

Designing Manuals with \LaTeX

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What is \LaTeX ?

What I need to use \LaTeX ?

Things you had better know

Designing manuals with \LaTeX

Who developed \LaTeX ?

Basic \LaTeX syntax

How to compile a \TeX document?

What is the virtue of \LaTeX ?

Who developed \LaTeX ?

Who developed L^AT_EX?

- T_EX is a typesetting system written by Donald Knuth at Stanford University in 1978.

Who developed \LaTeX ?

- \TeX is a typesetting system written by Donald Knuth at Stanford University in 1978.
- \LaTeX is, as a collection of \TeX macros, a document preparation system initially written by Leslie Lamport in 1984.

Basic L^AT_EX syntax

```
\documentclass[a4paper,10pt]{memoir}
\usepackage{dhucs}

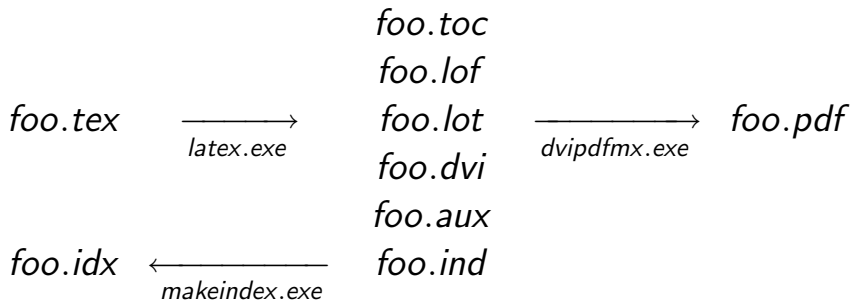
\makeindex

\begin{document}
\frontmatter
\tableofcontents
\listoftables
\listoffigures

\mainmatter
\chapter{Overview}
\section{Summary}\label{sec:summary}
\subsection{Features}
blah blah blah\
Refer to Section \ref{sec:summary}.
\include{Installation}
\input{Setup}

\backmatter
\printindex
\end{document}
```

How to compile a T_EX document?



- c.bat

```

latex foo
makeindex foo
latex foo
latex foo
dvipdfmx foo
  
```

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- You can automate publications in connection with database. (Phone book in India)
- You can get the highest productivity.

What kind of T_EX distribution should I install?

- OzTeX** A popular and up-to-date T_EX implementation for OS X and Mac OS.
- teTeX** One of the most popular distribution for Unix systems, developed primarily by Thomas Esser.
- fpTeX** A T_EX distribution for Win32 systems, developed by Fabrice Popineau and based on teTeX.
- MiKTeX** A popular and up-to-date T_EX implementation for Windows, developed by Christian Schenk.
<http://www.miktex.org>
- ProTeXt** An easy-to-install T_EX distribution for Windows, based on MiKTeX.

What editors are available in Windows?

TeXmaker Free cross-platform L^AT_EX editor.

<http://www.xm1math.net/texmaker/>

TeXnicCenter IDE designed for Windows, but incapable of handling two-byte characters. <http://www.texniccenter.org>

WinEdt Shareware IDE for Windows, but incapable of handling Unicode encoding (utf-8). <http://www.winedt.com>

EmEditor A text editor supporting every character encoding as well as Unicode. <http://www.emeditor.com>

Is there anything else that I should install?

Adobe Reader The standard PDF viewer. <http://www.adobe.com>

GhostScript An interpreter of the Adobe PostScript and Portable Document Format page description languages.
<http://www.ghostscript.com>

DviOut An DVI viewer, developed by Toshio Oshima
<http://ftp.ktug.or.kr/mirrors/dviout/>

GraphicxMagick An image format converter
<http://www.graphicsmagick.org>

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What references should I refer to?

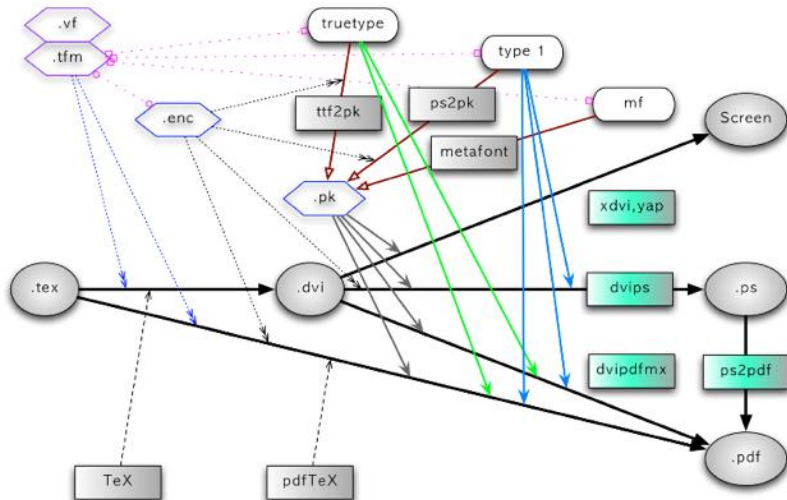
What references should I refer to?

[lshort-kr.pdf](#) <http://faq.ktug.or.kr/faq/lshort-kr>

[A Guide to \$\LaTeX\$](#) 3rd edition, 1999, Addison-Wesley

[The \$\LaTeX\$ Companion](#) 2nd edition, 2004, Addison-Wesley

[memman.pdf](#) </tex/texmf/doc/latex/memoir/memman.pdf>



Graphics in T_EX

- BMP → Raster EPS → PDF (.bb)
- Vector EPS → PDF (.bb)
- `\includegraphics[scale=\figscale]{fig}`

How do people read the manual?

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- They read it using the product at the same time.
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- They read it not wholly but partially.

What is the best layout for manuals? I

- Enumerated section titles
- Captioned tables and figures
- Page header (and footer)
- Table of contents
- List of figures
- List of tables
- Cross-reference
- Index
- Graphics: charts, diagrams and illustrations.
- Sectional titles numbered to the level of subsection.
- All graphics to be consistent and optimum with a page format in size and proportion.
- Floating objects thrown into the discard.

What is the best layout for manuals? II

- Pages with ragged bottoms.
- Asymmetric two columns. The left column is allocated for section titles and graphics, and the right column is allocated for body text.
- Tables and figures flushed into the left with their captions.
- Paragraphs without indentation but wider line space
- No more than two types of fonts but with their bold faces; however, index entries in the same fonts.

What does the hozemanucs class provide?

```
\placecapfig{filename}{caption}{text}
%filename is also used as a reference label.
\listfig{filename}
\illustfig{filename}{text}
\placesidefig{filename}
\linefig{filename}
\figscale, \@flfig, \figframe, \entitytopsep, \interwidth
\illustcaptable[label]{caption}{tabular}{text}
\grayrow
\alert[Caution]{text}
\button{text}
\terms{initials}{words}
```

Why should we modularize manuals?

- To save time.
- To share common text and graphics.
- To unify all contents of manuals.
- **The file name database and conditional text make it possible.**

`\include{foo}`, `\input{foo}`

How can we reuse then again select correct figure files?

- A same name given to figure files with a same feature.
- Looking over figure folders according to priority.

The End.

Thank you.