Custom LaTeX Beamer Theme: Foo is not bar but foo

A Modern Beamer Theme

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Overview

Motivation and Goal

- ✗ Traditional Beamer theme looks too **Classical**
- → We want newer one!

Previous research

- ● Metropolis is cool modern theme but we need a little bit of pop

What we've found are …

1. It's possible to **design** a Beamer theme
2. We completely understood LaTeX (…just joking).

How to use this template

Preparation

1. **Fork** this repository
2. Install LaTeX and **latexmk**

Build pdf

Run `make`

→ slide.pdf should be generated

Your first slide

```
\documentclass[
  xetex, % Use XeTeX
  unicode,
  10pt
]{beamer}

% Loading style files
\usepackage{sty/slide}

% Set titles
\title{Title of the slide}
\author{My Name}
\institute{My University}
\date{\today}

\begin{document}

% make title page
\maketitle

\begin{frame}{Title of the frame}
  Body of the frame
\end{frame}

\end{document}
```

- You can set the font size(Now it's 10 pt)
- Start comments with %
- Each pages are called **frames** in Beamer

Simple List

```
\begin{frame}{Title of the frame}
  Use itemize to list things.

  \begin{itemize}
  \item This is the first item.
  \item This is the second item.
  \item This is the third item.
  \end{itemize}
\end{frame}
```

Use **itemize** to list things

- This is the first item.
- This is the second item.
- This is the third item.

```
\begin{frame}{Title of the frame}
  Use enumerate if the order matters

  \begin{enumerate}
  \item Do this first
  \item And then do that
  \end{enumerate}
\end{frame}
```

Use **enumerate** if the order matters

1. Do this first
2. And then do that

Bored with bullet points?

```
\begin{itemize}
  \ngitem
  Bullet points cannot show
  the relation of the items
  \thusitem
  You may find it good to
  use some extra symbols
\end{itemize}
```

✕ Bullet points cannot show the relation of the items

→ You may find it good to use some extra symbols

Custom \item Macros

✓ \okitem: OK !

✕ \ngitem: NG

→ \thusitem: Thus, …

↔ \butitem: But, …

E.g. \egitem: For example, …

Emphasize your key points!

1. Make sure to \emph{Emphasize} your **key points** [1]

2. \Emph{Use this} to empasize **very important point** [2]

3. We have \EMPH{this command} for the **very very very important notes**[3]

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[1] I let them to be bold
[2] I defined customly
[3] I defined customly

Block, Definition, Examples

```
\begin{block}{Title of the block}
  Here is the body sentences of the
  block. Notice foo is not bar!
\end{block}
```

Title of the block

Here is the body sentences of the block. Notice foo is not bar!

```
\begin{definition}
  A prime number is \dots
\end{definition}

\begin{example}
  \begin{itemize}
    \okitem 2 is a prime number
    \okitem 3 is also a prime number
    \ngitem 4 is not a prime number
  \end{itemize}
\end{example}
```

Definition

A prime number is …

Example

- ✓ 2 is a prime number
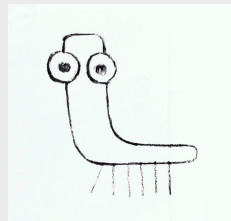- ✓ 3 is also a prime number
- ✗ 4 is not a prime number

Source codes

```
\lstinputlisting[
  language = tex
]{./fig/sample-10.tex}
```

- You need to pass **fragile** as the option of frame
- There are a lot of options in the listings package

  E.g. language, linewidth, ...

Inserting images

```
\includegraphics[width = 3cm]{./fig/logo.jpg}
```

Equation

$$x = a_0 + \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{a_3 + \cfrac{1}{a_4}}}} \tag{1}$$

$$\sqrt[n]{1 + x + x^2 + x^3 + \cdots + x^n}$$

Change colors

Set **maincolor accentcolor** to change the color theme

```
\definecolor{maincolor}{RGB}{210, 100, 130} % Setting the main color
\definecolor{accentcolor}{RGB}{0, 170, 210} % Setting the accent color
```

✕ Do not just use primary colors

✓ but cooler one! (You may like to google "Material Design, Color")

Header and the progress bar

Header

The **header** can be eliminated if you add the following command

```
\setbeamertemplate{headline}{}
```

✓ You won't get the extra space on top if you write this before the first frame

Progress Bar

You can eliminate **Progress bar** as follows:

```
\setbeamercolor{footline}{fg = backgroundcolor}
```

Summary and future works

Summary

✓ It's possible to **design** Beamer theme

✗ LaTeXis too difficult (for me ...)

Future works

1. Read the Beamer manual[1]
   ✗ IT'S TOO LONG ...
2. Find someone who helps me with LaTeX

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[1] Vedran Miletić Till Tantau Joseph Wright. The beamer class. 2020

References

[1]   Vedran Miletić Till Tantau Joseph Wright. **The beamer class. User Guide for version 3.60**. Dec. 2020. URL:
http://tug.ctan.org/macros/latex/contrib/beamer/doc/beameruserguide.pdf
(visited on 02/03/2021).