Welcome!

Welcome to Lug

- Welcome if you are new (or if you aren't)
- We meet the 3rd Wednesday of every month (Usually at DMACC Ankeny)
- Website (https://cialug.org)
- Mailing List (see website)
- IRC and Slack

Using LaTeXto make a slide deck

Because powerpoint was too easy

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About Me

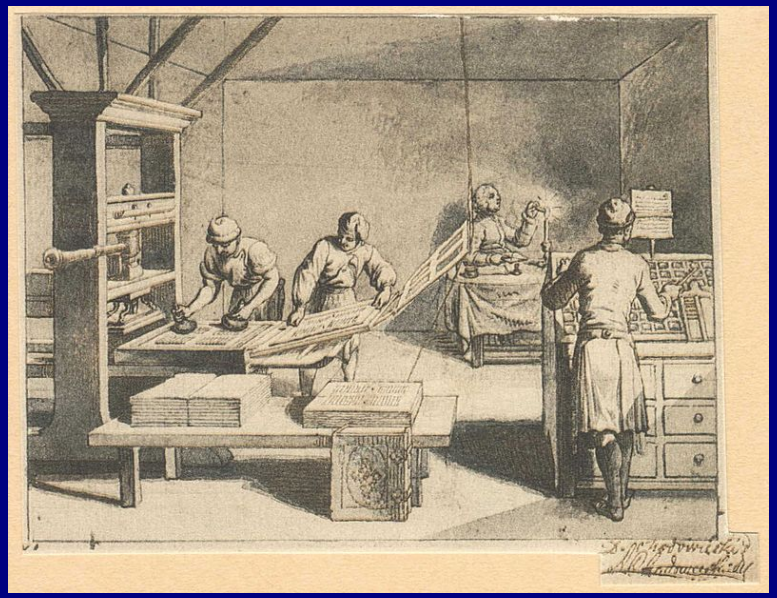
- By day, I am a senior software developer at a large North American Ag Company
- By night... a somewhat novice Linux guy
- I also like to tinker in some of the more obscure parts of the internet
- Slides will be posted at denner.co and source to https://gitlab.com/denner1/cialug-april-2019-latex-

What is TEX

- Typesetting system originally written in 1978 by Donald Knuth
- Knuth's publisher of *The Art of Computer Programing* moved from Monotype to phototypesetting
- Based around idea of literate programming "Instead of imagining that our main task is to instruct a computer what to do, let us concentrate rather on explaining to human beings what we want a computer to do."
- Currently on version 3.14159265, was last updated in 2014, and is asymptotically approaching π

What about LaTeX?

- Written by Leslie Lamport in 1983
- Short for Lamport TeX
- Actually written in TeXmacros
- Makes TeXeasier



What about LaTeX?

Like TeX, LaTeX started as a writing tool for mathematicians and computer scientists, but from early in its development it has also been taken up by scholars who needed to write documents that include complex math expressions or non-Latin scripts, such as Arabic, Sanskrit and Chinese.

LaTeX is intended to provide a high-level language that accesses the power of TeX in an easier way for writers. In short, TeX handles the layout side, while LaTeX handles the content side for document processing. LaTeX comprises a collection of TeX macros and a program to process LaTeX documents. Because the plain TeX formatting commands are elementary, it provides authors with ready-made commands for formatting and layout requirements such as chapter headings, footnotes, cross-references and bibliographies.

Why?

Why LaTeX?

- Properly Typeset . . . no more agonizing over the "right" way to do things
- Especially if you need math! Word is an epic fail!
- Packages for almost any thing you may want to do
- Free (Libre as well as free as in beer)
- Text based format, almost anything can open, and it is stable enough that 20 years later documents work
- Because Text you can leverage simple version control (this is in Git)
- Makes it easier to resist the distraction of formatting

Why not LaTeX?

- You give up a lot of control
- There is a lot to learn. . . you will spend a lot of time searching google and reading error messages
- Working with muggles can be hard. . . "Can't you just send me a .doc?"
- By default output looks very "LaTeX-y"
- To view results you have to compile, at first you will want to do this often

How do I get LaTeX?

- Start at https://www.latex-project.org/get/
- You can compile from scratch but it is far easier to use a distro
- Linux: You can use your favorite package manager (or install it directly)
- Mac: MacTex Package
- Windows: MikTeX, ProTeX, or TexLive
- Online services: OverLeaf, ShareLaTeX, *et al.*
- Also consider using various IDEs with support, TeXShop, Visual Studio Code *et al.*
- Another possibility is to use a WYSIWYM editor like LyX
- In the demo folder I have a docker image with LaTeXinstalled

Install Latex

- Docker Image is one option
- or if in Ubuntu: sudo apt install texlive-full
- git clone https://gitlab.com/denner1/cialug-april-2019-latex-.git
- Then can run latexmk
- Or Run a IDE like VS code or TeXShop

Document Types

article	For short documents and journal articles. Most Common
report	For longer documents and dissertations.
book	Useful to write books
letter	For letters
slides	For slides, rarely used
beamer	Slides in the Beamer class format. (this doc)

Demo Time

Resources

- http://tug.ctan.org/macros/latex/contrib/beamer/doc/beameruserg
- https://www.overleaf.com/learn/latex/Beamer