STATIC TACTICS

Using static website workshops to
develop capability & collaboration

Matt Plummer
Research Capability Team Leader
Te Kotuinga Mātauranga | Centre for Academic Development
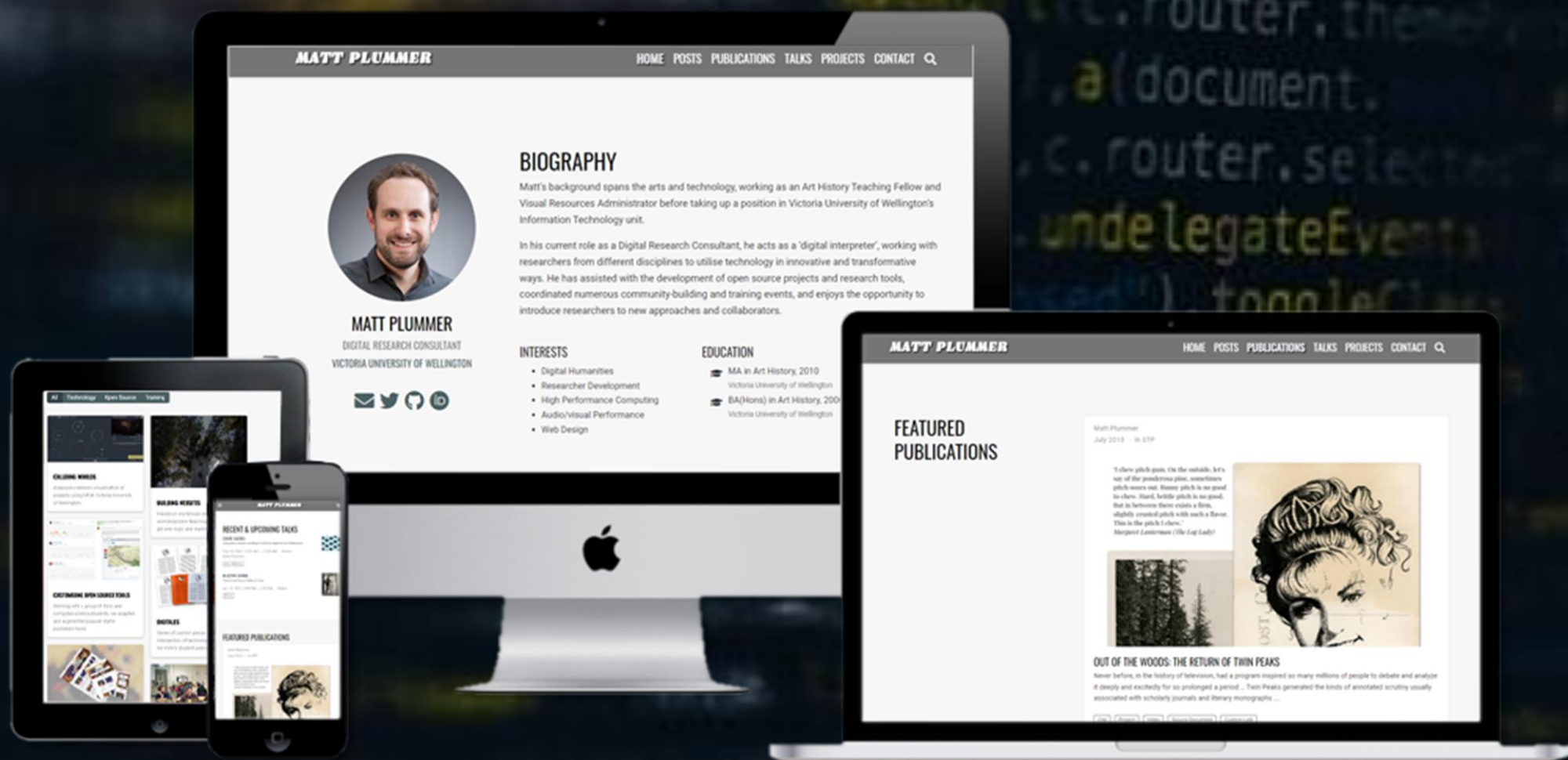Te Herenga Waka | Victoria University of Wellington
matt.plummer@vuw.ac.nz

VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA

WHAT?

