

Create slideshows in postscript

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Goals

- Create a slideshow directly from a text editor
- Rapid rendering
- Portable solution without dependencies
- Generate a portable document

Why Postscript?

- Can be edited in a text editor
- Direct rendering inside emacs (docview)
- Portable format, easily transformed to PDF
- Good opportunity to learn Postscript

A DSL to create slideshows

- This postscript file is separated in two parts:
 - A set of postscript functions providing a «Domain-specific language» to write a slideshow
 - The slideshow itself, using the above DSL
- To create your own slideshow, just modify the second part

Postscript primer

- Stack based language
- Comments begin with the % character
`% This is a comment`
- Strings are encapsuled in parenthesis
`(Hello World)`
- Arguments precede the function call
- Example of a postscript function call:
`(My slide title)slide-title`
- The same thing in C would look like:
`slide-title("My slide title");`

Slideshow skeleton

- Typical slideshow code:

```
slide-begin
```

```
(Title of first slide)slide-title
```

```
% slide content here...
```

```
slide-end
```

```
slide-begin
```

```
(Title of second slide)slide-title
```

```
% slide content here...
```

```
slide-end
```

```
...
```

Slide skeleton

- A slideshow is a succession of slides
- Each slide is made of:
 - `slide-begin`: declare the beginning of the slide
 - `(Title)slide-title`: declare the title of the slide
 - ...some content
 - `slide-end`: declare the end of the slide
- Example

```
slide-begin
```

```
(My first slide)slide-title
```

```
slide-end
```

My first slide

Slide content

- The previous slide is empty because no content was provided
- Slide content can be provided using:
 - Unordered list commands `l1`, `l2`, `l3`:
 - `l1` for level 1
 - `l2` for level 2
 - `l3` for level 3
 - Paragraph command `p`

Unordered lists

- Code sample:

```
(A level 1 list item)l1
```

```
(A level 2 list item)l2
```

```
(A level 3 list item)l3
```

```
(Another level1 list item)l1
```

- Result:
- A level 1 list item
 - A level 2 list item
 - A level 3 list item
- Another level1 list item

Paragraphs

- Code sample:

```
(You don't know about me without you have  
read a book by the name of The Adventures  
of Tom Sawyer; but that ain't no matter.)p
```

```
(That book was made by Mr. Mark Twain,  
and he told the truth, mainly.)p
```

- Result:

You don't know about me without you have read a book by the name of The Adventures of Tom Sawyer; but that ain't no matter.

That book was made by Mr. Mark Twain, and he told the truth, mainly.

Links

- Links can be added with the `link` command

- Usage:

```
(url)(text)link
```

- Example:

```
(https://www.freebsd.org)(FreeBSD website)link
```

- Result: [FreeBSD website](https://www.freebsd.org)

Images

- Image are added thanks to the `img` command
 - Huge files automatically resized to fit
 - Only eps files are supported
 - Tools like `jpeg2eps` might be useful

- Usage:

```
(filepath)img
```

- Example:

```
(imgs/dilbert.eps)img
```

Images

- Result:



Code sections

- The `code` command insert sections of code

- Usage:

```
(code goes here)code
```

- Example:

```
($ ls | wc -l
```

```
12)code
```

- Result:

```
$ ls | wc -l
```

```
12
```

Quotes

- The `quote` command inserts a quote

- Usage:

```
(content of the quote)(author)quote
```

- Example:

```
(Unix has retarded OS research by 10 years  
and linux has retarded it by 20.)
```

```
(Dennis Ritchie)quote
```

- Result:

*«Unix has retarded OS research by 10 years
and linux has retarded it by 20.»*

Dennis Ritchie

Font style

- 3 commands to change temporary the font style in a sentence

- `bold` for bold text:

```
(a ) (bold)bold ( word)l2
```

- a **bold** word

- `italic` for italic text:

```
(an ) (italic)italic ( word)l2
```

- an *italic* word

- `fixed` for fixed text:

```
(a ) (fixed)fixed ( word)l2
```

- a fixed word

Font style

- 4 commands to change the font family permanently:
 - `normalfontfamily`
 - `boldfontfamily`
 - `italicfontfamily`
 - `fixedfontfamily`
- Those commands are mostly used to setup the cover slide.

Font size

- 4 commands to change the font size permanently:
 - `tinyfontsize`
 - `normalfontsize`
 - `largefontsize`
 - `hugefontsize`
- Those commands are mostly used to setup the cover slide.

Cover slide

- First slide layout is free
- Fell free to adapt it to your needs
- Some useful commands:
 - `#num newline: insert #num newlines`
 - `(some text)center: center a line of text`
 - `titlecolor: use title font color`
 - `defaultcolor: use default font color`
- Next slide provide a full example of cover slide

Cover slide (sample)

```
slide-begin
1 newline
titlecolor
hugefontsize
(Create slideshows in postscript) center
largefontsize
defaultcolor
2 newline
(Gérôme Fournier) center
normalfontsize
fixedfontfamily
(https://twitter.com/@jeffoutaise)
(@jeffoutaise) link center
normalfontfamily
2 newline
(2018/01/30) center
slide-end
```

```
% insert a blank line
% use title font color
% switch to huge font
% center main title
% switch to large font
% switch to normal color
% insert 2 blank lines
% center author name
% switch to normal font
% switch to fixed font
% insert link to twitter
% account
% switch to normal font
% insert 2 blank lines
% center date
```

That's all folks!

- Open the poscript file in a text editor
- Write your own slides
- Have fun!

<https://foutaise.org/fossil/slideshow>