LaTeX Primer

Clint Grimsley clint.grimsley@gmail.com

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Outline

What is LaTeX

- TeX is a typesetting program
- LaTeX is a document preparation system
- The result of compiling a document created in LaTeX is typically a PDF document
- it's all plaintext, which means it has awesome features
  - version controllable with things like git, mercurial, subversion (gross) and CVS (grosser)
  - compressable
  - easily ported and emailed
  - highly programmatic
  - encryptable with GnuPG

More reasons LaTeX is awesome

- Keeps awesome bibliographies (BibTeX)
- Can be made aware of different journal formats
  - APA
  - Chicago Style
  - MLA
- Programmatic
  - Means you can use fun languages like Python to generate really good looking reports from SQL databases
  - Or you can use with other usual suspects, like emacs org-mode and DocBook

Tell me more!

- BibTex
  - Keep bibliographies in an easy-to-read plaintext document
  - example:

```
@Book
{ESR2001,
   author = {Eric S. Raymond},
   title = ``The Cathedral and the Bazaar'',
   booktitle = ``The Cathedral and the Bazaar'',
   publisher = www.snowballpublishing.com,
   year = {2010}
}
```

  - The beginning (after the @Book) is the reference identifier, this can be used to create footnotes in your articles that will provide hyperreferential links within the resulting PDF document, as well as do things like paranthetical citations
  - the rest is self-explanatory

Tables

- Tables are the cornerstone of good reporting
- Be forewarned, tables take practice

Sample Table	
Data	1
Data	2

Table Sample Code

```
\begin{table}
  \centering
  \begin{tabular}{|l|l|}
    \hline
    \multicolumn{2}{|c|}{Sample Table} \\
    \hline
    Data & 1 \\
    Data & 2 \\
    \hline
  \end{tabular}
\end{table}
```