Latex Certificate Course Instructions

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1 Beamer

IATEX can also make presentations. It has multiple classes for buliding presentations. And beamer class is a popular option. The current version of this IATEX class is 3.62. And is maintained by samcarter and Joseph Wright. The class documentation is available at CTAN.

LATEX documents can have one class and multiple packages. Package provides commands that work almost everywhere whereas Class is used for imposing documentation standards suggested by different institutions or to build special purpose documents - presentations, books, thesis, poster, brochure, calendar,

1.1 frame environment

The presentations made using beamer class are called beamer presentations. The frames are the building blocks of a beamer presentation. And frame environment is used to define frames. And \frametitle command is used for frame titles. The frames gives a structure to the slides. Using overlay, you can build multiple slides from a frame which we will see later.

1.2 Presentation Themes

The following are a few popular themes. 1. AnnArbor 2. Antibes 3. Bergen 4. Berkeley 5. Berlin 6. Boadilla 7. CambridgeUS 8. Copenhagen 9. Darmstadt 10. Dresden 11. Frankfurt 12. Goettingen 13. Hannover 14. Ilmenau 15. JuanLesPins 16. Luebeck 17. Madrid 18. Malmoe 19. Marburg 20. Montpellier 21. PaloAlto 22. Pittsburgh 23. Rochester 24. Singapore 25. Szeged 26. Warsaw

A few themes above might require that you install the theme before you use them. The \usetheme command is used for applying a theme to your beamer presentation. This command is written in the preamble. For example, \usetheme{\Warsaw} will apply \usetheme to your beamer presentation.

1.3 Colour Themes

IATEX beamer has a few popular color themes, 1. albatross 2. beaver 3. beetle 4. crane 5. dolphin 6. dove 7. fly 8. lily 9. orchid 10. rose 11. seagull 12. seahorse 13. whale 14. wolverine

The \usecolortheme command is used for changing colors for a selected theme. For example, \usecolortheme{seagull} will apply seagull color theme for different presentation themes. For a quick decision you may use theme matrices.

Once again, we start from the content. You may apply some presentation theme and color theme. But, you should try to complete the content before searching for a theme and colour scheme suitable to your audience and content.

2 An Example

The beamer presentation syntax is quite the same. The sectioning commands, text formatting commands, list environments, math mode, mathematics environments... are available.

The difference is that the typesetting is quite different for beamer presentation. For example, the list bullets are quite different for the slides but we always write them the same way we wrote lists in LATEX articles and books.

We usually write the sectioning commands outside frames. And you can see that LATEX only prints what is written inside frame environment. You might be wonder why would someone write material which are not going to be printed. The LATEX system wants you to write your content in a structured way. Even though, the titles of the sectioning commands are not printed as frame titles -you can use them for table of contents, references as well as for headers/footers. And a few themes uses these sectioning commands for slide navigations as well.

In Figure 1 at line 10, you can see that beamer has \institution command for title. Other commands are already familiar to you.

One advantage of using LATEX to build your presentation is that you can build presentation from an existing LATEX document. Thus, you can reuse almost all your content — figures, tables, equations, theorems,

```
\documentclass{beamer}
    \usepackage{graphicx}
    \usetheme{Warsaw}
    \usecolortheme{seagull}
    \title{Demo Presentation}
    \author{Jacob Antony}
    \institution{KE College, Mannanam}
10
    \date{\today}
11
    \begin{document}
13
    \begin{frame}
14
    \mbox{\mbox{\tt maketitle}}
    \end{frame}
16
17
    \begin{frame}
18
    \frametitle{Contents}
19
    \tableofcontents
20
    \ensuremath{\mbox{\mbox{end}\{\mbox{frame}\}}}
21
22
    \section{Introduction}
    \begin{frame}
24
    \frametitle{Frame Title}
    Content goes here
26
    \end{frame}
    \end{document}
```

Figure 1: Beamer Presentation