Beamer

Presentations in LaTeX

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The simplest presentation.

Here's how the title page and the previous page were typed:

```
\documentclass{beamer}
\usepackage[T1]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english]{babel}
\usetheme{Warsaw}
\title{Beamer}
\subtitle{Presentations in \LaTeX}
\author{Kovács Kristóf, Magyar András, Simon András}
\institute{Math Institute}
\begin{document}
\maketitle
\begin{frame}
  The simplest presentation.
\end{frame}
\end{document}
```

The title of this frame

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- The table of contents were produced by \frame{\tableofcontents[pausesections]}
- But of course it's only helpful if we use \sections and \subsections. (These should be given *outside* of frames.)
- Each frame can have a title. It's the argument of the frame environment. So the beginning of this particular frame could have been written like this:
  \begin{frame}{The title of this frame}.

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- First item

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Proof.

Beautiful proof.

then we write the following:

```
\begin{frame}[<+->]
If we simply want our various items to appear
in their natural order, like they do here:
\begin{itemize}\item First item
\item Second item
\end{itemize}
\begin{theorem} Important theorem.
\end{theorem}
\begin{proof} Beautiful proof.
\end{proof}
then we write the following:
\end{frame}
```

Note that all we had to do was to give the optional argument <+->
to the frame environment.
But we can have more control over the order in which various
items become (and stay) visible.

1. First item

3. Third item

1. First item
2. Second item
3. Third item
4. Fourth item

1. First item
2. Second item

4. Fourth item
5. written like this:

```
\begin{enumerate}
  \item<1-> First item
  \item<2-> Second item
  \item<1,2> Third item
  \item<2-> Fourth item
  \item<3->  written like this:...
\end{enumerate}
```

- The overlay specification <1-> means "from slide 1 on."
- Overlay specification are lists of numbers or number ranges where the start or ending of a range can be left open.
- For example -3,5-6,8- means "on all slides, except for slides 4 and 7."
- There are commands other than \item which take overlay specifications as arguments, for example \uncover, \visible and \only. (Unlike \item, these are Beamer commands. Look them up, if you want to know what they do.)
- Certain environments, including the theorem and proof environments also take overlay specifications.

Proof.

Beautiful proof. □

Sometimes we want to show the world our proof more than our theorem.

```
\begin{theorem}<2> Important theorem.
\end{theorem}
\begin{proof}<1,2> Beautiful proof.
\end{proof}
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proof more than our theorem.
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As you can see here, the text that is not tagged by overlay specifications is shown on all slides of the frame.

Theorem

Important theorem.

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- If you want to use the \verb command of the verbatim environment, use the fragile optional argument of the frame environment. That is, open it like this: \begin{frame}[fragile]
- If you think that something is really important, use the \alert command: \alert{really important}
- There are lots of themes besides Warsaw that is used here. There is exactly one which looks good: the one named metropolis.
- If we want to distribute our slides as a handout, we should give the handout optional argument to Beamer, that is, start our document like this: \documentclass[handout]{beamer}
- See [1] for (lots of) further options and details.
- There are templates for conference talks, generic talks and short talks here: https://ctan.org/tex-archive/macros/latex/contrib/beamer/doc/solutions

📄 Till Tantau, Joseph Wright and Vedran Miletić
The BEAMER class
http://tug.ctan.org/macros/latex/contrib/beamer/
doc/beameruserguide.pdf