Wrapped Up in \LaTeX

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\LaTeX
Why \LaTeX?
Why \LaTeX? 

- Typeset mathematics (well)
- Better grades on your homework
\LaTeX is Markup

- (x)emacs, (g)vi(m), etc.

- $ \% \ \backslash \ # \ \{ \ \} \ _ \ ^ \ ~$

- Easier than programming

(Also LyX, almost WYSIWYG.)
Overview

- edit foo.tex
- latex foo.tex
- xdvi foo.dvi
- dvips, dvipdf, etc.
Structure

\documentclass{report}

article, report, book, slides
Structure

- \usepackage
- \include
- \section, \subsection, etc.
- \label, \ref, \pageref
$\ldots$

\begin{displaymath}
  a^2 + b^2 = c^2
\end{displaymath}

\begin{align*}
a^2 + b^2 &= c^2 \\
x + y - z &\text{ vs } x + y - z
\end{align*}
Mathematics

\[
\lim_{x \to 0} \frac{\sin x}{x} \neq \infty
\]
Mathematics

\[
\left( \sum_{i=0}^{n} \frac{1}{i} \right)^2
\]

\[
( \sum_{i=0}^{n} \frac{1}{i} )^2
\]
Mathematics

\[
\left( \sum_{i=0}^{n} \frac{1}{i} \right)^2
\]
Environments

- verbatim
- tabular
- figure
Commands

- \textbf{ }
- \textit{ }
- \underline{ }
- \texttt{ }
- \texttttt{ }
More!

- Graphics
- Define new commands
- Define new environments
Discussion

And http://www.cs.drexel.edu/~jeffa/talks/