CSE 214

Engineering Drawing

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Preface

This is solely my preparation for the course. There is no guarantee of it being sufficient.

Chapter-1

Installations

1.1 Packages

We are currently running an Ubuntu derived distribution. Required packages are marked using asterisk

1. ***texlive-full**
2. **tldr**

The installation size for this package is 6423 MB. Installation snippet:

```
$ sudo apt-get udpate
$ sudo apt-get install texlive-full tldr
```

1.2 Documents

We will download all doc-files in the **~/doc/** directory. Documentations for following packages will be downloaded

1. GNU Make

Installation snippet:

```
$ wget
  https://www.gnu.org/software/make/manual/make.pdf
  ~/doc/
```

Chapter-2
Tools

In this section we will add useful tools as we move along our preparation. The tools we recommend

1. `*texlive-full`
2. `texdoc`

2.1 tldr

This command shows simplified man pages for other commands. Be sure to update the offline cache of `tldr` pages using the following command

```
tldr -u
```

To learn how to use `tldr`, use the following command ;)

```
tldr tldr
```

It is recommended to see the `tldr` pages for every command mentioned here.

2.2 texdoc

Following should suffice our use-cases

1. `texdoc PACKAGE_NAME`
   This opens the documentation of the LaTeX package `PACKAGE_NAME`.
2. `texdoc --list KEYWORD`
   This lists the documents in your texlive distribution the paths of which contain `KEYWORD`

Documentations for the following LaTeXpackages should be at the tip of our fingers

1. TikZ
2. PGFPLOTS
3. PGFPLOTSTable

The following packages should not be required for this course, but, they are good to know about just in case.

1. tkz-graph
   This is not mandatory but could be useful.
2. tkz-euclid
   Useful for Euclidean geometry. But should be out of scope for this course.

2.3 `latexmk`

This is our golden tool we wish to make heavy use of.

1. **`latexmk fileName.tex`**
   Compiles **`fileName.tex`** file and produces the PDF output.
2. **`latexmk -c`**
   Cleans the directory of auxiliary files generated during compilation. This is a useful command to include in the **`clean`** target of your **`Makefile`**.
3. **`latexmk -pvc fileName.tex`**
   This compiles your TeX file, opens the output in your PDF viewer. Then it keeps checking all the relevant files in your project. If any file changes, this tool re-compiles your file and the PDF viewer reloads the output to show the changes.