- Free, static, git-based websites – maintainable* and version-controlled

- Based on open-source Hugo theme (Academic), tailored for researchers

- Packaged by Wowchemy, deployed by Netlify

- Markdown-based, supports math equations, code-highlighting and diagrams, great way to showcase projects

- Also text editors, CSS, HTML, Shortcodes, Front Matter, config files (yaml, toml)

MATT PLUMMER

HOME POSTS PUBLICATIONS TALKS PROJECTS CONTACT

BIOGRAPHY

Matt's background spans the arts and technology, working as an Art History Teaching Fellow and Visual Resources Administrator before taking up a position in Victoria University of Wellington's Information Technology unit.

In his current role as a Digital Research Consultant, he acts as a 'digital interpreter', working with researchers from different disciplines to utilise technology in innovative and transformative ways. He has assisted with the development of open source projects and research tools, coordinated numerous community-building and training events, and enjoys the opportunity to introduce researchers to new approaches and collaborators.

MATT PLUMMER
DIGITAL RESEARCH CONSULTANT
VICTORIA UNIVERSITY OF WELLINGTON

INTERESTS
- Digital Humanities
- Researcher Development
- High Performance Computing
- Audio/visual Performance
- Web Design

EDUCATION
MA in Art History, 2010
Victoria University of Wellington

BA(Hons) in Art History, 2006
Victoria University of Wellington

FEATURED PUBLICATIONS

Matt Plummer
July 2015 · in STP

'I chew pitch gum. On the outside, let's say of the ponderosa pine, sometimes pitch oozes out. Runny pitch is no good to chew. Hard, brittle pitch is no good, but in between there exists a firm, slightly crusted pitch with such a flavor. This is the pitch I chew.'
Margaret Lanterman (The Log Lady)

OUT OF THE WOODS: THE RETURN OF TWIN PEAKS
Never before, in the history of television, had a program inspired so many millions of people to debate and analyze it deeply and excitedly for so prolonged a period ... Twin Peaks generated the kinds of annotated scrutiny usually associated with scholarly journals and literary monographs ...

RECENT & UPCOMING TALKS

FEATURED PUBLICATIONS

Build future-proof sites 🔥

The FREE, Hugo-based OPEN SOURCE website builder trusted by 750,000+ sites.

No Code. Easily build anything with widgets - from landing pages, online courses, and knowledge bases to academic resumés, conferences, and tech blogs.

Get Started — it's free

Latest release v5.3.0

⭐ Star Wowchemy on GitHub   5,854

Trusted by 750,000+ sites, including staff and alumni from

Deloitte.   **Google**   **MIT**   UNIVERSITY OF **OXFORD**   **Stanford** University   **Tencent** 腾讯

WHY?

- ❑ <u>Intrinsic motivation</u> - website design is fun, academic portfolio site useful for research engagement.
- ❑ Low risk, free-to-fail "sandpit", <u>empowering and enjoyable</u>
- ❑ Excellent way to teach version control - benefits and processes
- ❑ GitHub identity can also be used to access related services e.g. (HackMD)
- ❑ Encourages <u>troubleshooting</u> - deploy logs, community fora
- ❑ Entry-level training that creates a platform for collaboration and skill base for further capability development
- ❑ <u>Immediacy</u> - live site deployed and first git commit made within 15 minutes
- ❑ Can appeal to a different audience to those who'd sign up for a carpentries workshop, while acting as a useful primer
- ❑ Can cater to different levels of skill and experience

VUW COMPUTE CAPABILITY MODEL

Desktop Mastery

Focus: Learning and utilising desktop tools for better and faster results

Tools: R, Matlab, SPSS, PowerBI, Git DataVis

Training: Software Carpentry, ResBaz, 121, local workshops, online, static website development, statistical consultancy

Scale-up Sandpit

Focus: Learning to scale up, test and break out of the desktop for increased compute or coding

Tools: AWS, Azure, Greenbutton, local CPU/GPU boxes, Cloudstor/SWAN, Jupyter notebooks

Training: Software Carpentry, local workshops, online, parallelisation / distribution

Personal Cloud or Performance

Focus: Individually focused and resource limited environment for personal or team research project

Tools: AWS, Azure, Cloudstor, Owncloud, bespoke hardware configuration

Training: Software and environment dependant

University Performance

Focus: University or School services for scaled-up distributed or parallalised compute

Tools: Rāpoi, SCS Grid, Performance servers

Training: eResearch Specialist, eScience Consultant, other researchers, disciplinary community

NeSI Services

Focus: National High Performance Computing and consultancy service

Tools: Research and architecture dependant: https://www.nesi.org.nz/services

Training: Introduction to HPC, NeSI provided: https://www.nesi.org.nz/services/training

