

Custom L^AT_EX Beamer Theme:

Foo is not bar but foo

A Modern Beamer Theme

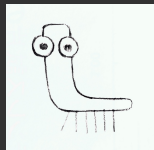
November 28, 2021

Waseda University

Tokyo, Japan

twitter@sano65747676

Jin SANO



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).

1. Introduction

2. Some Templates

3. Customizing the theme

4. Summary

How to use this template

Preparation

- 1 **Fork** this repository
- 2 Install \LaTeX and **latexmk**

Build pdf

Run `make`

→ slide.pdf should be generated

1. Introduction

2. Some Templates

3. Customizing the theme

4. Summary

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

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

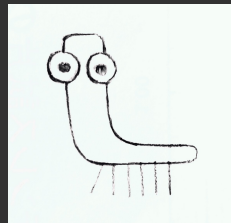
Source codes

```
\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

$$x = a_0 + \frac{1}{a_1 + \frac{1}{a_2 + \frac{1}{a_3 + \frac{1}{a_4}}}} \quad (1)$$

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

1. Introduction

2. Some Templates

3. Customizing the theme

4. Summary

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}
```


1. Introduction
2. Some Templates
3. Customizing the theme

4. Summary

Summary and future works

Summary

- ✓ It's possible to **design** Beamer theme
- ✗ \LaTeX is too difficult (for me ...)

Future works

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

[1] Vedran Miletic 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).