

Beamer Presentation with Pandoc and Markdown

A quick way to prepare slides

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What are Beamer, Pandoc, and Markdown?

- **Beamer**

Beamer is a LaTeX **document class** for creating presentation slides, with a wide range of templates and a set of features for making slideshow effects.

It supports pdfLaTeX, LaTeX + dvips, LuaLaTeX and XeLaTeX. The name is taken from the German word “Beamer” as a pseudo-anglicism for “video projector”.

What are Beamer, Pandoc, and Markdown?

- **Pandoc**

Pandoc is a free and open-source **document converter**, widely used as a writing tool (especially by scholars) and as a basis for publishing workflows. It was created by John MacFarlane, a philosophy professor at the University of California, Berkeley.

What are Beamer, Pandoc, and Markdown?

- **Markdown**

Markdown is a lightweight **markup language** with plain text formatting syntax. Its design allows it to be converted to many output formats, but the original tool by the same name only supports **HTML**. Markdown is often used to format readme files, for writing messages in online discussion forums, and to create rich text using a plain text editor.

The Philosophy of Markdown

Markdown is intended to be as **easy-to-read** and **easy-to-write** as is feasible.

Readability, however, is emphasized above all else. A markdown-formatted document should be *publishable* as-is, as plain text, without looking like it's been marked up with tags or formatting instructions.

Typography

`*italic*` | `_italic_` becomes *italic*

`**bold**` | `__bold__` becomes **bold**

`**_bold and italic_**` becomes ***bold and italic***

`~~strikethrough~~` becomes ~~strikethrough~~

`**_~~mixed~~_**` becomes ***~~mixed~~***

`Ordered List**`**

1. Item 1
2. Item 2
3. Item 3

Ordered List

1. Item 1
2. Item 2
3. Item 3

****Unordered List****

- Item 1
- Item 2
- Item 3

Unordered List

- Item 1
- Item 2
- Item 3

`<https://pandoc.org>` becomes <https://pandoc.org>

`[Pandoc] (https://pandoc.org)` becomes [Pandoc](https://pandoc.org)

```
![alternative text](address to image)
```

The image displays the word "LATEX" in a large, bold, black serif font. The letters are well-spaced and have a classic, elegant appearance. The 'L' is tall and narrow, the 'A' has a wide base, the 'T' is simple and vertical, the 'E' has three horizontal strokes, and the 'X' is formed by two intersecting diagonal strokes.

Figure 1: latex

Code and Syntax Highlighting

```
```javascript  
var s = "JavaScript syntax highlighting";
alert(s);
```
```

```
var s = "JavaScript syntax highlighting";  
alert(s);
```

Code and Syntax Highlighting

```
```python
string = "Python syntax highlighting"
print(string)
```

string = "Python syntax highlighting"
print(string)
```

Tables

```
Tables	Are	Cool
col 3 is	right-aligned	$1600
col 2 is	centered	$12
col 1 is	left-aligned	$1
```

becomes

| Tables | Are | Cool |
|----------|---------------|--------|
| col 3 is | right-aligned | \$1600 |
| col 2 is | centered | \$12 |
| col 1 is | left-aligned | \$1 |

> This is a block quote.

Since the initial description of Markdown contained ambiguities and unanswered questions, the implementations that appeared over the years have subtle differences and many come with syntax extensions.

Installing and Running

1. Install LaTeX and Pandoc
2. Run this command:

```
pandoc input.md -t beamer -o output.pdf
```