Org-Mode Beamer Example

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[2015-07-12 Sun]

Outline

Topic

Introduction

Instructions

Look at the Org source file to learn about available options. I also added many comments explaining the usage, there.

- generating presentation notes.
- inserting a table of contents with the current section highlighted at the beginning of each section.
- configuring transparency of yet uncovered overlay elements.

Org mode version information

```
Emacs version:
GNU Emacs 24.5.1 (x86_64-unknown-linux-gnu, GTK+ Version 3.10.8)
 of 2015-05-04 on dflt1w

org version: 8.2.10
```

Sources and Links

- I started this example based on the Worg hosted example by Eric S. Fraga
- Basic LaTeX Beamer links
  - An introduction to Beamer (German)
  - great beamer reference card by Fabrice Niessen on GitHub.
  - nice link for choosing a theme: beamer theme matrix
  - nice example of beamer features (pure Latex)

A simple slide

This slide consists of some text with a number of bullet points:

- the first, very important, point!
- the previous point shows the use of the special markup which translates to the Beamer specific *alert* command for highlighting text.

The above list could be numbered or any other type of list and may include sub-lists.

A more complex slide

This slide illustrates the use of Beamer blocks. The following text, with its own headline, is displayed in a block:

Theorem (Org mode increases productivity)

- *org mode means not having to remember LATEXcommands.*
- *it is based on ascii text which is inherently portable.*
- *Emacs!*

Tables

The size of the table font can be chosen by giving a #+LATEX: \small command (or \tiny or \footnotesize)

WNs	Processors	Cores/node	HS06/node	total cores	total HS06
20	2*Xeon X5560	8	118	160	2360
11	2*E5-2670 2.60GHz	16	263	176	2893
4	2*AMD 6272 2.40GHz	32	241	128	964
35				464	6217

Topic

block environments

a block

```
\begin{block}{A block}
...
\end{block}
```

an alert block

```
\begin{alertblock}{An alert block}
...
\end{alertblock}
```

an example block

```
\begin{exampleblock}{An alert block}
...
\end{exampleblock}
```

some more blocks

The beamercolorbox does not seem to work

```
\begin{beamercolorbox}[shadow=true, rounded=true]{eecks}
...
\end{beamercolorbox}
```

A `fullframe` is a frame with an ignored slide title. `frametitle` is set to the empty string

- A headline with an `ignoreheading` environment will only have its contents displayed in the output. The heading text itself is ignored, and no heading bar is shown.

  - Contents are not inserted in any `frame` environment.

- `ignoreheading` is useful as a structural element in order to again place normal text after a previous element (like a block or a column environment).

structureenv environment

- For highlighting text.
- To help the audience see the structure of your presentation.
- TODO: Currently I see no effect on the text style when using structureenv

- might need to use `ignoreheading` (like here) in order to then insert some more normal text after the structureenv.

definition environment

Definition (definition)

Contents of the definition

proof environment and revealing line by line

proof.

- Suppose p were the largest prime number.
- Let q be the product of the first p numbers.
- Then $q + 1$ is not divisible by any of them.
- But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

`proof` environment and revealing line by line

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numbered list over two pages (1)

1. one
2. two
3. three
4. four

numbered list over two pages (1)

Use the [@N] syntax to start a numbered list at a certain value.

block A

5. five
6. six
7. seven

block B

8. eight
9. nine
10. ten

Topic

Highlighting text

The double @@ can be used to enclose avtive code. Here we use it to specify beamer code that will highlight text by specifying an overlay.
A useful feature

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Lists

For the first list we use an #+ATTR_BEAMER: :overlay +- specification.
It acts like \begin{itemize}[<+->]. So, it will cause the list items to appear
one after the other.

- item 1
- item 2
- item 3

For the second list we classify each line by angular brackets

- item 1
- item 2
- item 3

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Two blocks animated by BEAMER_act

First Block

- this is visible from the beginning

Second Block

- and this one is revealed afterwards by using the BEAMER_act keyword in the PROPERTIES section.

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Two blocks with invisible layering

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- this is visible from the beginning

Two blocks with invisible layering

First Block

- this is visible from the beginning

Second Block

- and this one is revealed afterwards by using the BEAMER_act keyword in the PROPERTIES section.

different transparency setting and default overlay

First Block

this is visible from the beginning. Note that we specified another transparency compared to the previous slide.

Second Block

and this is revealed later by using the BEAMER_act keyword in the frame's PROPERTIES section.

Third Block

Same here!

different transparency setting and default overlay

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Third Block

Same here!

plain text between two blocks

block 1
The first block

A plain text paragraph. I only managed to get the right uncovering behavior by using #+LATEX: \onslide<2-> in front of the paragraph.

block 2
The second block

plain text between two blocks

block 1
The first block

A plain text paragraph. I only managed to get the right uncovering behavior by using #+LATEX: \onslide<2-> in front of the paragraph.

block 2
The second block

plain text between two blocks

block 1

The first block

A plain text paragraph. I only managed to get the right uncovering behavior by using #+LATEX: \onslide<2-> in front of the paragraph.

block 2

The second block

Topic

Blocks in two columns

A left block

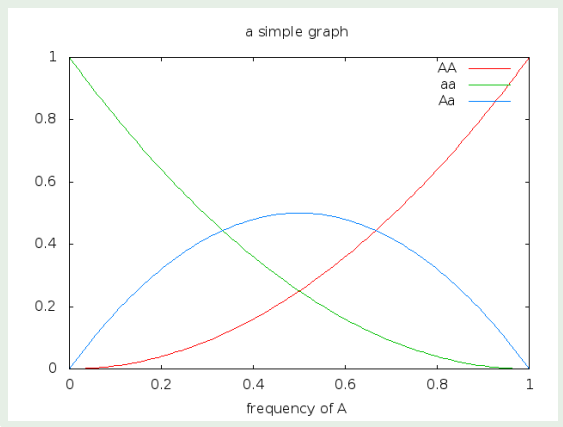- this slide consists of two columns
- This is the first column

A right block

- this is the right column

A text section and a figure

- this slide consists of two columns
- the first (left) column has no heading and consists of text
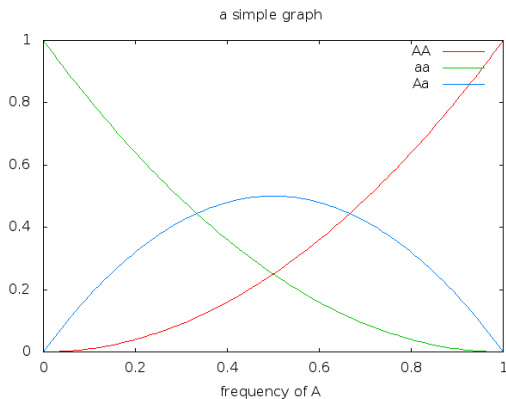- the second (right) column has an image and is enclosed in an example block

Example (A screenshot)

A centered text section and a figure

- a centered text section. I found no good way for using \vfill or \minipage as referenced here

Example (A screenshot)

a simple graph

Babel

Octave code

```octave
A = [1 2 ; 3 4]
b = [1; 1];
x = A\b
```

The output

```
A =

   1   2
   3   4


x =

  -1
   1
```

Topic

Summary

- org is an incredible tool for time management
- but it is also excellent for writing and for preparing presentations
- Beamer is a very powerful LaTeX package for presentations
- the combination is unbeatable!

Appendix

SOME BACKUP SLIDES. The Appendix will not be listed in the table of contents.

Backup slide 1

Some backup info

Backup slide 2

These details are not part of the main talk.