WordNet Installation Procedure

Notes: This guide was written for installation of WordNet 3.0 on a clean Linux Mint Rafaela system. Installation on other Linux distributions should be similar. Root privileges are required.

Steps:
1) Ensure all the required libraries are installed. The easiest method to ensure the required libraries are installed is to just install/re-install them as detailed below. It is recommended that installation proceed in the outlined order:

> a) libx11-dev - This can be installed using an apt-get command so at the terminal type: *sudo apt-get install libx11-dev*
> b) TCL 8.5 – the latest version of TCL is 8.6, but WordNet requires TCL 8.5. It is best to download TCL from their website as apt-get commands do not always properly install this package:
>> 1. download *tcl8.5.18-src.tar.gz* from http://www.tcl.tk/software/tcltk/download.html
>> 2. extract the contents of the .tar.gz file anywhere
>> 3. open the terminal (if needed)
>> 3. navigate to the extracted directory
>> 4. navigate to the *unix* subdirectory
>> 5. type the following commands, and look for and resolve any errors that occur. For error troubleshooting type *more README*. Commands:
>>> I. type *./configure*
>>> II. type *make*
>>> III. type *make test*
>>> IV. type *sudo make install*
>> 6. installation complete
> c) TK 8.5 – as with TCL the latest version is 8.6, but WordNet requires TK 8.5. Again it is best to download TK from their website rather than using apt-get commands.
>> 1. download tk8.5.18-src.tar.gz from http://www.tcl.tk/software/tcltk/download.html
>> 2. installation is identical to TCL8.5, so follow the TCL 8.5 instructions above starting at step 2. Errors may occur during the *make test* step. These errors can generally be safely ignored.

2) Install WordNet
> a) Download the latest version of WordNet from https://wordnet.princeton.edu/wordnet/download/current-version/
> b) Install WordNet
>> 1. extract contents of the downloaded .tar.gz file anywhere
>> 2. open the terminal (if needed)
>> 3. navigate to the extracted directory
>> 4. type the following commands, and look for and resolve any errors that occur. For error troubleshooting type *more INSTALL*. Commands:
>>> I. type *./configure*
>>> II. type *make*
>>> III. Type *sudo make install*
>> 5. installation complete, navigate to /usr/local/ and find the *WordNet-3.0* directory to verify installation

3) Install WordNet packages (if desired)

    a) WordNet::QueryData – this is a useful perl package for accessing WordNet, and is required for other WordNet packages. It is available off of CPAN by:

        1. open the terminal (if needed)

        2. type *sudo perl -MCPAN -e shell*

        3. type *yes* if asked *would you like to configure as much as possible automatically?*

        4. type *yes* if asked *would you like me to automatically choose some CPAN mirror sites for you?*

        5. you are now using CPAN and should see a command prompt such as *cpan[1]>*

        6. type *install WordNet::QueryData*

        7. installation complete, type *ctrl+c* to quit CPAN

    b) WordNet::Similarity – contains similarity measures for comparing words within WordNet. It is available off of CPAN:

        1. follow the *QueryData* installation procedure above but once using CPAN type *WordNet::Similarity*

    c) Verify installation of WordNet packages

        1. create a new text file called *wordNetTest.pl*

        2. paste the following code into *wordNetTest.pl*

```perl
#!/usr/bin/perl
use WordNet::QueryData;
use WordNet::Similarity::lesk;
my $qd = WordNet::QueryData->new();
my $wnsim = WordNet::Similarity::lesk->new($qd);
my $score = $wnsim->getRelatedness("finger#n#1",
"hand#n#1");
print "score = $score\n";
```

        3. open the terminal (if needed)

        4. navigate the directory containing *wordNetTest.pl*

        5. type *perl wordNetTest.pl*

        6. verify the output is: *score = 538*