

Documentation of the Template

Conventions, functions and attributes

by

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1. Template

The template functions are defined in `template/template.typ`. However, to make it easier to switch between a “long” report and a “short” assignment submission, we created two sub-versions:

- `template/template-long.typ` for long reports
- `template/template-short.typ` for short reports

Both use the same functions but with different default values. Therefore, all the functions mentioned below can be imported from any of these files with the same capabilities, except the default values will be better suited for the type of document you are writing.

Here are the functions available in `template/template.typ`:

- `init()`
- `cover-container()`
- `generic-container()`
- `pre-content-container()`
- `main-content-container()`
- `post-content-container()`
- `appendix-container()`

init

Main function of the template that defines the overall style. This function is designed to be used in the main scope of the document, and to be called using `#show: init.with(...)`.

Parameters

```
init(
  body: content,
  title: str content,
  subtitle: str content,
  authors-names: array str content,
  authors-data: dictionary,
  text-font: str array,
  math-font: str array,
  raw-font: str array,
  headings-font: str array none,
  font-size-multiplier: float,
  base-font-size: length,
  header: length,
  page-numbering: str function,
  _documentation: bool
) -> content
```

body `content`

The body of the document.

title `str` or `content`

The title of the document.

Default: `""`

subtitle `str` or `content`

The subtitle of the document.

Default: `""`

authors-names `array` or `str` or `content`

The names of the authors.

Default: `()`

authors-data `dictionary`

The data of the authors. Can contain any number for (key, value) pairs. The key is a string and the value is an array of strings. The key is used as a label for the piece of information and the values correspond to the authors.

Default: `(:)`

text-font `str` or `array`

The font to use for the text.

Default: `("Source Serif 4", "Libertinus Serif")`

math-font `str` or `array`

The font to use for the math.

Default: `("STIX Two Math", "New Computer Modern Math")`

raw-font `str` or `array`

The font to use for the raw text.

Default: `("Source Code Pro", "Libertinus Mono")`

headings-font `str` or `array` or `none`

The font to use for the text in titles. If none, the text font will be used.

Default: `none`

font-size-multiplier `float`

The font size multiplier to use for the text. This is used to scale the font size of the document.

Default: `1.0`

base-font-size `length`

The base font size to use for the text.

Default: `11pt`

header `length`

The content of the header.

Default: `(left: "[title]", center: none, right: "[subtitle]")`

page-numbering `str` or `function`

The default page numbering style to use.

Default: `"1"`

_documentation `bool`

Special argument for the documentation.

Default: `false`

cover-container

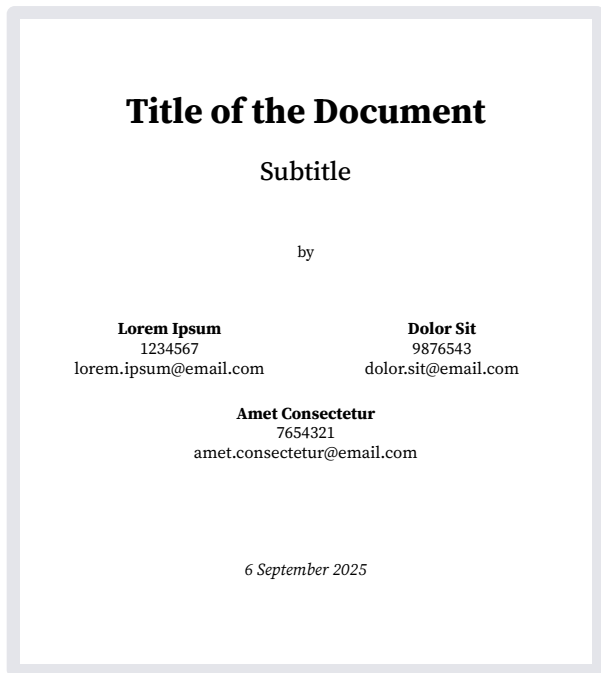
Cover page container. To use in combination with a cover page. Removes the header and footer of the page.

```
#[
  #show: cover-
  container.with(_documentation: true)
  #cover.cover(
    title: "Title of the Document",
    subtitle: "Subtitle",
    authors-names: ("Lorem Ipsum",
"Dolor Sit", "Amet Consectetur"),
    authors-data: (
      "Student IDs": ("1234567",
"9876543", "7654321"),
      "Email": (
        "lorem.ips@email.com",
        "dolor.sit@email.com",
```

```

    "amet.consectetur@email.com",
  ),
),
date: datetime.today(),
_documentation: true,
)
]

```



Parameters

```

cover-container(
  body: content,
  full-page: bool,
  _documentation: bool
) -> content

```

body `content`

The body of the document.

full-page `bool`

Whether the cover page is a full page or not. If true, the page will be set to have no header or footer.

