LaTeX Slides styles using tikz

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Outline

1 Why is it?

- Beamer is the most popular class
- Among LaTeX packages for making presentation
- However, Beamer is too straight
- Interested by the slide design in ConTeXt
- Let's design some new styles in LaTeX

2 Packages used

geometry set the screen size

fancyhdr set header and footer

titling set title format

tikz design the background

eso-pic display the background

3 How to use the *.cls

- using `\documentclass{class_name}` to declare the class
- using `\myfrontcover` to show the title page
- using `\tableofcontents` to show the outline
- using `\section` to start a topic
- using `\newpage` to begin a new slide
- using `\mybackcover` to show the end page
- no more difference with LaTeX
- no functions like `pause` in Beamer

4 Source tex of this presentation

```
\documentclass{ryslidemess}
% declare any package you need like below
\usepackage{fancyvrb}
\renewcommand{\theFancyVerbLine}{%
   \color{gray!30}{\tiny\arabic{FancyVerbLine}}}
% Demo the presentation as follows
\title{\LaTeX{} Slides styles using tikz}
\author{Rainy}
\date{\today}
\begin{document}
% show the title page using \myfrontcover defined in the cls file
\myfrontcover
% show the outline
\tableofcontents\thispagestyle{empty}
% using \section to start a topic of your presentation
% using \newpage to start a new slide
\newpage\section{Why is it?}
\begin{itemize}
    \item \textsc{Beamer} is the most popular class
    \item Among \LaTeX{} packages for making presentation
    \item However, \textsc{Beamer} is too straight
    \item Interested by the slide design in ConTeXt
    \item Let's design some new styles in \LaTeX{}
\end{itemize}
```

```
25 \newpage\section{Packages used}
26 \begin{description}
27     \item[geometry] set the screen size
28     \item[fancyhdr] set header and footer
29     \item[titling] set title format
30     \item[tikz] design the background
31     \item[eso-pic] display the background
32 \end{description}
33 \newpage\section{How to use the *.cls}
34 \begin{itemize}
35     \item using {\small\verb"\documentclass{class_name}"} to declare the c
36     \item using {\small\verb"\myfrontcover"} to show the title page
37     \item using {\small\verb"\tableofcontents"} to show the outline
38     \item using {\small\verb"\section"} to start a topic
39     \item using {\small\verb"\newpage"} to begin a new slide
40     \item using {\small\verb"\mybackcover"} to show the end page
41     \item no more difference with \LaTeX{}
42     \item no functions like {\tt pause} in {\textsc{Beamer}}
43 \end{itemize}
44 \newpage\section{Source {\tt tex} of this presentation}
45 \fvset{fontsize=\scriptsize,numbers=left,numbersep=3pt}
46 \VerbatimInput{ryslidemessTEST.tex}
47 \newpage\section{Source {\tt ryslidemess.cls}}
48 \fvset{fontsize=\scriptsize,numbers=left,numbersep=3pt}
49 \VerbatimInput{ryslidemess.cls}
50 \newpage\section{\LaTeX{} introduction on Wiki}
51 \LaTeX{} is a document preparation system and document markup language.
52 It is widely used for the communication and publication of scientific docu
```

```
including mathematics, physics, computer science, statistics, economics, a
It also has a prominent role in the preparation and publication of books %
and articles that contain complex multilingual materials,
such as Sanskrit and Arabic, including critical editions.
\LaTeX{} uses the \TeX{} typesetting program for formatting its output,
and is itself written in the \TeX{} macro language.
\LaTeX{} is not the name of a particular editing program,
but refers to the encoding or tagging conventions that are used in \LaTeX
\mybackcover
% of cause you can use custom back cover instead of \mybackcover
%\newpage
%\vspace*{\fill}
%{\centering\color{white} See Your Later\\}
%\vspace*{\fill}
\end{document}
```

