Formatting in Beamer

By Benoy Thomas, Navraj Singh, Bikram Singh

February 20, 2024

Table of Contents

Formatting in LaTeX

The thing that makes Latex so useful is the fact that there are so many in built packages that you can utililize.
Such as:

- *Font Families*
- Font Styles or Sizes
- **Bold,** *italics,* and Underlining
- Mathematical Σxpressions

Font Families

By default, in standard LaTeX classes the default style for text is usually a Roman (upright) serif font.
To change the font you just need to use some simple latex commands
Latex has hundreds thousands of different fonts you can choose from.
The code would look like:

CODE	OUTPUT

`\usepackage{chancery}`
`\fontfamily{pzc}\selectfont`
`Hello in Cursive`
	Hello in Cursive

Font Styles and Sizes

LaTeX offers various options for customizing the appearance of your text. While it automatically sets fonts based on document structure, you can control both size and style. Default font size is 10pt, with options ranging from 8pt to 20pt. Commands like tiny and large allow for specific size adjustments.

CODE

```
\Huge{Huge Text}
\tiny{Tiny Text}
```

OUTPUT

Huge Text

Tiny Text

Bold, Italics, and Underlining

LaTeX provides distinct commands for achieving bold, italic, and underlined text, allowing you to emphasize specific words or phrases. To make text bold, use the textbf command. For italics, use textit or emph. Underlining can be achieved with underline. These commands can be nested to combine effects. For example, ***important*** produces bold and italicized text. However, overuse of these formatting options can hinder readability.

CODE	OUTPUT

`\textbf{Bold,}`
`\textit{Italics,}`
`\underline{and Underline.}`
`\textbf{\textit{\`
`underline{All.}}}`
	Bold,
	Italics,
	and Underline.
	All.

Mathmatical Expressions

What's even crazier is that Latex can be used for Mathmatical expressions as well. There are two modes for Mathmatical equations.

- Inline Mode: is when you need to make a short expression within regular text
- Display mode: is for when you want to represent stand alone equations (you can do this [ ] or with the begin equation)

Mathmatical Examples

Inline Mode

CODE: `$a^2 + b^2 = c^2$`

OUTPUT: $a^2 + b^2 = c^2$

Display Mode

CODE:

```
\begin{equation}
a^2 + b^2 = c^2
\end{equation}
```

OUTPUT:

$$a^2 + b^2 = c^2 \tag{1}$$

What is Beamer?

Beamer is a LaTeX document class for creating presentation slides, with a wide range of templates and a set of features for making slideshow effects.

Why is it useful?

Beamer is useful becuase of the wide range of packages that are provided in it. Compared to languages like html you don't have to worry about styling due to the fact that a lot of the styles come imbedded in the beamer.

Color Themes

Beamer provides a diverse range of color themes when it comes to slides, some of which include:

1. seams: Creates a modern and professional look with subtle color gradients and contrasting elements.
2. Warsaw: Utilizes bold colors and clear divisions between presentation elements, making it suitable for impactful presentations.
3. adrid: Provides a clean and minimalist aesthetic with muted tones, ideal for presentations emphasizing text and content.
4. ontpellier: Offers a vibrant and colorful scheme, well-suited for presentations targeting younger audiences or aiming for a more informal tone.
5. PaloAlto: Features a dark background with bright accent colors, perfect for highlighting key points and creating a dramatic effect.

Frame Types

Frame Types:

Frame: The basic building block, containing the main content of your presentation.

Title: Used for the presentation title and author information.

Slide: Represents individual slides within a frame, allowing for multi-step presentations.

Navigation: Displays navigation elements like previous/next buttons and frame thumbnails.

Navigation styles:

Navigation symbols: The default style, showing small circles or squares representing frames.

Scrollbar: Displays a horizontal scrollbar for navigating through frames.

Miniature: Presents thumbnail previews of each frame for quick visual navigation.

Outline: Shows a hierarchical outline of the presentation

Customization

Beamer allows for a lot of customizing. Where you can customize your own themes in ***.sty files*** which can then be loaded into within your slides.
Some advanced features allow for overlays and animations to be added to certain slides.

Questions?