Disciplinary Services

Focus: Performance computing provided by global disciplinary institutes/centres: https://www.cancercollaboratory.org/ https://adacs.org.au/ https://quantumexperience.ng.bluemix.net/qx

Tools: Disciplinary or research dependant

Training: Institute or centre dependant

ECOSYSTEM CONCEPT MAP & KEY SITE LAYOUT HANDOUT

GitHub

web-based
version controlled
collaboration tool

Pull   Push   Deploy(netlify.com)

PersonalComputer

Website

GitHubDesktop   **CommandLine**

Slides   **Blogs**   **Projects**   **CV**   **Publications**

TextEditor   **FileExplorer**

Edit markdown   Add images
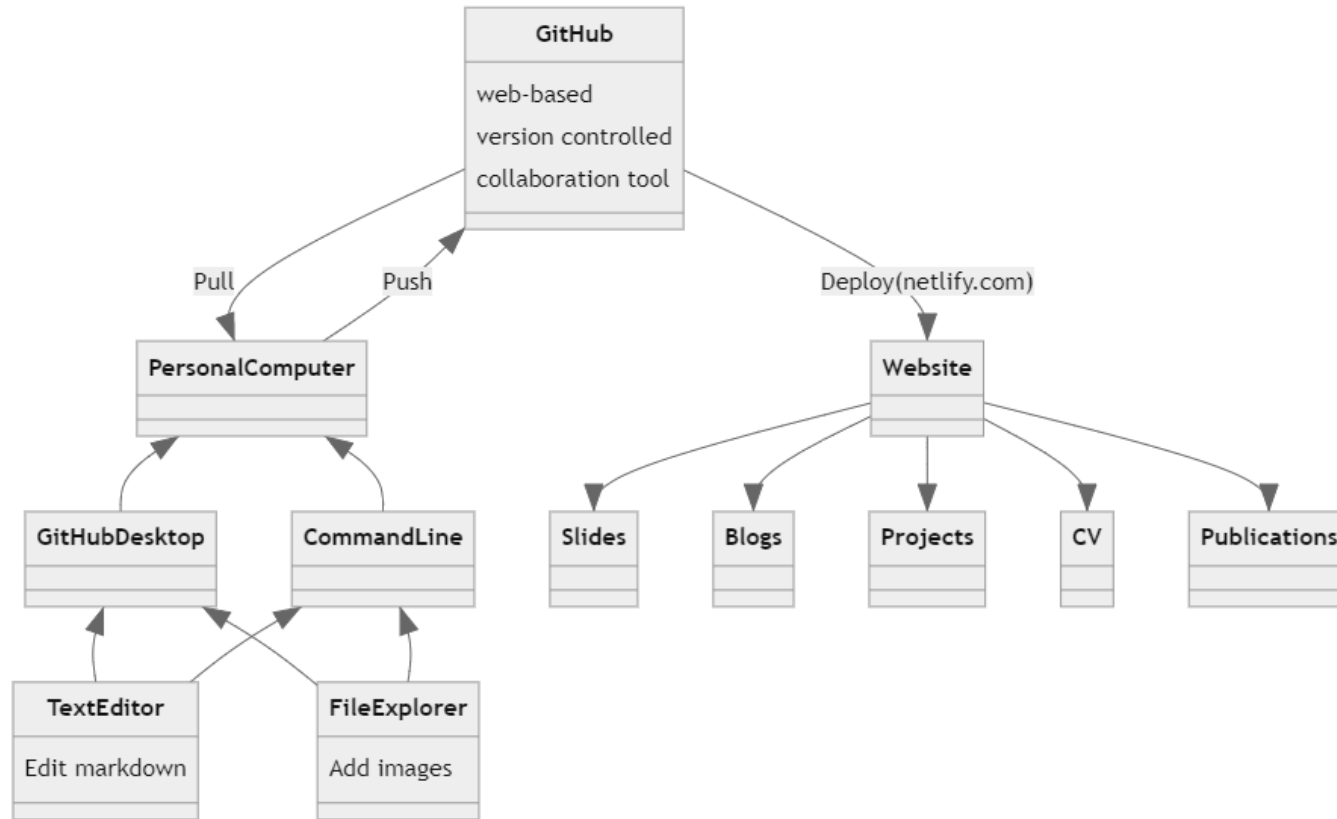
```
+---assets
|   \---media
|       |   icon.png (favicon for site)
+---config
|   \---_default
|           config.yaml (main site configuration)
|           menus.yaml (menu configuration)
|           params.yaml (configure other variables, such as enabling diagrams)
+---content
|   +---admin
|   |       index.md
|   +---authors
|   |   \---admin
|   |           avatar.jpg (Substitute your image – keep the file name)
|   |           _index.md (your bio here)
|   +---home      (these represent the different sections you see on the website)
|   |       about.md
|   |       contact.md
|   |       experience.md
|   |       index.md
|   |       posts.md
|   |       projects.md
|   |       publications.md
|   |       skills.md
|   |       tags.md
|   |       talks.md
|   +---publication
|   |   |   _index.md
|   |   |
|   |   \---example
|   |           cite.bib
|   |           example.pdf
|   |           featured.jpg  (substitute your image – keep the file name)
|   |           index.md
|   +---fonts
|   |       my_font_set.toml (change to custom fonts)
|   |
|   \---themes
|           custom.toml (add custom theme colours etc for site)
|
\---static
    \---uploads
```

