Markdown

Lecture 17

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Documentation beyond comments

- Literate programming remains important
- First level is within a file, particularly at the start
  - *Should be a statement about what the module/program does*
  - *Add comments as you write the code*
    - Not just prior to submission
- Beyond the individual file, README.txt or README.md
- In doc as in coding, keep it DRY – Don't Repeat Yourself (hat-tip Davor @ Archbee)
- Very good article by Codacy on best practices in doc, including some tools

Markdown – simple, portable text formatting

- One of the earliest things Unix was used for was type-setting text
  - *Roff (runoff) mid 1960s. Pre Unix*
  - *Nroff (new roff), later Troff (mid 1970s, Unix)*
    - Basis of the man pages
  - *TeX, LaTex (mid 1980s)*
    - Large texts (theses); Maths
  - *HyperText Markup Language (HTML) (1993)*
    - Emphasis on screen rather than page
    - Idea of page markup
  - *Markdown (2004)*
    - Portability. Aimed at blogging, doc, readme files

Markdown core idea – visible tags

- Early type setting systems users add tags, italics, heading, etc,
  - *.i (italics), .H 1 (first level heading) - Troff*
  - *<i>, <h1> - HTML*
- MS-Word made the tags invisible
- Markdown goes back to the explicit tag idea, but makes the tags more intuitive.
  - *Subset of most useful features, cf LaTeX*

Some tags – headings, styles

Markdown	HTML	Effect
Heading ======	Heading	Level 1 heading
# Heading	Heading	Level 1 heading
Sub-heading --------------	Sub-heading	Level 2 heading
## Sub-heading	Sub-heading	Level 2 heading
Extra blank line	<p>	New paragraph
(2 spaces at end of line)	 	Line break
italic	<i>italic</i>	Italic font style
bold	<b>bold</b)	Bold font style
`monospace`	<code>monospace<code>	Fixed font

Lists

Markdown	HTML	Effect
1. Socks 2. Then shoes	 Socks Then shoes <\ol>	Numbered List
* Horse * Cart	 Horse Cart <\ul>	Bullet List

- Lists can be inside other lists, e.g. bullet within numbered
- Numbering not automatic
  - Arguably no bad thing

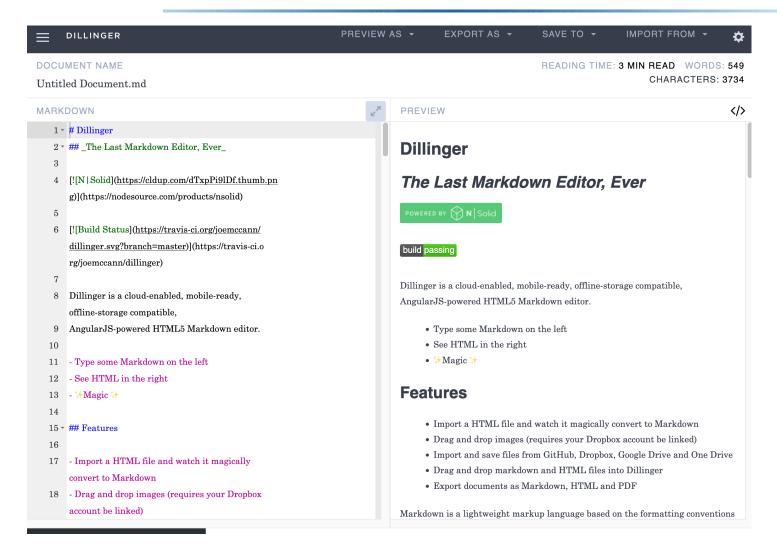# More markdowns

Markdown	HTML	Effect
> Prepend greater than > before each block-quote line	<blockquote> Prepend &gt;<p> before each block-quote line </blockquote>	Indented block quote
[Link to UWA](http://uwa.edu.au)	Link to UWA	Link to another page
![Image](https://study.com/cimages/multimages/16/discount-2345221_960_720.png, "markdown")	<img src=https://study.com/cimages/multimages/16/discount-2345221_960_720.png, alt="markdown">	Import image from URL

Many features absent cf LaTeX, HTML, e.g. tables

Where used

- Reddit uses Markdown to deal with submitted reddits -> HTML
- R studio uses Markdown
- GitHub (its own version), Slack, Trello, Discord
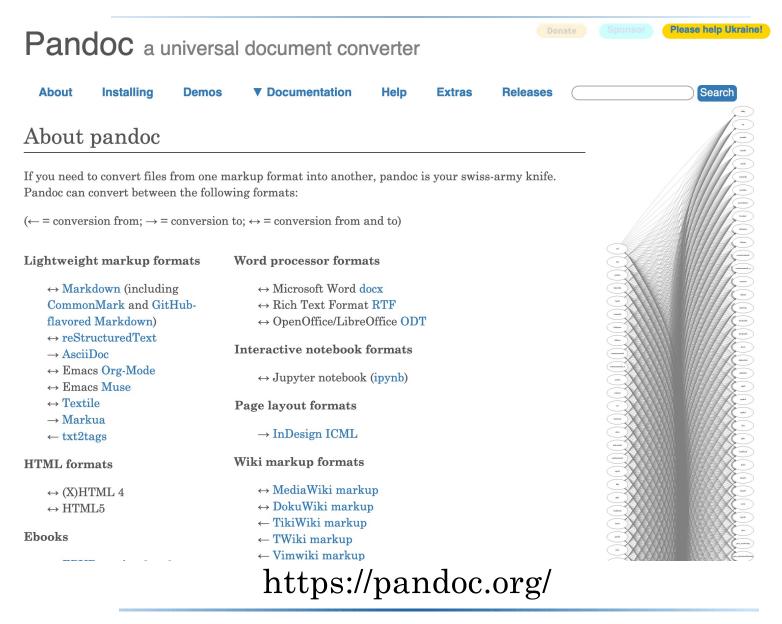- helpOSTS

Dillinger cloud Markdown processor

Type text,
export MD,
HTML, PDF

Can also input
text from file

https://dillinger.io/

Pandoc converts doc formats

The page keeps on going below what is shown!

https://pandoc.org/

Vinnylanni @ WordPress

Beyond Markdown

- Code documentation is moving into typesetting
- Sphinx https://www.sphinx-doc.org has been used to create books as well as major software documentation, including Python 2 and 3.