Default: `true`

_documentation `bool`

Special argument for the documentation.

Default: `false`

generic-container

Generic container for a subset of the document. This function is designed to define the style of the document locally, using a show rule like this:

```
#[
  #show: generic-container.with(
    new-page: true,
    page-numbering: "1"
  )
  #include "../content/content.typ"
]
```

Parameters

```
generic-container(
  body: content,
  new-page: bool,
  h1-new-page: bool,
  reset-page-numbering: bool,
  page-numbering: none str function,
  heading-numbering: none str function array,
  heading-supplement: none str content array
) -> content
```

body `content`

The body of the document.

new-page `bool`

Whether to start a new page at the beginning of the container.

Default: `true`

h1-new-page `bool`

Whether to start a new page before each level 1 heading.

Default: `true`

reset-page-numbering `bool`

Whether to reset the page numbering at the beginning of the container.

Default: `true`

page-numbering `none` or `str` or `function`

The page numbering style to use.

Default: `none`

heading-numbering `none` or `str` or `function` or `array`

The heading numbering style to use. If it is an array, it must have 6 elements (one for each heading level). Each element of the array must be one of the other allowed types.

Default: `none`

heading-supplement `none` or `str` or `content` or `array`

The supplement to use for the headings. If it is an array, it must have 6 elements (one for each heading level). Each element of the array must be one of the other allowed types.

Default: `"Section"`

pre-content-container

Container for the pre-content of the document. Pre-content is defined as the content after the cover page and before the main content (usually containing the preface, acknowledgements, abstract, table of contents, etc.). This function is designed to define the style of the document locally, using a show rule, like in *generic-container*.

Parameters

```
pre-content-container(
  body: content,
  new-page: bool,
  h1-new-page: bool,
  reset-page-numbering: bool,
  page-numbering: none str function,
  heading-numbering: none str function array,
  heading-supplement: none str content array
) -> content
```

body `content`

Refer to the *body argument in generic-container* for more details.

new-page `bool`

Refer to the *new-page argument in generic-container* for more details.

Default: `true`

h1-new-page `bool`

Refer to the *h1-new-page argument in generic-container* for more details.

Default: `true`

reset-page-numbering `bool`

Refer to the *[reset-page-numbering argument in generic-container](#)* for more details.

Default: `true`

page-numbering `none` or `str` or `function`

Refer to the *[page-numbering argument in generic-container](#)* for more details.

Default: `"j"`

heading-numbering `none` or `str` or `function` or `array`

Refer to the *[heading-numbering argument in generic-container](#)* for more details.

Default: `none`

heading-supplement `none` or `str` or `content` or `array`

Refer to the *[heading-supplement argument in generic-container](#)* for more details.

Default: `"Section"`

main-content-container

Container for the main content of the document. Main content is defined as the core content, usually containing the chapters, sections, and subsections. This function is designed to define the style of the document locally, using a show rule, like in *[generic-container](#)*.

Parameters

```
main-content-container(
  body: content,
  new-page: bool,
  h1-new-page: bool,
  reset-page-numbering: bool,
  page-numbering: none str function,
  heading-numbering: none str function array,
  heading-supplement: none str content array
) -> content
```

body `content`

Refer to the *[body argument in generic-container](#)* for more details.

new-page `bool`

Refer to the *new-page argument in generic-container* for more details.

Default: `true`

h1-new-page `bool`

Refer to the *h1-new-page argument in generic-container* for more details.

Default: `true`

reset-page-numbering `bool`

Refer to the *reset-page-numbering argument in generic-container* for more details.

Default: `true`

page-numbering `none` or `str` or `function`

Refer to the *page-numbering argument in generic-container* for more details.

Default: `"1"`

heading-numbering `none` or `str` or `function` or `array`

Refer to the *heading-numbering argument in generic-container* for more details.

Default: (`"1."`, `"1.a."`, `"1.a.i."`, `none`, `none`, `none`)

heading-supplement `none` or `str` or `content` or `array`

Refer to the *heading-supplement argument in generic-container* for more details.

Default: (`"Chapter"`, `"Section"`, `"Subsection"`, `none`, `none`, `none`)

post-content-container

Container for the post-content of the document. Post-content is defined as the content after the main content and before the appendix (usually containing the bibliography, index, etc.). This function is designed to define the style of the document locally, using a show rule, like in *generic-container*.

