LaTeXDistributions

The first thing you will need to do is to install a working copy of LaTeX on your computer. I outline here brief notes on a couple of ways to obtain this free software–of course you should come talk to me, or to the Help Desk in the South Hall computer lab, if you have problems.

Text-based distributions

Mac Users: Direct your favorite web browser to `http://www.tug.org/mactex/` and download the MacTeX-2009 package by clicking on the `MacTeX.mpkg.zip` link. This is a large file–you probably don't want to be using wireless when you download it. Once it downloads, click on the MacTeX.dmg icon and follow the usual installation routine. You will install a lovely program called TeXShop as well as all of the nuts and bolts necessary to get TeXShop to do what it needs to do.

To create your first document, start TeXShop. It should open to a blank screen. Type in the following four lines:

```
\documentclass{article}
\begin{document}
The quick red fox jumped over the lazy brown dogs.
\end{document}
```

Save the document somewhere with a name like `gunk.tex`. Make sure that the dropdown menu to the right of the `Typeset` button is set on La-TeX, and then click on the `Typeset` button. Good things should happen. Congratulations!

PC People: Start at `http://www.tug.org/protext/`. In the **Download and Install** section, click on the link to **download the self-extracting protext.exe file**. You will be directed to a site that includes a link named `ProTeXt-2.2.1-102109.exe`. Click on that link and save the file to your desktop. This is a very large file and will take a while to download, especially if you are using wireless.

Once the download is complete, run the `ProTeXt-2.2.1-102109.exe` program by clicking on the icon on your desktop. Go ahead and run the software when Windows asks you. This self-extracting archive will give you a series of windows asking about whether you want to install the software. Go ahead and accept the default.

When the extracting is over, open the folder ProTeXt-2.2 and double click on the `Setup.exe` icon. This program will ask you what language you like and then open a `.pdf` file named ProTeXt. You will have to read through this document and click on things to finish installing ProTeXt.

You will be well-served if you print out this document and read it before you continue! Consider yourself warned.

As you read the .pdf document you will be advised to click on various buttons in order to uninstall or install various components of the ProTeXt application. Click on these buttons as advised, using the digital version of the document. (If you really expect to do something on your computer by poking at the paper copy of the document, please come and tell me immediately. We need to talk.)

- **Installing MiKTeX:** I chose to install Basic MiKTeX and other than that accepted the defaults, changing the paper size to "Letter" rather than "A4".

- **Installing TeXnicCenter:** There should be no problems or choices here–again, I recommend accepting all defaults in the installation process.

- **Installing Ghostscript:** Again, uninstall the old version and install the new one, accepting defaults along the way.

- **Installing GSview:** Uninstall the old one and install the new one. Accepting defaults seems to be best.

- **Getting Started:** At this point, you have installed everything that you need to install. Try going to `Start -> All Programs -> TeXnicCenter`. A "Configuration Wizard" will start up. You will want to refer to page 10 of the ProTeXt document for the path to the distribution. I used the path
  `C:\ProgramFiles\MiKTeX 2.7\miktex\bin`
  and it worked for me.

  Now, let's create a document! As suggested on Page 11 of the ProTeX document, change the *Output Profile* to `LaTeX => PDF`. Then go to `File -> New` to open a new document. Type the following lines into the new document:

  ```
  \documentclass{article}
  \begin{document}
  You must remember this, a kiss is just a kiss.
  \end{document}
  ```

  Now save the document somewhere, giving it a cute name. Then click the *Build and view current file* icon and (with luck) you will see your typeset document! Congratulations!

Point-and-click Distribution

The package `texmaker` can be found at `http://www.xm1math.net/texmaker/`. There are installation packages here for Mac, Windows and Linux, which are much less complicated to install than Protex. Although I haven't used this one very much, it has the advantage that, rather than remembering that to produce $\int$ you need to type `$\int$`, you can click on icons to produce the mathematics that you want to see, and the program will insert the needed code.

To get started with `texmaker`, you need to configure it to work on your computer. On a Windows machine, look under the `Options` menu for `Configure Texmaker` (it is under the `File -> Preferences` menu on a Mac). Check the `Quick Build` menu, and make sure that the button marked `PdfLaTeX + View PDF` is chosen. Then check the `Editor` button and ensure that the `Editor Font Encoding` choice is `System`. Then click `OK`.

To start a document, go to the main page, and click on `File -> New`. Then, in the `Wizard` menu, select `Quick Start`. Change `Encoding` to `None` and change `Paper Size` to `letterpaper`. Then click `OK`. The document window will open with about 8 lines of code already in there. Two of the lines consist of a single dot. Erase the first of the dots and then click on the line after the `\begin{document}` and type "The rain in Spain falls mainly in the plain." Then click `File -> Save` and save the document, giving it a name like `gunk`. Then click on the arrow to the left of the menu option `Quick Build` and your document should be typeset.