HOW?

❑ Carpentries-inspired methodology - sticky notes + formative feedback, both in person and online

❑ Code-along approach, with clear explanations

❑ Help – good ratio of instructor to attendees, or supplemented with helpers

❑ Peer support, in session and ongoing

❑ Introductory and follow-up sessions

❑ Repetition and a modular, scaffolded approach

❑ Paper or PDF handouts of key information (concept map of components, directory structure of site, Markdown cheat sheet)
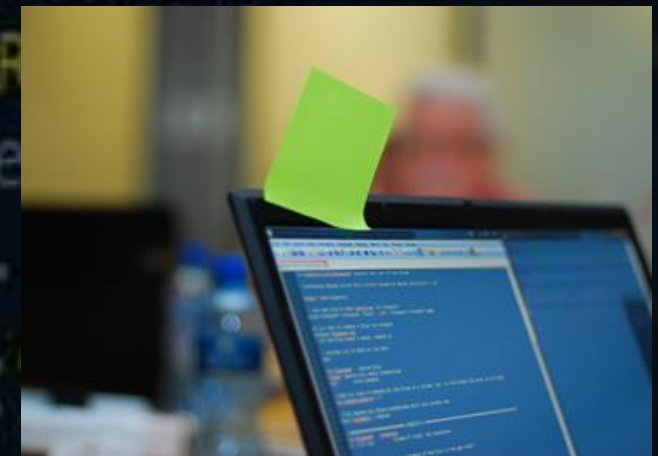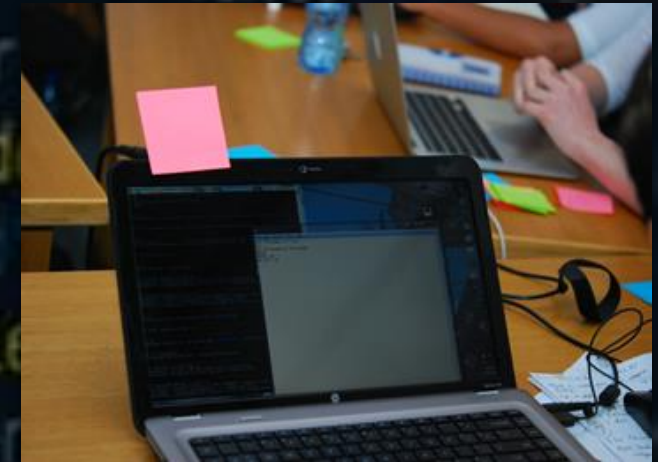
MARKDOWN 'CHEAT' USING HACK.MD

HackMD

"Prime Personal" 30 days trial

1 ONLINE

```
1  #  Open Refine With [Powerhouse Museum](https://www.maas.museum/powerhouse-
   museum/) collection data
2
3  Based on [this video](https://)
4  > Discover how to prep data for your next machine learning project using
   OpenRefine.
5
6  1. Install OpenRefine and open in browser: http://127.0.0.1:3333/
7  2. Create project and import data (phm-collection.tsv) - `either download and
   upload, or add via Get Data From > Web addresses URL >
   https://data.freeyourmetadata.org/powerhouse-museum/phm-collection.tsv`  *tip
   go to https://data.freeyourmetadata.org/powerhouse-museum/ and right click on
   file `phm-collection` and choose `copy link address` option.
8  3. Notice essentially dealing with a giant spreadsheet with rows and columns,
   each column has a menu with options for manipulating and filtering the data
   for that column. On the left hand side options for facet and filter - in data
   science, faceting allows different views of your data by breakin it up,
   defined by a specific characteristic - like many sides of a gem - hence the
   OpenRefine logo. *concept of viewing is interesting here - we have a copy of
   data, different views etc*
9  > facet
10 > /ˈfasɪt,ˈfasɛt/
11 > noun
12 > one side of something many-sided, especially of a cut gem.
13 > "a blue and green jewel that shines from a million facets"
14 >
15 > a particular aspect or feature of something.
16 > "a philosophy that extends to all facets of the business"
17
18 ![OR logo]
   (https://upload.wikimedia.org/wikipedia/commons/4/4b/OpenRefine_New_Logo.png)
19
20 Two main types in OpenRefine *text facet* and *numeric facet*
21
```