Parameters

```
post-content-container(
  body: content,
  new-page: bool,
  h1-new-page: bool,
  reset-page-numbering: bool,
  page-numbering: none str function,
  heading-numbering: none str function array,
  heading-supplement: none str content array
) -> content
```

body content

Refer to the *body argument in generic-container* for more details.

new-page bool

Refer to the *new-page argument in generic-container* for more details.

Default: true

h1-new-page bool

Refer to the *h1-new-page argument in generic-container* for more details.

Default: true

reset-page-numbering bool

Refer to the *reset-page-numbering argument in generic-container* for more details.

Default: false

page-numbering none or str or function

Refer to the *page-numbering argument in generic-container* for more details.

Default: "1"

heading-numbering none or str or function or array

Refer to the *heading-numbering argument in generic-container* for more details.

Default: none

heading-supplement none or str or content or array

Refer to the *heading-supplement argument in generic-container* for more details.

Default: "Section"

appendix-container

Container for the appendix of the document. Appendix is defined as a separate part at the end of the document that gives extra information. This function is designed to define the style of the document locally, using a `show` rule, like in *generic-container*.

Parameters

```
appendix-container(
  body: content,
  new-page: bool,
  h1-new-page: bool,
  reset-page-numbering: bool,
  page-numbering: none str function,
  heading-numbering: none str function array,
  heading-supplement: none str content array
) -> content
```

body `content`

Refer to the *body argument in generic-container* for more details.

new-page `bool`

Refer to the *new-page argument in generic-container* for more details.

Default: `true`

h1-new-page `bool`

Refer to the *h1-new-page argument in generic-container* for more details.

Default: `true`

reset-page-numbering `bool`

Refer to the *reset-page-numbering argument in generic-container* for more details.

Default: `true`

page-numbering `none` or `str` or `function`

Refer to the *page-numbering argument in generic-container* for more details.

Default: `numbly.numbly("A-{:1:1}")`

heading-numbering `none` or `str` or `function` or `array`

Refer to the *heading-numbering argument in generic-container* for more details.

Default:

```
numbly.numbly("Appendix {1:A}", "{1:A}.{2:1}.", "{1:A}.{2:1}.{3:a}.", none, none,  
none)
```

heading-supplement `none` or `str` or `content` or `array`

Refer to the *heading-supplement argument in generic-container* for more details.

Default: (`none`, "Appendix", "Appendix", `none`, `none`, `none`)

2. Cover Page

A simple cover page is defined in `template/cover.typ`. It is a simple function that takes the title, authors, and date as arguments, as well as some optional arguments to customize the layout.

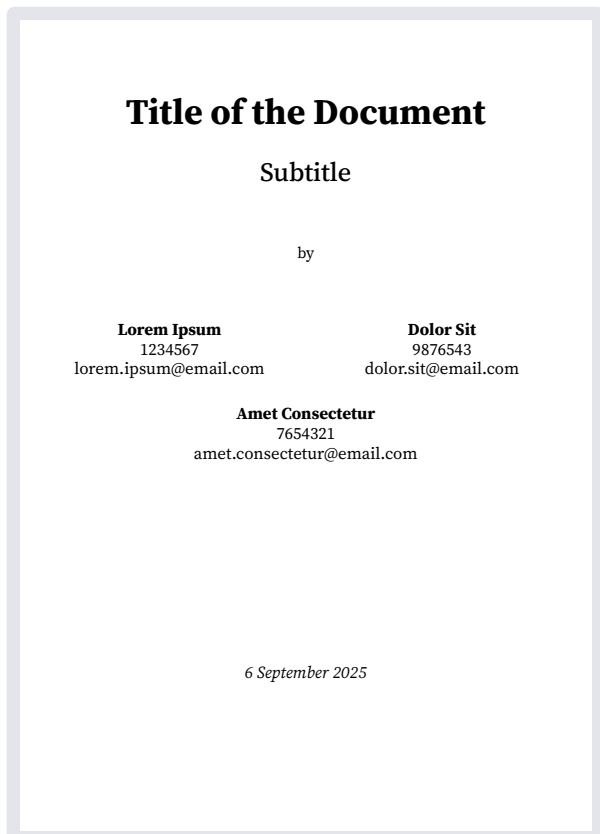
Here are the functions available in `template/cover.typ`:

- `cover()`

cover

Cover page template. Supports full page and non-full page formats.

```
#[
  #show: template.cover-
  container.with(_documentation: true)
  #cover.cover(
    title: "Title of the Document",
    subtitle: "Subtitle",
    authors-names: ("Lorem Ipsum",
"Dolor Sit", "Amet Consectetur"),
    authors-data: (
      "Student IDs": ("1234567",
"9876543", "7654321"),
      "Email": (
        "lorem.ipsum@email.com",
        "dolor.sit@email.com",
        "amet.consectetur@email.com",
      ),
    ),
    full-page: true,
    date: datetime.today(),
    _documentation: true,
  )
]
```



Parameters

```
cover(
  title: str content,
  subtitle: str content none,
  authors-names: str array,
  authors-data: dictionary,
  date: datetime str content none,
  full-page: bool,
  logos: array none,
  other-content: content none,
  _documentation: bool
) -> content
```

title `str` or `content`

The title of the document.

