get to your game/concert/show as quickly as possible.

Of course, a big problem with most corners of the internet is labeling. One of our most consistently frustrating issues is trying to figure out whether two ticket listings are for the same real-life event (that is, without enlisting the help of our army of interns).

To pick an example completely at random, Cirque du Soleil has a show running in New York called "Zarkana". When we scour the web to find tickets for sale, mostly those tickets are identified by a title, date, time, and venue. Here is a selection of some titles we've actually seen for this show:

```
Cirque du Soleil Zarkana New York
Cirque du Soleil-Zarkana
Cirque du Soleil: Zarkanna
Cirque Du Soleil - Zarkana Tickets 8/31/11 (New York)
Cirque Du Soleil - ZARKANA (Matinee) (New York)
Cirque du Soleil - New York
```

rapidfuzz

```
from itertools import combinations

from rapidfuzz import fuzz
```

```
def find_similar_tags(tags, *, threshold=80):
    for t1, t2 in combinations(sorted(tags), 2):
        if fuzz.ratio(t1, t2) > threshold:
            yield t1, t2
```

Wrangling the tags:

- How do I find documents that match a set of tags?
  List comprehensions are fine for small N.

- How do I get URLs to filter by tag?
  Use the hyperlink library.

- How do I find mistyped or similar tags?
  Use fuzzywuzzy or rapidfuzz.

```
docstore add 'BillJul21.pdf' \
  --source_url='https://acme.co/gas' \
  --title='2021-07: Gas bill for 2021' \
  --tags='home,utility-bills,acme-energy'
```

showing documents 1–54 of 54.

▶ tag list

▶ tag cloud

For All Mankind Lunar Surface Access Module (LSAM) LEGO instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs welcome

Papers from “Making IT Work” conference

showing documents 1–54 of 54.

▶ tag list

▼ tag cloud

archives aws by:CrossStitchMari by:Happinest by:James Clear by:Mathysphere by:SpaceXplorer by:The Duckbill Group by:ZAnnaCrossStitch chinese community-safety conferences cross-stitch-patterns elasticsearch esu family file-format-specs for-all-mankind from:Gendered Intelligence gsk languages lego lgbtq-network music org:mhfa-england org:open-university org:prospect-union personal pride-planets recipes rpg sci-fi self-improvement sketchnotes stonewall talks trans-awareness-training trans-inclusion-policies wellcome write-the-docs

For All Mankind Lunar Surface Access Module (LSAM) LEGO Instructions, by SpaceXplorer

date saved: 6 Jun 2021
source: rebrickable.com
tagged with: for-all-mankind lego sci-fi

Journey into our Underworld

date saved: 17 Apr 2021
source: www.deepstore.com
tagged with: archives

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

JPEG 2000 spec

date saved: 4 Oct 2019
tagged with: file-format-specs wellcome

showing documents **1–10 of 10.**

by:CrossStitchMari by:Happinest by:Mathysphere by:ZAnnaCrossStitch **cross-stitch-patterns** music pride-planets

filtering to tag **cross-stitch-patterns** [x]

Volcano pattern, by CrossStitchMari

date saved: 26 Feb 2021
source: www.fastmail.com
tagged with: cross-stitch-patterns

Math Sampler pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

showing documents 1–6 of 6.

by:Mathysphere cross-stitch-patterns pride-planets

filtering to tags **cross-stitch-patterns** [x] **by:Mathysphere** [x]

