Beamer overlays beyond the \visible

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Last year, I looked at the beamer overlay concept with relative slide specifications to produce dynamic slide structures (Wright, 2014). Prompted by a question on \TeX\ Stack Exchange (‘Tarass’, 2014), here I’m going to look at a related area: action keywords.

The ‘standard’ beamer overlay system does the same thing as the \visible command: makes things appear and disappear, but always keeps space for them on the slide. However, beamer also provides \only, which completely omits items not visible on a slide. So the question was how to combine this idea with the general overlay concept.

It turns out that this is quite straightforward if you know what to look for. The standard beamer overlay syntax, for example

\item<+->

supports the inclusion of an action type to specify what the overlay should do. That action is given as a keyword and an @ before the overlay number(s).

So, for example

\begin{itemize}
  \item item 1
  \item item 2
  \item<only@1> Second item
  \item<only@2> Replacement second item
\end{itemize}

will show Second item on the first slide and then replace it entirely with Replacement second item on the second slide. That approach can be combined with the idea of relative slide specifications, as I talked about before, to give something like

\documentclass{beamer}
\begin{document}
\begin{frame}
\begin{itemize}[<+->]
  \item item 1
  \item item 2
  \item<+-|alert@+(1)> item 3
  \item item 4
  \item item 5
\end{itemize}
\end{frame}
\end{document}

where item 3 appears on the third slide and is highlighted on the fourth one. (Note that both + substitutions in this line use the same value for the pause counter, hence needing the (1) offset.) That’s useful even without the ‘one at a time’ effect, for example

\documentclass{beamer}
\begin{document}
\begin{frame}
\begin{itemize}
  \item item 1
  \item item 2
  \item<alert@+(1)> item 3
  \item item 4
  \item item 5
\end{itemize}
\end{frame}
\end{document}

highlighting the item on the second slide.

A bit of imagination with this syntax can cover almost any appearance/disappearance/highlight requirement. As I said before: the key thing is not to overdo it!

References


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