LEARN WEB

ale66

MARKDOWN

MARK-UP, A RECAP

Enrich the text with annotations that may describe

- its structure: `<body>`, `<header>`, `<p>` ...

- how it should be rendered: `<h1>`, `<b>` ...

- the meaning of its parts: `<title>`, `<quote>` `<article>` ...

Residual cases:

- tags inside `<head>` for indexing etc., in particular `<meta>`

- tages inside `<body>`: `<div>` and `<span>`

CURRENTLY

- we are editing HTML documents to provide a bit of all this

- the text is irremediably mixed with the mark-up

- the mark-up is not very readable and often repetitive

THE MARKDOWN VISION

1. prepare a text file with all the content but only minimal annotations: the Markdown file `my_contents.md`

2. feed it to a *parser* software, e.g., *pandoc* that *renders* it:

   - HTML tags are *injected* into the file, and

   - CSS styles are linked and assigned to tags

3. the thus-created `my_page.html` can be manually refined/tweaked, if need be

4. publish it

github.com/ale66/learn-web

MARKDOWN RENDERING

MD code is *rendered* into HTML equivalent annotations platforms with web page generation support MD contents and render them automatically:

- MyAriel

- GitHub

MD IS USEFUL:

in the `my_page.html` version:

TWO MEANINGS FOR [ ]( )

```
[linked text](https://www.unimi.it) ->

<a href='https://www.unimi.it'>linked text</a>

![](./imgs/image.png) ->

<img src='./imgs/image.png'>
```

MD files are essentially parsed and rendered row by row

it is possible to put HTML tags into a MD file and to see them in the rendering.

```
1  ### this is an h3 title in MD
2
3  <img src='./imgs/image.png' width="50%" alt='Merry Xmas'>
4
5  __this is a boldface caption to the image__
```

MD INTERPRETERS

- download the MD extension for VS Code

- use online interpreters from GitHub

to-markdown   Source on GitHub

☐ GitHub Flavored Markdown

HTML

```
<h1>This is Hello World in
HTML</h1>
        <img src="images/earth-
small.png" alt="A small picture
of the Earth."/>
        <p>Hello World!</p>
        <p>A.K.A:</p>
        <ul>
            <li>Earth</li>
            <li>Terra</li>
            <li>Gaia</li>
            <li>Globe</li>
        </ul>
```

Markdown

```
# This is Hello World in HTML

![A small picture of the Earth.]
(images/earth-small.png)

Hello World!

A.K.A:

*    Earth
*    Terra
*    Gaia
*    Globe
```

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THE LIMITS OF MD

There is no internation/industrial standard:

ambiguity ensues

```
![My text](./imgs/image.png) ->
```

```
1  <img src='./imgs/image.png' alt="My te
```

```
1  <img src='./imgs/image.png'>
2
3  <h6>My text</h6>
```

Use Pandoc/Quarto Markdown

LEARN MD

GET STARTED

Study the simplified language on GitHub where interpretation is automated

GitHub interprets Markdown automatically

Example: collapsed sections

MARDOWN IN VS CODE

VS code supplies a preview of the rendering of `.md` files

install the Markdown-all-in-one extension by Yu Zhang

The page explains how to code MD quickly

SUMMARY OF THE METHOD

- Markdown is the simplest, lightest form of text annotation

- the pandoc software takes our MD text and generates an equiv. HTML page

  - fragments for inclusion into an existing page, or

  - standalone pages

- VS Code+Markdown-all-in-one supports MD with highlighting & preview

- pandoc.org/try/ generates pages from MD texts

- install Pandoc on your computer to render pages

- other output formats are available: DOCX, PPTX, PDF, EPUB etc.

SELF-ASSESSMENT

- what is mark-up?

- what is rendering? Who/what does it?

- what is HTML injection? Who/what does it?

- why do README.md files look good on GitHub?

- what is pandoc?

CODA: THE HTML INJECTION ATTACK

Malicious HTML generation could embed invisible parts that in fact communicate, using HTTP Post() methods!