Math Sampler pattern, by Mathysphere

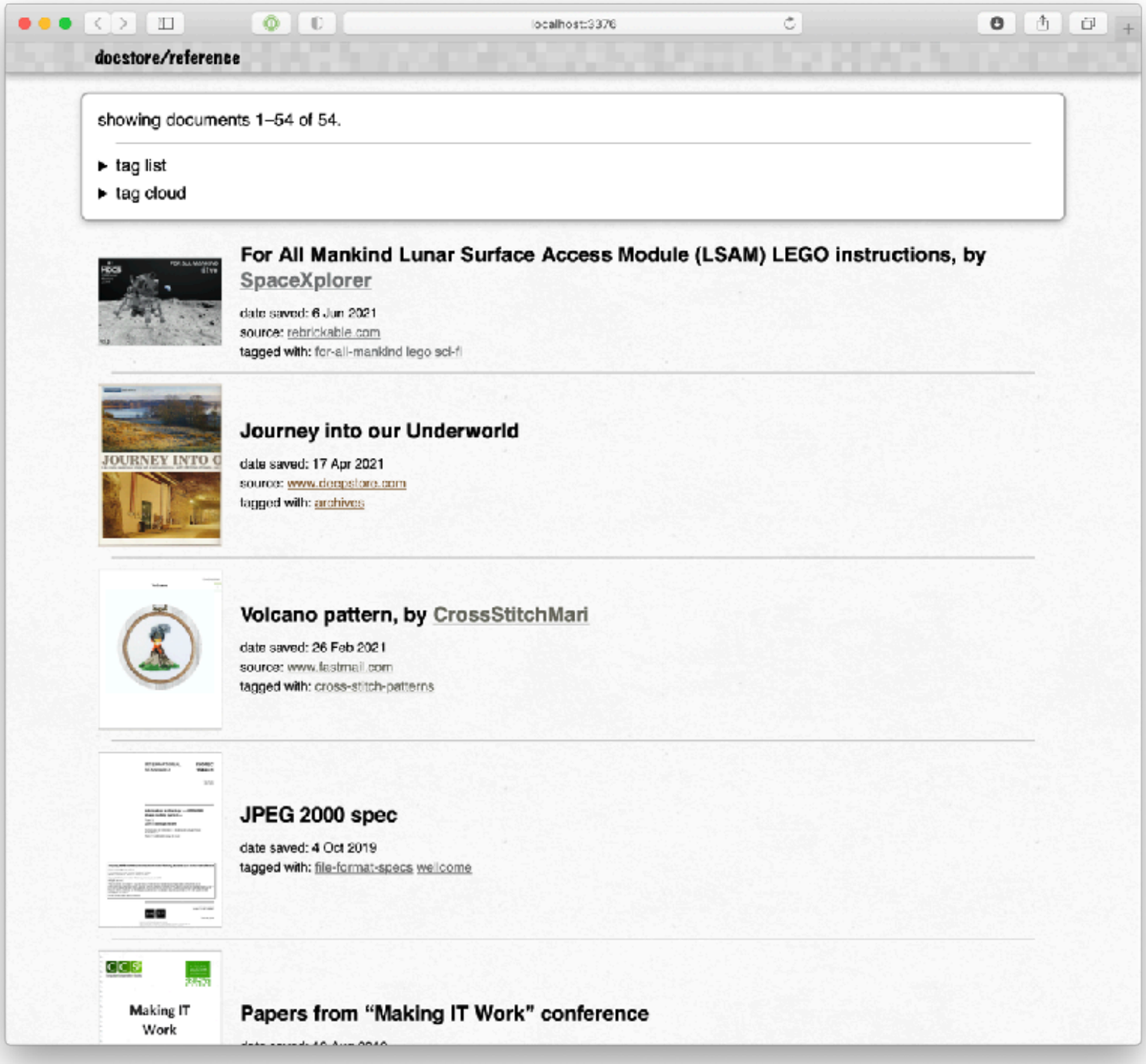
date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Solar Eclipse cross-stitch pattern, by Mathysphere

date saved: 2 Jan 2020
source: www.fastmail.com
tagged with: cross-stitch-patterns

Trans Pride Planet pattern, by Mathysphere

date saved: 19 Apr 2019
tagged with: cross-stitch-patterns pride-planets



alexwlchan/docstore

Storing the files

Storing the metadata

Previewing the files

Wrangling the tags

Takeaways:

Takeaways:

- You’re all going to go away and download docstore!!

Takeaways:

- You’re all going to go away and write your own file management software!!

Takeaways:

- Writing tools that are just for you is easier than writing tools for everyone
- Writing tools that are just for you can have interesting lessons and ideas for writing “real” software
- Source code is a terrible way to share ideas

Using Python to organise my physical paper

Alex Chan · alexwlchan.net · they/she

Slides: alexwlchan.net/files/2021/campug.pdf