

Moodular

Use Typst's HTML export to generate content for your Moodle courses

v0.0.1

<https://github.com/SillyFreak/typst-moodular>

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I INTRODUCTION

This package allows you to use Typst's HTML export to generate content for your Moodle courses, but preview them faithfully in Tinymist or the webapp.

This package is somewhat opinionated, as it contains features tailored towards specific Moodle plugins used at our own school:

- Generico: Moodular provides functions to insert Generico tags into your document
- Components for Learning (C4L) (Atto/TinyMCE plugin): Moodular recreates the HTML structure of C4L blocks, and also renders them for PDF export

II MODULE REFERENCE

II.a moodular

- `setup()`
- `frame()`

`setup()` -> `function`

Moodular's main Template function, to be called as a show rule:

```
1 #show: setup()
```

The function applies the following settings for PDF export:

- sets the page height to auto so that all content appears on a single continuous page, like on the web
- sets a sans serif font (Noto Sans is currently hardcoded and therefore needs to be present) and displays links blue and underlined
- shows blockquotes with a gray left border
- show raw blocks with a light beige background

which is a best-effort recreation of Moodle's default style.

For HTML export, the following settings are applied:

- raw blocks are wrapped in `<pre class="language-..."><code>` tags to apply Moodle's syntax highlighting
- image elements are transformed into `` tags. The `@@PLUGINFILE@@` prefix is used internally by Moodle to indicate references to uploaded files.

`frame(body: content) -> content`

Conditionally puts content into an `html.frame`, i.e. rendering it as an `<svg>` tag. When exporting to PDF, the content is simply displayed as-is.

Parameters:

`body (content)` – the content to put into a frame

II.b c4l

- `key-concept()`
- `tip()`
- `reminder()`
- `quote()`
- `do-dont()`

- `reading-context()`
- `example()`
- `figure()`
- `attention()`
- `procedural-context()`

- `learning-outcomes()`
- `expected-feedback()`
- `card()`

```
key-concept(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/key-concept/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.key-concept[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
tip(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/tip/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.tip[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat.



Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

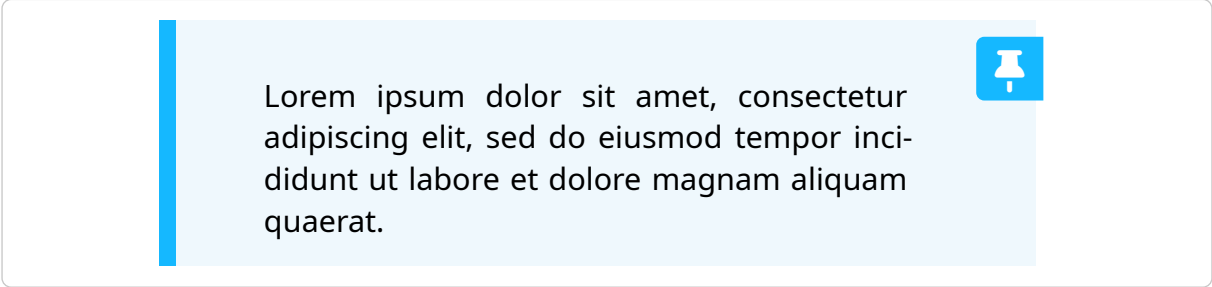
```
reminder(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/reminder/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.reminder[#lorem(20)]
```

typc

A light blue rectangular box with a vertical blue bar on the left and a blue pushpin icon on the right. Inside the box, the text "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat." is displayed in a serif font.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

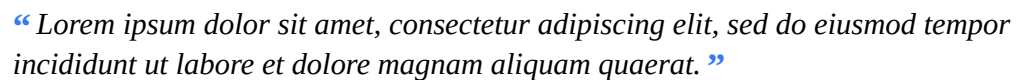
```
quote(body: content, full-width, attribution) -> content
```

See <https://componentsforlearning.org/components/quote/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.quote[#lorem(20)]
```

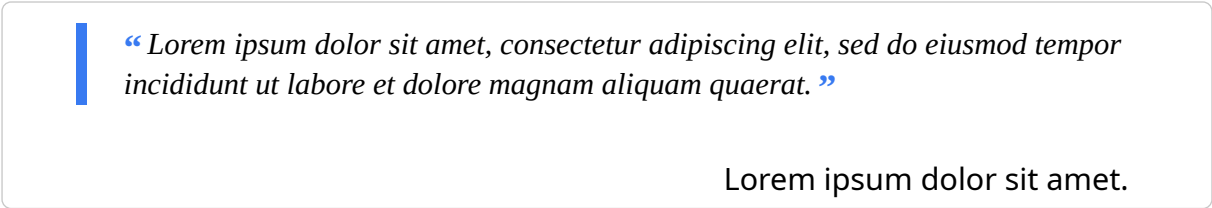
typc

A light blue rectangular box with a vertical blue bar on the left. Inside the box, the text "“Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.”" is displayed in a serif font.

“Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.”

```
1 c4l.quote(attribution: lorem(5))[#lorem(20)]
```

typc

A light blue rectangular box with a vertical blue bar on the left. Inside the box, the text "“Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.”" is displayed in a serif font.

“Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.”

Lorem ipsum dolor sit amet.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

`attribution` (= `none`) – the attribution associated with the quote

```
do-dont(do: content, dont: content, full-width) -> content
```

See <https://componentsforlearning.org/components/do-dont-cards/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.do-dont[#lorem(20)][#lorem(20)]
```

typc

✓
Lorem ipsum dolor sit amet, consectetur adipiscing elit,
sed do eiusmod tempor incididunt ut labore et dolore
magnam aliquam quaerat.

✗
Lorem ipsum dolor sit amet, consectetur adipiscing elit,
sed do eiusmod tempor incididunt ut labore et dolore
magnam aliquam quaerat.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
reading-context(  
  body: content,  
  full-width,  
  attribution,  
  comfort-reading,  
) -> content
```

See <https://componentsforlearning.org/components/reading-context/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.reading-context(comfort-reading: true)[#lorem(20)]
```

typc

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```
1 c4l.reading-context(attribution: lorem(5))[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

Lorem ipsum dolor sit amet.

Parameters:

full-width (= **false**) – whether the component should take up the full text width

attribution (= **none**) – the attribution associated with the quote

comfort-reading (= **false**) – whether to display the context in a serif font

```
example(title: content, body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/example/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.example[Title][#lorem(20)]
```

typc

TITLE

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
figure(..args, full-width) -> content
```

See <https://componentsforlearning.org/components/figure/> for details and examples rendered in HTML.

This is rendered as a regular figure in PDF preview:

```
1 c4l.figure[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

```
1 c4l.figure(caption: lorem(5))[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.
Lorem ipsum dolor sit amet.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
attention(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/attention/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.attention[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.



Parameters:

full-width (= **false**) – whether the component should take up the full text width

```
procedural-context(body: content , full-width) -> content
```

See <https://componentsforlearning.org/components/procedural-context/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.procedural-context[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

Parameters:

full-width (= **false**) – whether the component should take up the full text width

```
learning-outcomes(title: content , body: content , full-width) -> content
```

See <https://componentsforlearning.org/components/learning-outcomes/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.learning-outcomes[Title][
2   - #lorem(5)
3   - #lorem(10)
4 ]
```

typc

TITLE

- ▶ Lorem ipsum dolor sit amet.
- ▶ Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

```
1 c4l.learning-outcomes[Title][
2   + #lorem(5)
3   + #lorem(10)
4 ]
```

typc

TITLE

1. Lorem ipsum dolor sit amet.
2. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
expected-feedback(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/expected-feedback/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.expected-feedback[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat.



Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

```
card(body: content, full-width) -> content
```

See <https://componentsforlearning.org/components/all-purpose-card/> for details and examples rendered in HTML.

This is how the component looks in PDF preview:

```
1 c4l.card[#lorem(20)]
```

typc

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua quaerat.

Parameters:

`full-width` (= `false`) – whether the component should take up the full text width

II.c htmlx

• `elem()`

• `div()`

• `img()`

```
elem(..args: any) -> content
```

A thin wrapper around Typst's `html.elem` that collects all named arguments into the `attrs` parameter. For example, these two are equivalent:

```
1 html.elem("div", attrs: (class: "x"))[body]
2 htmlx.elem("div", class: "x")[body]
```

typc

```
div() -> content
```

A thin wrapper for creating div html elements. In other words, these two are equivalent:

```
1 htmlx.elem("div", class: "x")[body]
2 htmlx.div(class: "x")[body]
```

typc

```
img(src, ..args) -> content
```

A thin wrapper for creating img html elements, making the required src attribute positional. In other words, these two are equivalent:

```
1 htmlx.elem("img", src: "example.png", alt: "Example")
2 htmlx.img("example.png", alt: "Example")
```

typc