

# LaTeX을 이용한 이글루스 '나만의책' 서비스

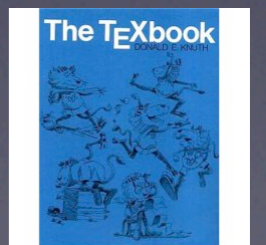
허진영 (SK communications)

October 21, 2006

# TeX 이란?

- Donald E. Knuth 교수가 1980년대에 개발한 현존하는 최고의 조판 시스템
- 저서 'The Art of Computer Programming' 의 미려한 조판이 목적
- 정교한 수학기공식 표현이 가능, MetaFont
- 현재 버전 3.141592
- 대표적인 Markup Language

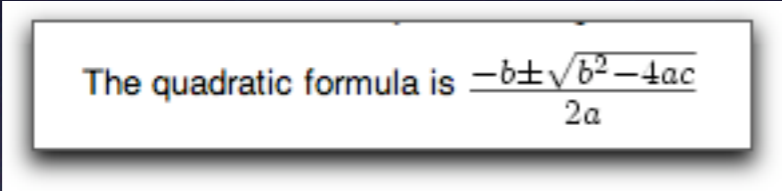
TEX



# TeX 예제

```
Hello, World  
\bye           % marks the end of the file; not shown in the final output
```

```
The quadratic formula is  $-b \pm \sqrt{b^2 - 4ac}$  over  $2a$   
\by
```



The quadratic formula is  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

```
The quadratic formula is  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$   
\by
```

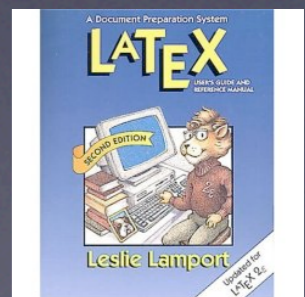
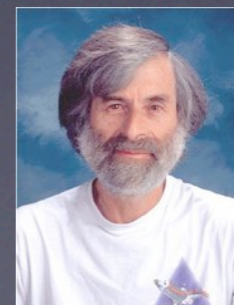


The quadratic formula is  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

# LaTeX 이란?

- 1984년 Leslie Lamport가 TeX을 보다 쉽게 사용할 수 있도록 만든 매크로 패키지
- 저자가 저작에 집중할 수 있도록 콘텐츠에서 레이아웃을 분리
- 자료의 구조화와 레이아웃의 변경 모두 강점
- MiKTeX(win), teTeX(unix), OzTeX(mac)

L<sup>A</sup>T<sub>E</sub>X



# LaTeX 예제

```
\documentclass[12pt]{article}
\title{\LaTeX}
\date{}
\begin{document}
\maketitle \LaTeX{} is a document preparation system for the \TeX{}
typesetting program. It offers programmable desktop publishing
features and extensive facilities for automating most aspects of
typesetting and desktop publishing, including numbering and
cross-referencing, tables and figures, page layout, bibliographies,
and much more. \LaTeX{} was originally written in 1984 by Leslie
Lamport and has become the dominant method for using \TeX; few
people write in plain \TeX{} anymore. The current version is
\LaTeXe.
\newline
% This is a comment, it is not shown in the final output.
% The following shows a little of the typesetting power of LaTeX
\begin{eqnarray}
E &=& mc^2 & \backslash
m &=& \frac{m_0}{\sqrt{1-\frac{v^2}{c^2}}}
\end{eqnarray}
\end{document}
```

L<sup>A</sup>T<sub>E</sub>X

L<sup>A</sup>T<sub>E</sub>X is a document preparation system for the T<sub>E</sub>X typesetting program. It offers programmable desktop publishing features and extensive facilities for automating most aspects of typesetting and desktop publishing, including numbering and cross-referencing, tables and figures, page layout, bibliographies, and much more. L<sup>A</sup>T<sub>E</sub>X was originally written in 1984 by Leslie Lamport and has become the dominant method for using T<sub>E</sub>X; few people write in plain T<sub>E</sub>X anymore. The current version is L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>.

$$E = mc^2 \tag{1}$$

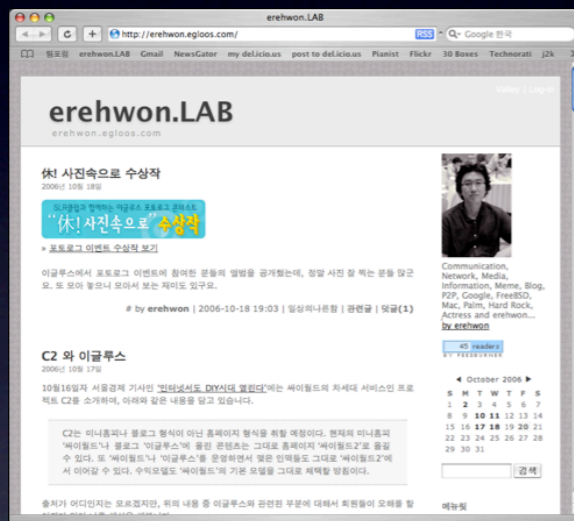
$$m = \frac{m_0}{\sqrt{1 - \frac{v^2}{c^2}}} \tag{2}$$

