Structure

File Structure

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This Presentation

- Introduce classes and packages

- Options

- File Types

- DVI, PDF, and PostScript

NOTE: This presentation only includes a cursory overview of classes, packages, and options. If you're interested in the layout and syntax of a LaTeX document please go to the next presentation entitled "Document Structure."

Classes and Packages

- Classes and packages are used to define how a document looks and the features that are added into it.

- A *class* is the type of document.
  - e.g. article, book, slide show, etc.
  - Only one class per document (can't be a book and presentation).

- A *package* loads features for a document.
  - For instance, we may want to include graphics in our document so we call for the appropriate package.
  - Can contain many packages in a single document.

Options

- Classes and packages both have options available.

- An example of a *class* option is changing from letter size (default) to A4 paper.

- An example of a *package* option is changing the background of a slide.

- We will continue this in the next few slides and in the next presentation.

Classes

- Classes are the type of document we want to use for the paper.

    - `Article`—used for documents with sections, but not chapters. Most commonly used and is good for almost all papers.

    - `Book`—similar to `article`, but with chapters and a cover page.

    - `Report`—for smaller books (e.g. PhD thesis).

    - `Slides`—for presentations (e.g. this presentation), uses big letters.

Classes (con't)

- Classes are invoked with,

  $$\texttt{\textbackslash documentclass[\textit{options}]\{\textit{class}\}}$$

- So if we wanted an article for a paper while studying in Europe where they use A4,

  $$\texttt{\textbackslash documentclass[\textit{a4}]\{\textit{article}\}}$$

Packages

- Packages are features or add–in's for a document.

- There are a plethora of packages available, you can even "easily" write your own.

- Packages are invoked by:

$$\backslash \texttt{usepackage[} options \texttt{]\{} package \texttt{\}}$$

- Many, many, many packages are often use so it's hard to break them down.

- Classes and packages will be discussed at length in the next presentation.

Processing Files

- The next presentation will discuss the layout and syntax of a document.

- However, we can discuss how a document is created in broad terms.

- Making a document in a word processor (Word, Wordperfect) consists of a single file (e.g. *.doc).

- A LaTeX document consists of several files.

  - This is because we take the original LaTeX file and make "readable" files out of it.

Making a LATEXdocument

LATEXFile $\longrightarrow$