5 Source ryslidemess.cls

```
% ryslidemess.cls <utf-8 encoding>
\NeedsTeXFormat{LaTeX2e}
\ProvidesClass{ryslidemess}[2012/06/07 by Rainy <renyuuu@gmail.com>]
\LoadClass{article}
% set screen size
\RequirePackage[paperheight=96mm,paperwidth=128mm,%
                hmargin={32mm,4mm},vmargin={20pt,20pt},%
                headheight=13pt,headsep=7pt,footskip=7pt]%
               {geometry}
% define colors
\RequirePackage{xcolor}
\definecolor{mydarkgreen}{RGB}{17,63,61}
\definecolor{mygreen}{RGB}{60,79,57}
\definecolor{mylightgreen}{RGB}{179,214,110}
\definecolor{myorange}{RGB}{248,147,29}
\definecolor{mydarkorange}{RGB}{95,92,51}
% set cover page
\RequirePackage{titling}
\pretitle{\begin{center}\LARGE\sf\color{myorange}}
\posttitle{\par\end{center}\vspace{10mm}}
\preauthor{\begin{center}\large\sf\color{mylightgreen}}
\postauthor{\par\end{center}\vspace{-2mm}}
\predate{\begin{center}\small\sf\color{gray!30}}
\postdate{\par\end{center}}
```

```
%% \mythetitle is defined to substitute for \thetitle,
%% which is defined by Package titling but redefined by Package titlesec.
\let\oldtitle\title
\renewcommand{\title}[1]{\oldtitle{#1}\newcommand{\mythetitle}{#1}}
% set footer and header
\RequirePackage{fancyhdr}
\pagestyle{fancy}
\fancyheadoffset{2mm}
\fancyfootoffset{2mm}
\lhead{\small\sf\color{gray!70}\mythetitle}
\chead{}
\rhead{}
\lfoot{}
\cfoot{}
\rfoot{\small\sf\color{gray!70}\theauthor}
\renewcommand{\headrulewidth}{0pt}
\renewcommand{\footrulewidth}{0pt}
% set formats for title and tableofcontents
\renewcommand\contentsname{Outline}
\RequirePackage{titlesec,titletoc}
\titleformat{\section}{\color{myorange}\Large\sf}%
                      {\color{mylightgreen}\Huge\usefont{OT1}{pzc}{m}{n}\s
                      {0.5em}{}
\titlecontents{section}
              [0pt]
              {\addvspace{1ex}}%
              {\contentsmargin{0pt}%
               \makebox[1.5em][l]%
```

```
53                {\color{mylightgreen}\huge\usefont{OT1}{pzc}{m}{n}\selectfo
54                \large\sf}
55               {\contentsmargin{0pt}}
56               {}%{\quad/\,\sf\contentspage}
57 % set background
58 \RequirePackage{totcount}
59 \regtotcounter{page}
60 \RequirePackage{tikz,ifthen,eso-pic}
61 \AddToShipoutPicture{%
62     \begin{tikzpicture}[scale=0.2]
63     \clip (0,0) rectangle +(64,48);
64     \fill [mydarkgreen] (0,0) rectangle +(64,48);
65     \foreach \i in {1,2,...,\totvalue{page}} {%
66       \pgfmathsetseed{\i}
67       \pgfmathrandominteger{\x}{0}{120}
68       \pgfmathrandominteger{\y}{0}{470}
69       \pgfmathrandominteger{\r}{10}{60}
70       \ifthenelse{\i>\thepage}%
71                  {\def\couleur{gray}\def\thk{1pt}}%
72                  {\def\couleur{mydarkorange}\def\thk{2pt}}
73       \draw [line width=\thk,\couleur] (0.1*\x,0.1*\y) circle (0.1*\r);
74     }
75     \fill [mygreen] (14,0) rectangle +(64,48);
76     \end{tikzpicture}
77 }
78 % hyperref defination at last
79 \AtEndOfClass{
80 \RequirePackage[pdfpagemode=FullScreen,%
```

```
                colorlinks=true,linkcolor=gray!30]%
               {hyperref}
}%
% set global font and color
\AtBeginDocument{\color{gray!30}\small\sf}
% set \myfrontcover to show the front cover page
\newcommand{\myfrontcover}{%
    \begin{titlingpage}
      \setcounter{page}{0}%
      \maketitle
    \end{titlingpage}
    \setcounter{page}{1}
}
% set \mybackcover to show the back cover page
\newcommand{\mybackcover}{%
    \newpage\thispagestyle{empty}\vspace*{\fill}
    {\raggedleft\color{mylightgreen}\Huge\it Thank You\\}
}
% EOF
```

6 LaTeX introduction on Wiki

LaTeX is a document preparation system and document markup language. It is widely used for the communication and publication of scientific documents in many fields, including mathematics, physics, computer science, statistics, economics, and political science. It also has a prominent role in the preparation and publication of books and articles that contain complex multilingual materials, such as Sanskrit and Arabic, including critical editions. LaTeX uses the TeX typesetting program for formatting its output, and is itself written in the TeX macro language. LaTeX is not the name of a particular editing program, but refers to the encoding or tagging conventions that are used in LaTeX documents.

Thank You