# LaTeX을 이용한 조판

- 논리적인 마크업 언어로 HTML과 유사
- 스타일 파일을 통해 일괄적 레이아웃 변형이 가능
- 페이지 넘버링, 각주, 참고문헌 목록 등 지원
- 최고 수준의 출력용 아웃풋을 생성

# 이글루스 '나만의책'

자신의 블로그의 글을 PDF 혹은 책으로 출판하는 서비스



xml



LaTeX 기반 조판  
자동화 엔진

xhtml + css



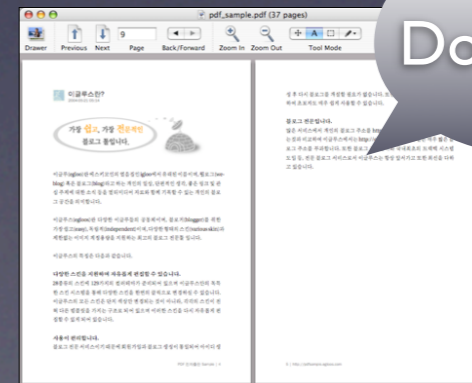
pdf

나만의책!



POD

Download



# 단순한 조판 엔진

일련의 LaTeX 함수 호출 과정을 제어하는 매크로

```
$ <parse .xml>
```

```
$ <get all media files>
```

```
$ <convert all media files>
```

```
$ <generate .tex>
```

```
$ lambda # .tex 2 .dvi
```

```
$ dvi2pdf # .dvi 2 .pdf
```

# 단순한 조판 엔진

.xml을 최적의 .tex로 변환하는 프리 프로세스

```
index.xml - SciTE
File Edit Search View Tools Options Language Buffers Help
1 index.xml
<?xml version="1.0" encoding="euc-kr" ?>
- <rss version="2.0">
- <channel>
  <title>修身齊家萬事成 2005</title>
  <link>http://mars.egloos.com</link>
  <description>修身齊家萬事成 2005</description>
  <creator>修身齊家萬事成</creator>
  <language>ko</language>
  <pubDate>2003-06-23 20:43:30</pubDate>
  <image>
    <title>修身齊家萬事成 2005</title>
    <url>http://pds.egloos.com/logo/1/200306/23/94/a0000094.jpg</url>
    <link>http://mars.egloos.com</link>
    <width>80</width>
    <height>61</height>
    <description>修身齊家萬事成 2005</description>
  </image>
  <item>
    <title>팬아트 </title>
    <link>http://mars.egloos.com/866374</link>
    <description>
      <![CDATA[
<CENTER><IMG CLASS=IMAGE_MID SRC="http://pds.egloos.com/pds/1/200501/09/
(클릭해서 보면 찌긋찌긋하게 없어집니다.)<BR>
<BR>
첸카이거의 "투게더" 라던가 "빌리 엘리어트" 같은 영화를 좋아하는 제가 좋아하는
<BR>
그래서 이런 팬아트를 꼭 해보고 싶었어요. 예? 이런것도 저작권 위반일까요? 흐.
<BR>
덧붙임) 노다메의 민소매와 세하의 잠바가 미스매치로군요. 여름 사진을 뒤져 봐
      ]]>
    </description>
    <category>육아일기 </category>
    <author>修身齊家萬事成</author>
    <pubDate>2005-01-09 20:53:06</pubDate>
  </item>
```