Line 1, Columns 1 — 55 Lines   Spaces: 4   Breaks   SUBLIME   Length: 7053

CHANGED 22 DAYS AGO

Open Refine With Powerhouse Museum collection data

Based on this video

> Discover how to prep data for your next machine learning project using OpenRefine.

1. Install OpenRefine and open in browser: http://127.0.0.1:3333/
2. Create project and import data (phm-collection.tsv) - `either download and upload, or add via Get Data From > Web addresses URL > https://data.freeyourmetadata.org/powerhouse-museum/phm-collection.tsv` *tip go to https://data.freeyourmetadata.org/powerhouse-museum/ and right click on file `phm-collection` and choose `copy link address` option.
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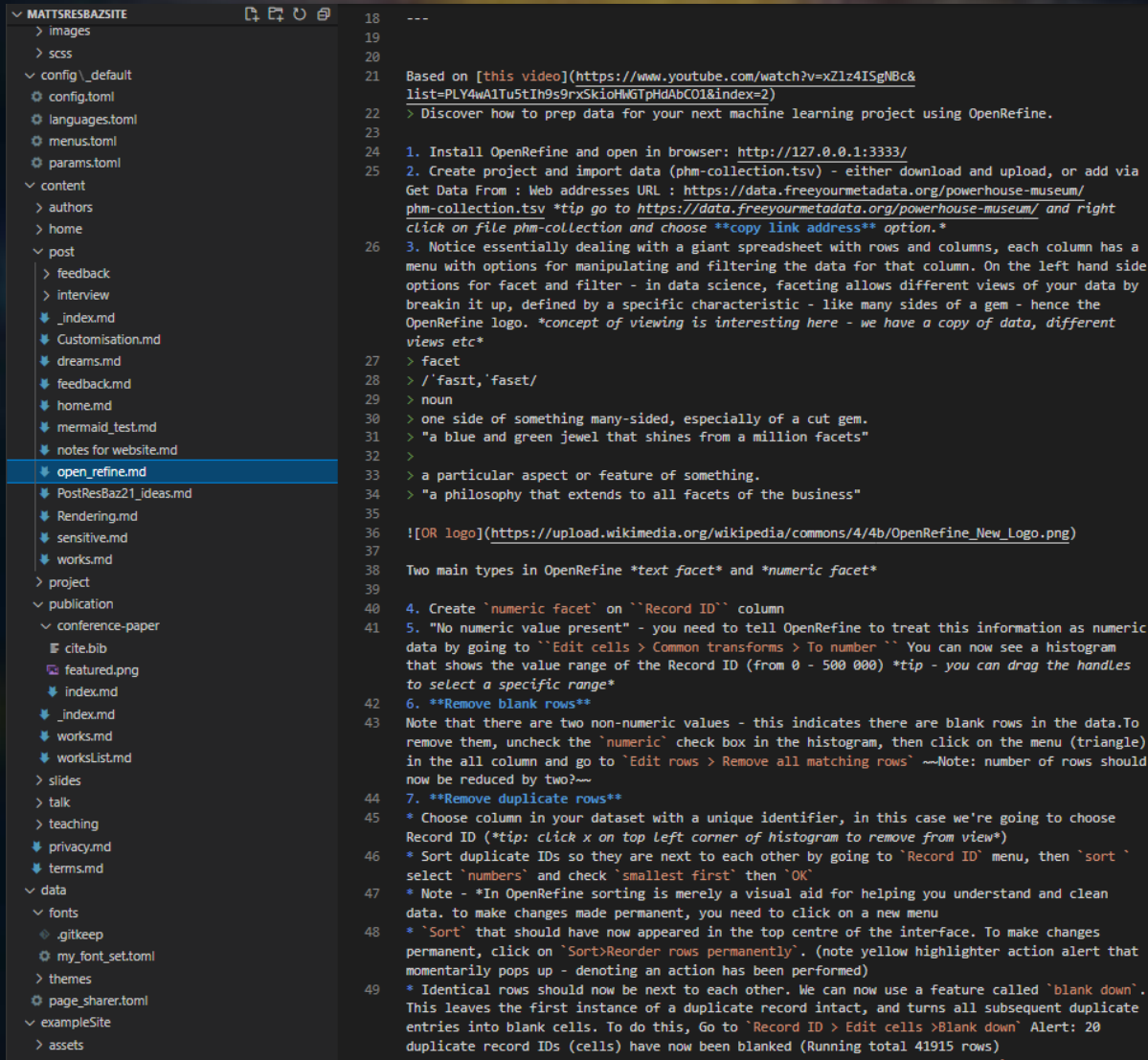
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> a particular aspect or feature of something.
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File tree:
```
MATTSRESBAZSITE
> images
> scss
v config\_default
  • config.toml
  • languages.toml
  • menus.toml
  • params.toml
v content
  > authors
  > home
  v post
    > feedback
    > interview
    _index.md
    Customisation.md
    dreams.md
    feedback.md
    home.md
    mermaid_test.md
    notes for website.md
    open_refine.md
    PostResBaz21_ideas.md
    Rendering.md
    sensitive.md
    works.md
  > project
  v publication
    v conference-paper
      cite.bib
      featured.png
      index.md
    _index.md
    works.md
    worksList.md
  > slides
  > talk
  > teaching
  privacy.md
  terms.md
v data
  v fonts
    .gitkeep
    my_font_set.toml
  > themes
  page_sharer.toml
v exampleSite
  > assets
```