Default: `""`

subtitle `str` or `content` or `none`

The subtitle of the document.

Default: `none`

authors-names `str` or `array`

The names of the authors.

Default: `()`

authors-data `dictionary`

The data of the authors. Can contain any number for (key, value) pairs. The key is a string and the value is an array of strings. The key is used as a label for the piece of information and the values correspond to the authors.

Default: `(:)`

date `datetime` or `str` or `content` or `none`

The date to be displayed on the cover page. If not provided, the current date is used.

Default: `datetime.today()`

full-page `bool`

Whether to use the full page format or not. This only changes the vertical layout of the content.

Default: `true`

logos `array` or `none`

Font sizes to use for the different elements (title, subtitle, authors, date)

Default: `none`

other-content `content` or `none`

Free content added after the date

Default: `none`

`_documentation` `bool`

Special argument for the documentation.

Default: `false`

3. Styled Blocks

`other-tools/styled-blocks.typ` contains a set of functions to add colourful blocks of text to the document. The intended use is to highlight tasks or information useful to the authors in writing the document. Then, the blocks can be hidden or removed when the document is rendered, using the `render` argument like this at the beginning of the file:

```
#let block-todo = block-todo.with(render: false)
```

Here are the functions available in `other-tools/styled-blocks.typ`:

- `styled-block()`
- `block-todo()`
- `block-discussion()`

styled-block

Create a styled block with a title and content.

```
#styled-block()[Here is the title][Here  
is the content that is longer.]
```



Parameters

```
styled-block(  
  title: str content none,  
  content: str content none,  
  block-type: str content none,  
  fill-title: color,  
  fill-content: color,  
  inset: length dictionary,  
  radius: length,  
  render: bool  
) -> content
```

title `str` or `content` or `none`

The title of the block.

content `str` or `content` or `none`

The content of the block.

block-type `str` or `content` or `none`

The type of the block (e.g., “TODO”, “Discussion”), displayed below the title.

Default: `none`

fill-title `color`

The colour of the title background.

Default: `rgb(180, 180, 255)`

fill-content `color`

The colour of the content background.

Default: `rgb(210, 210, 255)`

inset `length` or `dictionary`

The inset of the title and content blocks.

Default: (x: `6pt`, y: `8pt`)

radius `length`

The radius of the title and content blocks.

Default: `8pt`

render `bool`

Whether to render the block.

Default: `true`

block-todo

Create a styled block for TODOs.

```
#block-todo()[We have something to do]
[Don't forget to do it!]
```

TODO: We have something to do

Don't forget to do it!

Parameters

```
block-todo(
  title: str content none,
  content: str content none,
  render: bool
) -> content
```

title `str` or `content` or `none`

The title of the block.

content `str` or `content` or `none`

The content of the block.

render `bool`

Whether to render the block.

Default: `true`

block-discussion

Create a styled block for discussions.

```
#block-discussion()[Add more
explanations?][- Author A: Maybe it
would be better...
- Author B: Yes, but I don't know...
- Author A: What about...]
```

Discussion: Add more explanations?

- Author A: Maybe it would be better...
- Author B: Yes, but I don't know...
- Author A: What about...

Parameters

```
block-discussion(
    title: str content none,
    content: str content none,
    render: bool
) -> content
```

title `str` or `content` or `none`

The title of the block.

content `str` or `content` or `none`

The content of the block.

render `bool`

Whether to render the block.

Default: `true`

4. Custom Style

`other-tools/custom-style.typ` contains a function to add custom styles to the document. These styles are not directly included in the template because they are not really standard.

Here are the functions available in `other-tools/custom-style.typ`:

- `custom-style()`

custom-style

Define a custom style for figures, tables, and raw blocks. This function allows you to customize the appearance of figures, tables, and raw blocks in your document.

Parameters

```
custom-style(
  body: content,
  custom-figure-captions: bool,
  custom-tables: bool,
  raw-background: color
) -> body
```

body `content`

The body of the document

custom-figure-captions `bool`

Whether to use custom figure captions.

Default: `true`

custom-tables `bool`

Whether to use custom tables.

Default: `true`

raw-background `color`

The background colour for raw blocks. Set to `none` to disable the custom styling for raw blocks.

Default: `luma(220, 60%)`