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

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Source `tex` of this presentation

```
1  \documentclass{ryslidevideo}
2  % declare any package you need like below
3  \usepackage{fancyvrb}
4  \renewcommand{\theFancyVerbLine}{%
5    \color{gray!30}{\tiny\arabic{FancyVerbLine}}}
6  % Demo the presentation as follows
7  \title{\LaTeX{} Slides styles using tikz}
8  \author{Rainy}
9  \date{\today}
10 \begin{document}
11 % show the title page using \myfrontcover defined in the cls file
12 \myfrontcover
13 % show the outline
14 \tableofcontents\thispagestyle{empty}
15 % using \section to start a topic of your presentation
```

```latex
16 % using \newpage to start a new slide
17 \newpage\section{Why is it?}
18 \begin{itemize}
19     \item \textsc{Beamer} is the most popular class
20     \item Among \LaTeX{} packages for making presentation
21     \item However, \textsc{Beamer} is too straight
22     \item Interested by the slide design in ConTeXt
23     \item Let's design some new styles in \LaTeX{}
24 \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 class
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{ryslidevideoTEST.tex}
47 \newpage\section{Source {\tt ryslidevideo.cls}}
48 \fvset{fontsize=\scriptsize,numbers=left,numbersep=3pt}
49 \VerbatimInput{ryslidevideo.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 documents in many
53 including mathematics, physics, computer science, statistics, economics, and political s
54 It also has a prominent role in the preparation and publication of books %
55 and articles that contain complex multilingual materials,
56 such as Sanskrit and Arabic, including critical editions.
57 \LaTeX{} uses the \TeX{} typesetting program for formatting its output,
58 and is itself written in the \TeX{} macro language.
59 \LaTeX{} is not the name of a particular editing program,
60 but refers to the encoding or tagging conventions that are used in \LaTeX{} document
61 \mybackcover
62 % of cause you can use custom back cover instead of \mybackcover
63 %\newpage
64 %\vspace*{\fill}
65 %{\centering\color{white} See Your Later\\}
66 %\vspace*{\fill}
67 \end{document}
```

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Source `ryslidevideo.cls`

```
1  % ryslidevideo.cls <utf-8 encoding>
2  \NeedsTeXFormat{LaTeX2e}
3  \ProvidesClass{ryslidevideo}[2012/07/25 by Rainy <renyuuu@gmail.com>]
4  \LoadClass{article}
5  % set screen size
6  \RequirePackage[paperheight=96mm,paperwidth=128mm,%
7                  hmargin=38pt,vmargin=26pt,%
8                  headheight=13pt,headsep=13pt,footskip=22pt]%
9                  {geometry}
10 % set background
11 \RequirePackage{tikz,eso-pic,makecell}
12 \usetikzlibrary{positioning}
13 \newcommand{\mypage}{%
14 \begin{tikzpicture}[remember picture,overlay]
```

```
15    \pgfmathrandominteger{\a}{0}{255}
16    \pgfmathrandominteger{\b}{0}{255}
17    \pgfmathrandominteger{\c}{0}{255}
18    \definecolor{myframecolor}{RGB}{\a,\b,\c}
19    \shade [top color=myframecolor!50!black,bottom color=black]
20          (0,0) rectangle +(128mm,96mm);
21    \fill [white,rounded corners=5mm]
22          (5mm,5mm) rectangle +(118mm,86mm);
23  \end{tikzpicture}
24  }
25  \AddToShipoutPicture{\mypage}
26  % set cover page
27  \RequirePackage{titling}
28  %% \mythetitle is defined to substitute for \thetitle,
29  %% which is defined by Package titling but redefined by Package titlesec.
30  \let\oldtitle\title
31  \renewcommand{\title}[1]{\oldtitle{#1}\newcommand{\mythetitle}{#1}}
32  % set footer and header
33  \RequirePackage{totcount}
34  \regtotcounter{page}
35  \RequirePackage{fancyhdr}
36  \pagestyle{fancy}
37  \fancyheadoffset{35pt}
38  \fancyfootoffset{35pt}
39  \lhead{\color{gray!50}\small\sf\mythetitle}
40  \chead{}
41  \rhead{\color{gray!50}\small\sf\theauthor}
```

```
42 \lfoot{}
43 \rfoot{}
44 \cfoot{\begin{tikzpicture}
45      \draw [gray!50,line cap=round,line width=3pt]
46          (0,0) -- +(50mm,0mm);
47      \draw [gray!50!black,line cap=round,line width=3pt]
48          (0,0) -- +(\thepage/\totvalue{page}*50mm,0mm);
49      \end{tikzpicture}%
50      }
51 \renewcommand{\headrulewidth}{0pt}
52 \renewcommand{\footrulewidth}{0pt}
53 % set formats for title and tableofcontents
54 \renewcommand\contentsname{Outline}
55 \RequirePackage{titlesec,titletoc}
56 \titleformat{\section}{}%
57                      {}%
58                      {0pt}%
59                      {\color{black!38}\fontsize{90}{10}\usefont{OT1}{pzc}{m}{n}\select
60                                  \thesection\centering\\
61                      \color{black!62}\huge\sf\centering}
62 \titlecontents{section}
63              [0pt]
64              {\addvspace{1ex}}%
65              {\contentsmargin{0pt}%
66               \makebox[1.5em][l]%
67               {\LARGE\it\color{black!38}\thecontentslabel\hspace{0.3em}}%
68               \large\sf}
```

```
69                    {\contentsmargin{0pt}}
70                    {}
71 % hyperref defination at last
72 \AtEndOfClass{
73 \RequirePackage[pdfpagemode=FullScreen,%
74                    colorlinks=true,menucolor=gray,linkcolor=green!50!black]%
75                 {hyperref}
76 }%
77 % set global font and color
78 \AtBeginDocument{\small\sf}
79 % set \myfrontcover to show the front cover page
80 \newcommand{\myfrontcover}{
81   \begin{titlingpage}
82   \setcounter{page}{-1}
83   \begin{tikzpicture}[remember picture,overlay]
84     \node (Title) at (current page.center)
85     [yshift=10mm,inner sep=20pt,font=\huge\sf]
86     {\mythetitle};
87     \node (Author) at (current page.center)
88     [yshift=-15mm,inner sep=7pt,font=\large\sf]
89     {\makecell{\theauthor\\\thedate}};
90     \node (start) at (current page.center)
91     [circle,inner sep=2cm,opacity=0.6,scale=0.25,%
92      top color=white,bottom color=black!25]
93     {\begin{tikzpicture}[smooth cycle,fill=green!50!black]
94      \fill plot[tension=0] coordinates{(-2.887,-5) (-2.887,5) (5.774,0)};
95      %\fill [green] (0,0) -- (0,10) -- (8.66,5);
```

```
 96      \end{tikzpicture}
 97      };
 98    \end{tikzpicture}
 99    \end{titlingpage}
100    \setcounter{page}{0}
101 }
102 % set \mybackcover to show the back cover page
103 \newcommand{\mybackcover}{
104    \newpage\thispagestyle{empty}
105    \addtocounter{page}{-1}
106    \begin{tikzpicture}[remember picture,overlay]
107      \node (Thanks) at (current page.center)
108      [circle,inner sep=5mm,opacity=0.6,scale=0.25,%
109       top color=white,bottom color=black!25]
110      {\begin{tikzpicture}[red,line cap=round,line width=7mm]
111        \draw (-2.5,4.33) arc(120:420:5);
112        \draw (0,2) -- (0,6);
113       \end{tikzpicture}
114      };
115    \end{tikzpicture}
116 }
```

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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.