Editor content (open_refine.md):
```
18  ---
19
20
21  Based on [this video](https://www.youtube.com/watch?v=xZlz4ISgNBc&
    list=PLY4wA1Tu5tIh9s9rxSkioHWGTpHdAbCO1&index=2)
    > Discover how to prep data for your next machine learning project using OpenRefine.
22
23
24  1. Install OpenRefine and open in browser: http://127.0.0.1:3333/
25  2. Create project and import data (phm-collection.tsv) - either download and upload, or add via
    Get Data From : Web addresses URL : https://data.freeyourmetadata.org/powerhouse-museum/
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36  ![OR logo](https://upload.wikimedia.org/wikipedia/commons/4/4b/OpenRefine_New_Logo.png)
37
38  Two main types in OpenRefine *text facet* and *numeric facet*
39
40  4. Create `numeric facet` on ``Record ID`` column
41  5. "No numeric value present" - you need to tell OpenRefine to treat this information as numeric
    data by going to ``Edit cells > Common transforms > To number `` You can now see a histogram
    that shows the value range of the Record ID (from 0 - 500 000) *tip - you can drag the handles
    to select a specific range*
42  6. **Remove blank rows**
43  Note that there are two non-numeric values - this indicates there are blank rows in the data.To
    remove them, uncheck the `numeric` check box in the histogram, then click on the menu (triangle)
    in the all column and go to `Edit rows > Remove all matching rows` ~~Note: number of rows should
    now be reduced by two?~~
44  7. **Remove duplicate rows**
45  * Choose column in your dataset with a unique identifier, in this case we're going to choose
    Record ID (*tip: click x on top left corner of histogram to remove from view*)
46  * Sort duplicate IDs so they are next to each other by going to `Record ID` menu, then `sort `
    select `numbers` and check `smallest first` then `OK`
47  * Note - *In OpenRefine sorting is merely a visual aid for helping you understand and clean
    data. to make changes made permanent, you need to click on a new menu
48  * `Sort` that should have now appeared in the top centre of the interface. To make changes
    permanent, click on `Sort>Reorder rows permanently`. (note yellow highlighter action alert that
    momentarily pops up - denoting an action has been performed)
49  * Identical rows should now be next to each other. We can now use a feature called `blank down`.
    This leaves the first instance of a duplicate record intact, and turns all subsequent duplicate
    entries into blank cells. To do this, Go to `Record ID > Edit cells >Blank down` Alert: 20
    duplicate record IDs (cells) have now been blanked (Running total 41915 rows)
```

Rendered page (right):

OPEN REFINE WITH POWERHOUSE MUSEUM COLLECTION DATA

Last updated on Nov 24, 2021

Based on this video

> Discover how to prep data for your next machine learning project using OpenRefine.

