

My workshop about Typst for the fhLUG in Campus Hagenberg

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On June 8th, 2026, I had the wonderful opportunity to lead a Typst workshop for the fh Linux User Group at Campus Hagenberg, made possible by Daniel Knittl-Frank's excellent organization. It was a fantastic experience, with enthusiastic and engaged participants. In this blog post, you'll find highlights from the workshop as well as access to the full recording (German).

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If you're primarily interested in the workshop recording (German language only), you'll find the video at <https://www.youtube.com/watch?v=GS978MRbqqo>

1 Quick Background

fhLUG is the **Linux User Group FH Hagenberg**. They host talks, workshops or simple get togethers roughly once a month to discuss Linux and topics from the open software world.

Daniel Knittl-Frank is the main organizer and head of the group. His support and hassle-free organization allowed me to focus on the content of the workshop. Thank you, Daniel!

2 The Workshop



Figure 1: Me after the workshop and snagging a fitting shirt.

Before jumping into action, we started with a high level overview of document writing and why **Typst** stands out. Did you know that you can categorize tools in two categories?






<p> Word Processors (Word , Docs)</p> <p>Digitale Schreibmaschine</p> <ul style="list-style-type: none">• WYSIWYG• Koppelung<ul style="list-style-type: none">▸ Präsentation▸ Inhalt 	<p> Typesetting (\LaTeX, typst, )</p> <p>Dokument Compiler</p> <ul style="list-style-type: none">• Deklaratives Markup• Intention → Engine → Doc• Trennung<ul style="list-style-type: none">▸ Präsentation▸ Inhalt <pre data-bbox="1204 1339 1404 1411">#set align(center) == Learning Diary = #underline[Tim Peko]</pre> <p style="text-align: center;">↓</p> <div data-bbox="1204 1444 1404 1534" style="border: 1px solid black; padding: 5px; text-align: center;">Learning Diary Tim Peko</div>
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Figure 2: Two types of categories: Word Processors and Typesetting Systems.

The greatest advantage of typesetting is the separation between content and presentation. This allows for a lot of flexibility and reusability. It is literally what powers this blog website in its dark and light theme, as well as making blog posts available for download in a PDF optimized format.

Typst enables us to write documents programmatically. For example, let's generate the first 4 cubic numbers:

```

1 #for i in range(1, 4 + 1)
  [
2   $#i^3 = #calc.pow(i, 3)$\
3  ]

```



$$\begin{aligned}
 1^3 &= 1 \\
 2^3 &= 8 \\
 3^3 &= 27 \\
 4^3 &= 64
 \end{aligned}$$

Not a single cubic number written by hand

See that?! We have the power of a full turing complete programming language at our fingertips.

2.1 About Typst

The [Typst GitHub Repository](#) has about **54.1k** stars and **441** Contributors, which is no small achievement at all. Development was initiated by **Martin Haug** and **Laurenz Mädje** in 2019. After 4 years of development they founded an organization in **Berlin**.

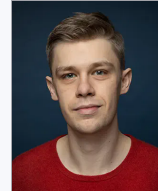


Figure 3:
Martin
Haug

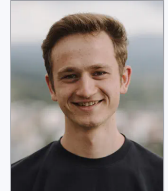


Figure 4:
Laurenz
Mädje

There are two ways to make something flexible: Have a knob for everything or have a few knobs that you can combine in many ways. Typst is designed with the second way in mind.

–Typst [README.md](#)

The above quote perfectly captures the philosophy of Typst and lays the foundation for its expressive power.

