\LaTeX Some Unfinished Business

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Here’s an example for creating a slides
\documentclass[portrait]{seminar}
\begin{document}
\begin{slide*}
  \begin{list}{{$\bullet$}}{{}}
    \item My first bullet point
      \begin{list}{{$\blacktriangleright$}}{{}}
        \item A sub bullet point
      \end{list}
    \item My Second bullet point
  \end{list}
\end{slide*}
\end{document}

Remember to indent your \LaTeX{} code just like in good coding practice
• Defining new commands
  \newcommand{\bone}{\{\bf 1\}}

  \$\bone’ \ (X’X)^{-1} \ X’ \ y\$
  produces $1’(X’X)^{-1}X’y$

• Can take arguments
  \newcommand{\seq}[1]{\{\#1_i\}_{i=1}^{\infty}}\{\infty\}

  \$\seq{x}\$ then \$\seq{y}\$

• produces $\{x_i\}_{i=1}^{\infty}$ then $\{y_i\}_{i=1}^{\infty}$

• Put all of your \texttt{newcommand} statements in the preamble or in a separate file

• Load separate files with \texttt{input}
Getting a pdf document

- One solution
  - \texttt{\LaTeX}
  - \texttt{dvips file.dvi -o}
  - \texttt{ps2pdf file.ps}

- Another solution is to use \texttt{pdflatex}
  - Instead of typing \texttt{latex myfile.tex type pdflatex myfile.tex}
  - In Auctex type \texttt{C-c C-c latex pdf}
  - Produces a pdf file instead of a dvi file
  - When importing graphics, import pdf files instead of ps files!
Color

- Use the `color` package part of the `graphics` bundle

\usepackage[usenames]{color}

{\color{red} This text is red} while \textcolor{blue}{This text is blue}

it works for \$\{\color{red} \lambda\}\$
symbols too

- This text is red while This text is blue it

works for \(\lambda\) symbols too

- Defining some new commands is helpful
• Defining new colors
  \definecolor{light-blue}{rgb}{.8,.85,1}
  \definecolor{mgrey}{gray}{.75}

  {\color{light-blue} light-blue, no good}
  {\color{mgrey} medium grey, no good}

• light-blue, no good medium grey, no good

• Often, colors don’t appear in your dvi file, but they do in your ps or pdf file
Some concluding remarks about \LaTeX

- It is impossible to cover all of \LaTeX{} in two classes
- Try the web site to get documentation for some of the packages
- Some of the ones I like are:
  - the \texttt{geometry} package for setting page margins
  - the \texttt{pstricks} package for drawing within a \LaTeX{} document
  - the \texttt{psfrag} package for adding \LaTeX{} symbols to an externally loaded ps file
  - the \texttt{graphics} packages