1. Install OpenRefine and open in browser: http://127.0.0.1:3333/
2. Create project and import data (phm-collection.tsv) - either download and upload, or add via Get Data From : Web addresses URL : https://data.freeyourmetadata.org/powerhouse-museum/phm-collection.tsv *tip go to https://data.freeyourmetadata.org/powerhouse-museum/ and right click on file phm-collection and choose *copy link address* option.*
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>
> a particular aspect or feature of something. "a philosophy that extends to all facets of the business"

DELIVERY & FEEDBACK

DIFFERENT CONTEXTS

- <u>ResBaz 2020-2021</u> – online workshops as part of wider event

- <u>VECAP (Victoria Early Career Academic Program)</u> – established cohort, 2 x 3 hour initial in-person workshops + follow up hack sessions

- <u>Post-graduate society</u> - 2 x 3 hour initial in-person workshops

- <u>Faculty of Graduate Research PhD workshops</u> – online introductory workshop – 2 hours

FEEDBACK [VECAP]

The workshop introduced me to new tools to build my own website in a very constructive, supportive and fun way. I loved the feeling of capability and success as - step by step - things "worked" and I could see the changes to my new website. The workshop not only helped us troubleshoot, but taught us how to do some troubleshooting ourselves . . . I've really enjoyed having to exercise a different part of my brain and to think in a different way than I normally do in my research and teaching. It's also been great fun to meet up from time to time with my cohort to keep tinkering away on the websites and help one another.

 - Marnie Lloyd, Lecturer, Faculty of Law

FEEDBACK [VECAP]

The workshop offered clear and helpful instruction about website development. I do not consider myself adept at coding or IT at all, but Matt took me and a group of peers through a range of different tools and interlocking components and I was amazed at what I was able to produce for my website.

 - Liana Macdonald, Lecturer

Faculty of Education

CARPENTRIES-STYLE FORMATIVE FEEDBACK [IN-PERSON WORKSHOP]

POSTIVE FEEDBACK:

+ Great workshop - very interesting and easy to follow (and fun!). Found it very worthwhile

+ Perfect step-by-step instructions / learning by doing approach, really helpful

+ The session has been really informative and useful. I've learnt heaps.

+ **Great pace, great explanation, very well prepared. I feel empowered and really enjoyed this. Thank you!!**

+ Very useful, good to be able to switch between different applications, time and space to adapt to own needs

+ Was very clear and easy to follow along, even though I was behind initially

+ **Use of GitHub, telling us to install/prepare beforehand saved a lot of time, great format - learned a lot already**

+ follow along parts useful, good pacing, WordPress critique helpful, enjoyed Q and A breaks a lot (great job!!)

+ Good choice of platform, easy to use, good instruction

+ **Cheat sheet is good, clear and well paced.**

+ **The paper handout with the flow of how parts connect was helpful**

CONSTRUCTIVE CRITICISM:

— could be useful to dive into GitHub Desktop for 15-30 minutes

— Digital handout with tools and examples could be cool

— Establish relationship between sites/software at beginning (to better remember where to pick up later)

— I wonder what happens if we push something wrong. Can we retract it at that level? Also, a little intro to command line.

— Follow up notes, hand out of pipeline could be useful. List of options for themes etc.

— **Downloading GitHub really worried me - projects, issues etc. Had no idea what I was going to use it for.**

— **Perhaps include a handout with basic step-by-step instructions of how to set up another website (i.e. steps we did during the first 20 mins or so of the workshop)**

— Can't really think of anything . . . maybe sending out a link to what the 'academic' template includes, looks like beforehand so we know what elements to have prepared?

RESBAZ SESSION ATTENDEES, NOVEMBER 2021

+ Excellent job navigating the multiple apps and interfaces.
  Clear presentation, and excellent to end up with a "product".
+ I like that you check in after every step if everyone is following along,
  sometimes its hard to keep up in other workshops
+ You are going at a really good pace and checking in frequently. It is great!
+ A really nice, well-paced workshop, really easy to keep up and understand what we're doing!
+ Really engaging and enjoyable workshop - pace is perfect
+ Very didactic. Easy to follow!

LEVERAGE & CUSTOMISE EXISTING RESOURCES

Leslie Myint — Home Posts Talks Teaching Fun CV Contact

Tips for using the Hugo academic theme

Jun 27, 2018 · 6 min read · 19 Comments · 🗀 R

I recently migrated my personal website and Wo...
an academic, it was natural to use the Academic...
package made the conversion fairly straighforwa...
some time figuring out how to work with this Hu...