2.2 Deep Dive

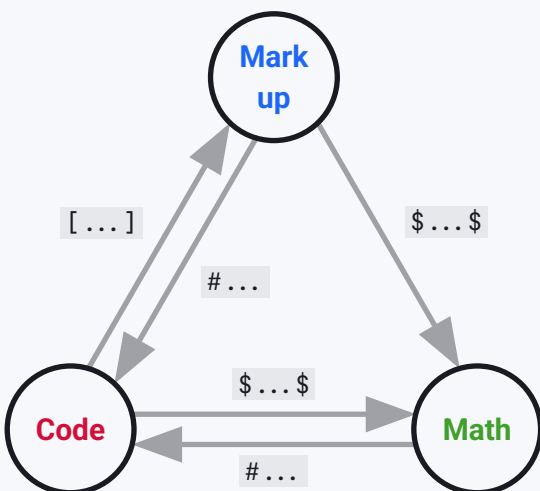


Figure 5: The three modes of Typst: *Markup*, *Math*, and *Code*. Arrows indicate syntax to switch between modes.

```

1 == A Title
2 *Bold* and _italic_ content.
3 #rect(stroke: red, "Trapped")
4 $ E(X) = \sum_{i=1}^n x_i P(X = x_i) $

```



A Title
Bold and *italic* content.

Trapped

$$E(X) = \sum_{i=1}^n x_i P(X = x_i)$$

Listing 1: The markdown related *Markup* mode, switching to *Code* mode for `rect` drawing and *Math* mode for the equation.

The official [Typst Documentation](#) is a great resource to learn more about the syntax and features of Typst. You can directly jump into [the tutorial](#) for a step-by-step introduction to Typst's features.

Arguably the most powerful styling tools are the `#set`- and `#show`-Rules. You can already tell that they are invoked in *Code* mode.

2.2.1 #set -Rules

#set -Rules are used to set default parameters for the following functions.

Have you mentioned functions?

Turns out, everything you see in Typst is a function.

= `Topic` is really just syntactic sugar for an invocation of the `#heading("Topic")` function. `*Bold*` is just `#strong("Bold")`. This holds true for all of Typst and is the second foundation for its flexibility.



Let's say we wanted to change the text font for the rest of this document. I will just quickly insert `#set text(font: "Source Code Pro")`...

Ah, there it is. Perfect! Neat huh?

Revert back with `#set text(font: "Roboto")`

Mind the scope!

#set (and #show) -Rules are effective for the whole scope they are defined in. If you have a block

```
1 #[ t Typst
2   #set text(fill: red)
3   Red Text
4 ]
5
6 Text normal
```



Red Text

Text normal

you can observe the red text #set -Rule only effects the *Markup* block. Had we left out the block:

```
1 #set text(fill: red) t Typst
2 Red Text
3
4 Text normal
```



Red Text

Text normal

you can observe the red text #set -Rule now effects the whole content.

2.2.2 #show -Rules

Whereas we saw #set -Rules to set default parameters for the following functions, #show -Rules are used to transform elements. For the rest of this document, I want “Typst” to show up in blue and in italic.

```
1 #show "Typst": set text(fill: blue)
2 #show "Typst": it => [_#(it)_]
```

Let's also try out putting the headings inside a green rectangle:

```
1 #show heading: it => rect(stroke: green, it)
```

If you continue on reading this blog post, you should notice all our intended #show -Rules are in place and working as expected.

2.2.3 Packages

This serves only as demonstration purpose about the power of the already promising package ecosystem: We will use the “conch” package for emulating a whole terminal right in our document:



```
timerertim@conch
timerertim@conch:~$ ls
test.txt
timerertim@conch:~$ cat test.txt
Show Line!
Ignore Line!
timerertim@conch:~$ cat test.txt | grep Show
Show Line!
timerertim@conch:~$
```

Very nice, looking like a real terminal! Can you believe that all of that is just 19 lines of code?

```
1 #import "@preview/conch:0.1.0": terminal-block, system
2
3 #terminal-block(
4   width: 100%,
5   user: "timerertim",
6   system: system(
7     files: (
8       "test.txt": (
9         "Show Line!",
10        "Ignore Line!"
11      ).join("\n")
12    )
13  ),
14  ```
15  ls
16  cat test.txt
17  cat test.txt | grep Show
18  ```
19 )
```

3 Conclusion

Thanks for reading this far! I hope you enjoyed the very brief overview of [Typst](#) and the incredibly step deep dive. You can find a few resources below in order to dive deeper into [Typst](#):

- [Typst Documentation](#)
- [Typst Tutorial](#)
- [Typst Forum](#)
- [Typst Universe](#) (Package Registry)
- [Typst GitHub Repository](#)