xml to tex

```
index.tex - SciTE
File Edit Search View Tools Options Language Buffers Help
1 index.tex
\begin{document}
\pagestyle{empty}
\AddToShipoutPicture*{
  \setlength{\unitlength}{1mm}
  \put(0,0){\includegraphics[width=148mm]{cover.jpg}}
}
\renewcommand{\baselinestretch}{0.7} \tiny \normalsize
\vspace*{34mm}
\hspace*{43mm}\textbf{\large 修身齊家萬事成 2005} \vspace{2mm} \|\
\hspace*{47mm}{\small\gt;textcolor[rgb]{1.00,1.00,1.00}{http://mars.egloos
\hspace*{47mm}{\small\gt;textcolor[rgb]{1.00,1.00,1.00}{by 修身齊家萬事成
\newpage
\cleardoublepage

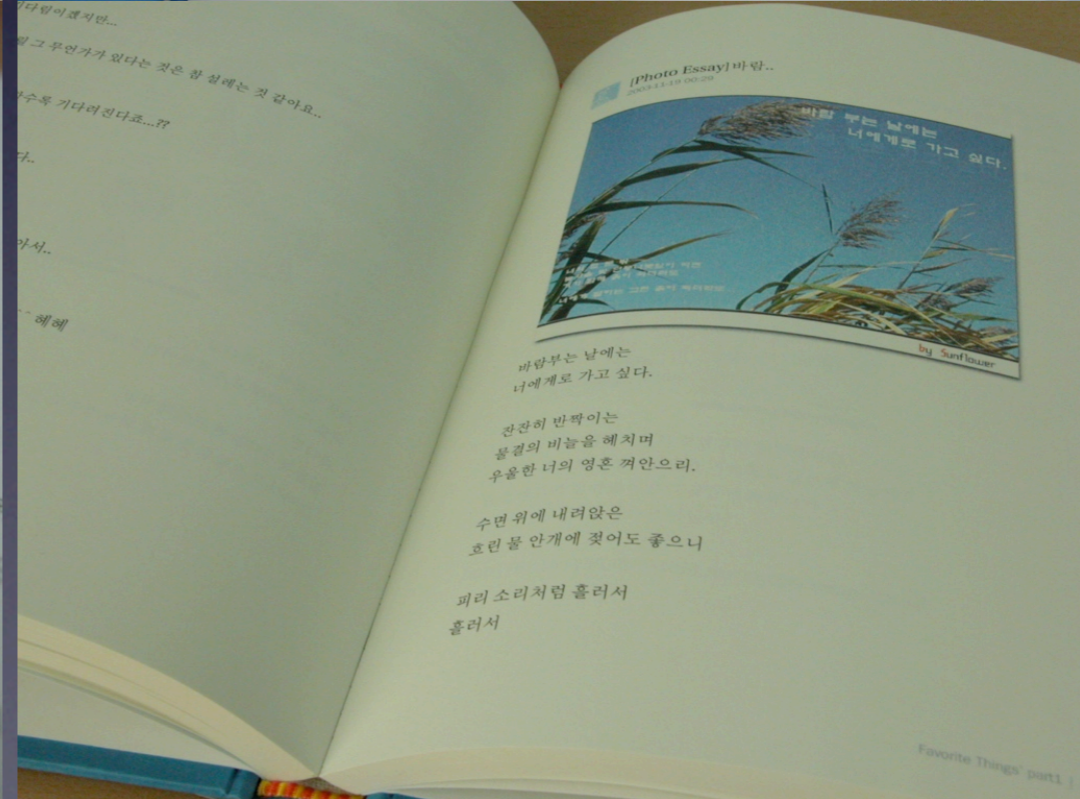
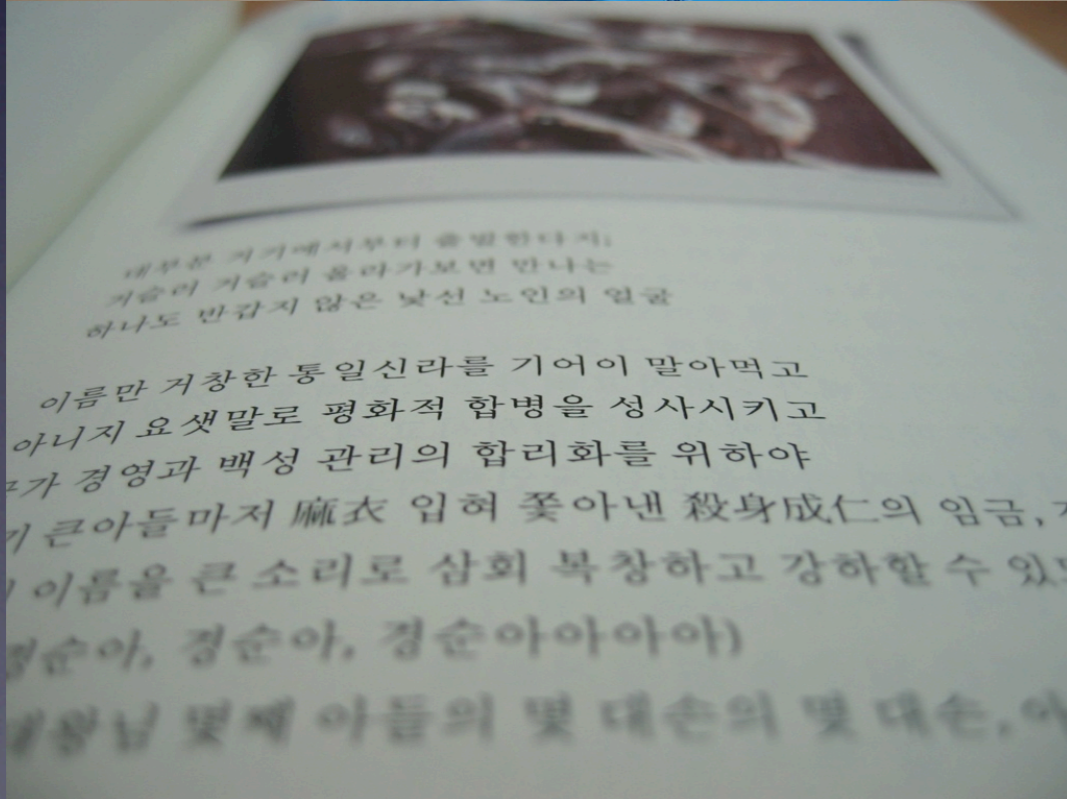
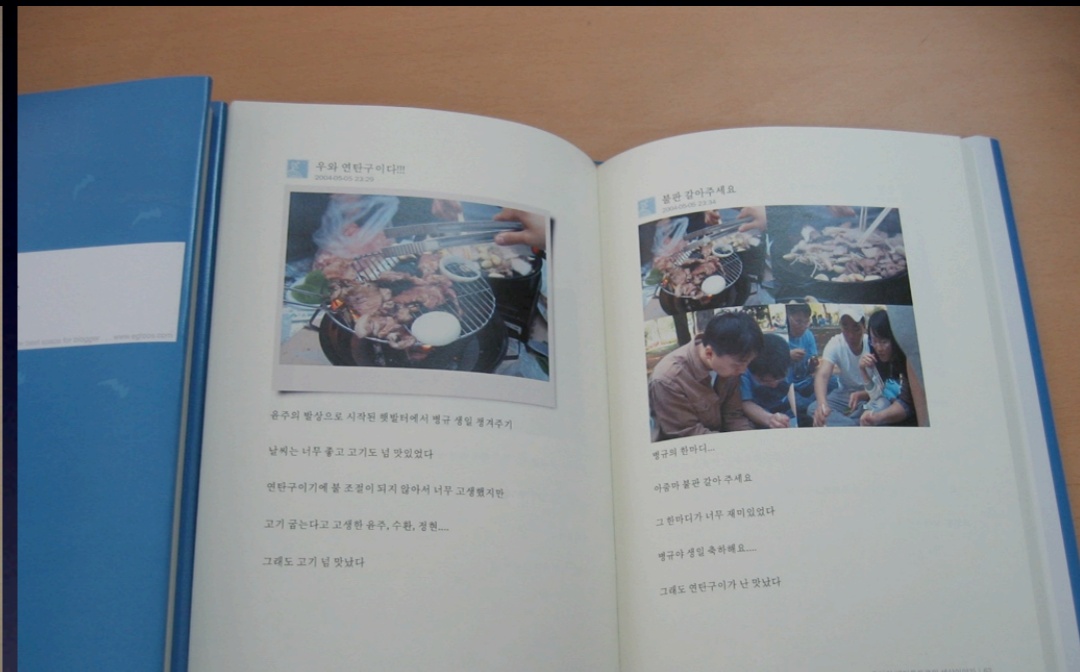
\renewcommand{\baselinestretch}{1.5} \tiny \normalsize
\vspace*{10mm}
\begin{center}
\fbx{\includegraphics[width=80pt, height=80pt]{TitleImage.jpg}}
\end{center}
\begin{center}
\fbx{\textbf{修身齊家萬事成 2005}} \|\
\fbx{\textcolor[rgb]{1.00,1.00,1.00}{http://mars.egloos.com}} \|\
{\footnotesize 2005-01 \$\sim$ 2005-12} \|\
\vspace*{\fill}
{\footnotesize by 修身齊家萬事成} \|\
\end{center}
\newpage

\makethinhangul
\setlength\headsep{10mm}
\AddToShipoutPicture{
  \setlength{\unitlength}{1mm}
  \put(0,0){\includegraphics[width=148mm]{content.jpg}}
}
\pagestyle{fancy}
\renewcommand{\headrulewidth}{0pt}
\renewcommand{\baselinestretch}{1.4} \tiny \normalsize
```

# '나만의책' PDF

- 은글꼴을 임베딩한 1200dpi PDF
- 한글 북마크 가능
- 한글 검색 가능
- 편집 불가
- 추가 변환없이 출판 전용 프린터를 통해 출력

# '나만의 책' 샘플



감사합니다.  
barcamp Seoul