The source and rendered files for my website are...

- Public, rendered site: the `public` directory w...
  project
- Hugo content and source files: all files and o...
  blogdown/Hugo project (i.e. TOML files, `arc...`
  `layouts/`, `static/`, `themes/`)

Table of Contents

1. Resources
2. Start with `config.toml`
3. Full content RSS feeds for categories
4. Modifying the Contact section
5. Adding a CV

Shrividya Ravi — Home Projects Publications Posts Contact

Mermaid in wowchemy sites

Last updated on Nov 11, 2021 · 2 min read

Mermaid diagrams for wowchemy sites

According to the instructions on wowchemy docs, it's quite easy to include mermaid diagrams. Just need to change the `diagram` parameter in `config/params.toml` to `true`. With this change, the diagram is rendered when the code is within a mermaid code block (using simple backticks markup).

Default version of Mermaid in wowchemy is problematic

Unfortunately, I had some issues with this approach. Wowchemy is still using `mermaid` `8.8.4` as seen in the `js plugin list`. The main issue being that the current version is `8.13.0` and features like rendering `flowcharts` with different directions to `subgraphs` are not available. A secondary issue was slowness in the render. Perhaps, it was my poor internet but the diagrams wouldn't always render with the default plugin location.

How to us the latest / custom version of mermaid

I ended up abandoning the wowchemy native approach and using mermaid as a third party plugin. Following instructions from here, I copied in the JS script reference to `layouts/partials/custom_js.html` and the shortcodes to `layouts/shortcodes/mermaid.html`.

Mermaid can now be called with the shortcode as follows:

```
{{< mermaid align="left" theme="neutral" >}}
flowchart LR
```

---

wowchemy — Templates Creator Stories ♥ Sponsor Learn ▾

🔍 Search... /

⭐ Docs

Home / ⭐ Docs

🐥 **Getting started**
1. Create a site
2. Build your homepage
3. Personalize!
Edit your site
Edit on your PC
Write in the CMS

✏️ **Create content**
Front Matter
📄 Page Features
📑 Page Elements
Create a landing page
Create a blog post
Create a publication
Create a course, documentation, or book
Create an author profile
Create a project
Create an event

Introduction

The free, open source Wowchemy Website Builder enables you to easily create a beautifully simple website using the Hugo static site generator in under 10 minutes 🚀

First steps

To get the most out of Wowchemy, start by reviewing a few introductory topics:

- 🔧 Create your site
- ▶️ Get Started, Build your Homepage, and Customize your new site
- 🎉 Add content to your homepage such as blog posts, projects, talks, publications, slides, and much more!
- ✍️ Write and format content with Markdown, math, code highlighting, galleries, third-party integrations, and much more!
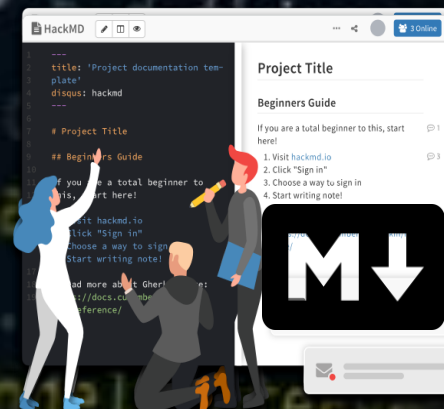- 🙋 Have a question? Explore the Troubleshooting Guide, Q&A Forum, or ask on 💬 Discord

Community:

- ☕ Take the survey and help us improve #OpenSource
- ⭐ Star Wowchemy on **GitHub** to show your support
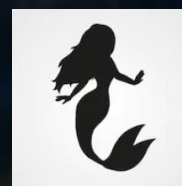- 🐦 Share your new site with the community

FUTURE PLANS

❑ Formalise lesson template, including learning objectives

❑ Collaborate with others interested in developing these lessons

❑ Continue to foster sustainable, ongoing community of practice

❑ WHEN: Scheduling prior to planned Carpentries workshops

❑ Offer follow along sessions:
- Reverting to previous git commits
- Collaborating with git
- Advanced styling with CSS
- More about Front Matter and Shortcodes
- Collaborating on team or research group sites
- Decoupling your site from Netlify and adding custom domain

CONTACT:

matt.plummer@vuw.ac.nz
@matty-plumski