

Slideshow presentations using \LaTeX



Tomasz Mazur

Oxford University

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Outline

Introduction

- What is this?

- Creating presentation overview

Modifying themes, colours and fonts

Adding things

- Adding new slides

- Table of contents

- Using boxes and images

Overlays

What else is possible

- Making most of the Beamer class

Introduction

- Creating presentations using \LaTeX is straightforward...
- ...with Beamer, a class for creating slides
- should be already installed with most \LaTeX distributions, but can be obtained from <http://latex-beamer.sourceforge.net/>
- Beamer documentation available from <http://www.ctan.org/tex-archive/macros/latex/contrib/beamer/doc/beameruserguide.pdf>
- This is a modification of Marco Barision's Torino theme
- It aims to produce slides that are *pretty*, but easily *readable* and with *large content area*
- Most of standard Beamer commands are supported

Creating your presentation

- You can simply modify this file
- Set the configuration options at the top of the document for
 - colours
 - fonts
 - title page style
 - logos
 - bullet points shapes, etc.
- Compile using `pdflatex` (recommended), but `latex` works too
- Due to format restrictions, graphics may be slightly misaligned in PS files, use PDF instead

Themes and colours

- There are four basic colour themes:
 - minimal (least eye-candy, good for longer presentations)
 - greenandblue
 - blue (good for low quality projectors)
 - red (American-style)
- Themes define the colours of the background, slide decorations, slide titles, main text, bullet points, etc.
- Edit themes by modifying the `beamercolortheme*.sty` file

Fonts

- There are five font themes:
 - default (sans serif)
 - serif (used for this presentation)
 - structurebold (titles, headlines, etc. are typeset in a bold font)
 - structureitalicserif (titles, headlines, etc. are typeset in an italics serif font)
 - structuresmallcapsserif (titles, headlines, etc. are typeset in a small caps serif font)
- Change the document-wise font size to 8, 9 , 10, 11 (default), 12, 14, 17 or 20 points in the options of `\documentclass`, e.g.
`\documentclass[12pt]{beamer}`
- Colour text using `\textcolor{<<colour>>}{<<text>>}`
- The `\alert{<<text>>}` command colours text red

Adding slides (1)

...with subheadings

- A slide is created using the following code:

```
\begin{frame}[<<options>>]
  \frametitle{<<slide title>>}
  <<contents>>
\end{frame}
```

- The possible options include:
 - `plain` removes all slide decorations (useful for larger images)
 - `c` and `b` align contents of the slide in the middle or bottom (default alignment is top, but this can easily be changed in the document class options)
 - `fragile` is necessary for slides that use the `verbatim`
 - `shrink` automatically makes the contents fit on one slide
 - `allowframebrakes` splits contents of a frame if it does not fit



Adding slides (2)

...with subheadings

- The `\framesubtitle` creates a secondary slide title
- The first slide is best created using the `\begin{frame}[plain] \titlepage \end{frame}` commands.

We are here now...

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...in fact, even here

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Table of contents

- Create outlines using `\tableofcontents[<<options>>]`
- The possible options include:
 - `currentsection` (all sections but current are greyed out)
 - `currentsubsection` (all subsections but current are greyed out)
 - `hideallsubsections` (all subsections are hidden)
 - `hideothersubsections` (all subsections of sections other than the current are hidden)
 - `pausesections` (shows the table of contents incrementally)
 - `pausesubsections` (finer increments than `\pausesections`)
 - `sections={<2-3>}` (only sections 2 and 3 are displayed)
 - `sectionstyle=<<1>>/<<2>>` (define style of current section (`<<1>>`), other sections (`<<2>>`) using `show`, `shaded` and `hide`, e.g. `sectionstyle=shaded/show`)
 - `subsectionstyle=<1>/<2>/<3>` (define style for current subsection (`<<1>>`), other subsections in current section (`<<2>>`), subsections in other sections (`<<3>>`))
- The commands `\section`, `\subsection`, etc. make a structure for tables of contents (outlines are independent of slide titles)

Boxes

- Use the `\begin{<<env>>} ... \end{<<env>>}` command for predefined environments (e.g. definition, theorem, proof, example, corollary, etc.) - not too pretty
- Alternatively, use fancy boxes
- Use the `columns` environments for multiple columns

Theorem

If P , then Q .

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If P , then Q .

Example

Consider $P = \dots$

Proof

Suppose that P holds...

Corollary

Q holds

Including images

- Include images using the standard figure environment
- Beamer supports `\includegraphics`, `\pgfimage`, `\pgfuseimage` and more



Figure: Oxford University logo



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- The `\uncover<x->` command orders the displaying of items.

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- Alternatively, see
[http://www.matthiaspospiech.de/latex/vorlagen/
beamer/content/beamer-examples/](http://www.matthiaspospiech.de/latex/vorlagen/beamer/content/beamer-examples/)
for a shorter, example-based guide