Marpee

Ah, the magic of *checks notes* compiling slides

Every machine I would move my slides to would display them differently. Even pdfs where not immune to this

Some unexpected requirements: missing fonts or mishaps in vectorial objects would also lead to incorrect display of slides and/or images within the slides

Portability of tools: powerpoint? which version? on what OS? and libreoffice? what about conversion to/from pptx? But google slides is universal! No, it's not

Limited expressivity: "Yes, slide software is extremely flexible, allows for so many things to do!" Said nobody ever. You know what's expressive? The **Web**. I want to be able to insert html/css/js in my presentation to leverage an incredibly large set of tools which exist on the one platform which is constantly looked at and interacted with. I want to put my slides on my website and people can interact with a plot, a slider, a sidenote, a whatever.

Plain text format is **the** portable format. Material in the slides is not "copy-pasted", rather it is part of the data ecosystem that I live with (thank you, Obsidian). Having a single language and format for notes, project management, slides, handbooks, etc. makes it so that any piece of information can be referenced without duplication, which is *essential* when your information has to be updated and/or replicated several times.

Imagine writing a handbook for documentation, and then having to create the slides from it. Imagine copy-pasting to power-point from word. Couldn't be me.

I bet you want to add some formula and use powerpoint's formulas. Or maybe a screenshot. Or maybe LateX. Thank you LateX, but you're too much, sorry.

Versioning systems are great. Online repositories of versioning systems are even better. "Oh, I need to modify this presentation, then give it to Annah to modify, then Adam has to shorten it too". Git, ladies. Github, wenches. Gitlab, even.

Marpee: getting started

Detailed instructions for compilation are available at the project's README.

Briefly:

- 1. Install marp (requires node): npm install -g @marp-team/marp-cli (Linux) or brew install marp-cli (brew, Mac)
- 2. Compile your slides in the desired format, e.g., html through a local (marp --html slides.md) or remote installation (npx @marp-team/marp-cli@latest slides.md)

That's it! Now you can compile your slides in html, pdf, pptx

Alternatively, a Docker image is also available.

If you are working on a tablet, and don't have any of these available, you should stop working.

Marpee and markdown

markdown is a template language thought for ease of writing, which includes syntax for

- **bold** through **{text}**, and *italic* through *{text}*
- headings through #: with k # you get a h{k} tags
- links through [link text](https://whatever.com)
- bullet list through -
- tables
- inline LateX with the \${latex}\$ and \$\${latex}\$\$ tags

As a markup language, markdown has several applications that allow to turn your markdown files into books (Leanpub, mdbook), notes (obsidian, logseq, boost note), websites (jekyll, quarto). Moreover, markdown allows you to embed native html within your markdown files.

Reference.

Marpee

Building on marp, which provides a compiler for markdown slides, marpee provides a set of utilities to ease construction of slide packs. This includes:

- import everything
- slide themes
- css customization
- vectorial assets

Moreover, being markdown, you can mixin html code!

Fonts

Forget presentations ruined by missing fonts! You can simply import web fonts instead. This presentation mainly features the Arvo font, which was imported with

```
<!-- Fonts -->
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Arvo:ital,wght@0,400;0,700;1,400;1,700&display=swap" rel="stylesheet">
```

Even if this requires a network connection to correctly import, it's a far safer option than manually look for and configure fonts yourself.

Themes

Rather than compile directly to pdf, you can go through an html step, thus compiling markdown to html, which you can then style with CSS! marp has a default theme (with more you can choose from), with marpee adding two more (which I added because I needed them, and no, I don't take theme requests):

- Unipi: an unofficial theme for University of Pisa
- xai: an unofficial theme for the XAI research project

Objects and css

The default marpee template includes an import to Semantic UI a CSS-based UI components library.

Dividers

```
<div class="ui center aligned basic segment">
   One choice
   <div class="ui horizontal divider">
        Or
      </div>
   Another choice
</div>
```

One choice

OR

Another choice

Objects and css

The default marpee template includes an import to Semantic UI a CSS-based UI components library.

Reveal animations



Objects and css

The default marpee template includes an import to Semantic UI a CSS-based UI components library.

Segments

```
<div class="ui raised segment">
  Pellentesque habitant morbi...
</div>
```

Pellentesque habitant morbi...

CSS

You can import the base theme I'm using for these slides with

```
<link
    rel="stylesheet"
    type="text/css",
    href="https://cdn.jsdelivr.net/gh/msetzu/marpee@latest/css/themes/base.css">
```

but remember that marp allows you to also insert html yourself. You can create your own theme, or apply different CSS to different files with a style tag. Even more refined, you can apply CSS to a single slide with the style scoped tag.

Stretching and pulling

marpee provides some convenience CSS classes for managing width and heights of objects (/css/scaling/sizing.css).

class	CSS
wX	<pre>{width: X !important}</pre>
hX	<pre>{height: X !important}</pre>

You can use this, e.g. to stretch and shrink columns by assigning classes w60 and w40 to a two-column layout to have the first column span 60% of the space, and the other one the 40% remaining. Supported are values 10, 20, 25, 33, 35, 40, etc. You can find a complete list on sizing.css.

Highlighting

To remark some points inline, marpee provides the highlight class. Apply class highlight to a span tag to highlight it!

- not highlighted
- highlighted

Boxes

To create an box, e.g., to display an important theorem, use the ui raised segment question classes on a div . Optionally, give it a title with a c class="question">

Important theorem. Poggi e buoi fanno pari.

Templates

Columns

You can create two-columns slides with

```
<div class="ui two column doubling stackable grid container bottom">
<div class="column">
</div>
<div class="column">
</div>
</div>
</div></div>
```

Want more columns? Simply swap the two class in the outer div to three, four, etc., and add as many <div class="column"></div>

To render content inside html scopes as markdown, leave two blank lines between the markdown and html.

Columns

You can create two-columns slides

Column 1

Column 2

Columns and rows

You can also compose columns to create grids.

```
<!-- First row -->
<div class="ui two column doubling stackable grid container bottom" style="width: 50%;">
<div class="column">
</div>
<div class="column">
</div>
</div>
<!-- Second row -->
<div class="ui two column doubling stackable grid container bottom" style="width: 50%;">
<div class="column">
</div>
<div class="column">
</div>
</div>
```

Columns and rows

1, 1

1, 2

2,1

2,2

VS

One thing! vs The other thing!

Boxes

```
<div class="ui raised segment question">
class="question" style="display: inline;">Important theorem.
Poggi e buoi fanno pari.
</div>
```

Boxes

Important theorem. Poggi e buoi fanno pari.

Footers

<!-- footer: "This is the footer of the page. Note that once set, it stays! If you want to remove it in the next slides insert an empty footer." -->

Much more

You can further customize this through marp directives.

You can find a list of presentations I've made with marpee in the gallery list.