

# LEARN WEB

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# 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>
- tags 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

# 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

GitHub Flavored Markdown

[Source on GitHub](#)

**HTML**

```
<h1>This is Hello World in
HTML</h1>
    
    <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
```

[github.com/ale66/learn-web](https://github.com/ale66/learn-web)

# 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

[github.com/ale66/learn-web](https://github.com/ale66/learn-web)

# 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

The screenshot shows the Visual Studio Marketplace page for the "Markdown All in One" extension. At the top, there's a navigation bar with the Visual Studio logo and the text "Visual Studio | Marketplace". Below it, the breadcrumb navigation shows "Visual Studio Code > Programming Languages > Markdown All in One". The main content area features a large icon with a white "M" and a downward arrow inside a black rounded rectangle. The extension name "Markdown All in One" is displayed in bold. Below the name, the author "Yu Zhang" is listed along with the number of installs (9,740,159) and a 5-star rating from 155 reviews. The word "Free" is also present. A descriptive text states: "All you need to write Markdown (keyboard shortcuts, table of contents, auto preview and more)". Two buttons are visible: a green "Install" button and a link "Trouble Installing?". Below this, a horizontal navigation bar includes links for "Overview" (which is underlined in blue), "Version History", "Q & A", and "Rating & Review". The "Overview" section contains the heading "Markdown Support for Visual Studio Code". At the bottom, there are several status indicators: "vscode marketplace v3.6.2", "downloads 28M", "build passing", "github stars 2.9k", and "contributors 64".

# 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/](https://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!

