# Liber-Primus Hangman demo v0.1

**Introduction:** This is a working demo, with limited testing. It's all prototpye code;-) The purpose of this app is to help find possible phrases that could be in the Liber Primus.

**Requires:** python 2 or 3 and PyQT4 or windows binary LP\_Hangman.exe

Tested on linux and Windows 7

Get ngram data: can't share on git too big a file compressed, please see

https://www.dropbox.com/s/36irgziw9o75b5z/ngram\_data.7z?dl=0

Uncompress ngram\_data.7z

Important: ngram\_data files must be in this relative path

<install>\ngram\_data\4gram\<letters>\file.text

And

<install>\ngram\_data\1gram\<letter>\file.text

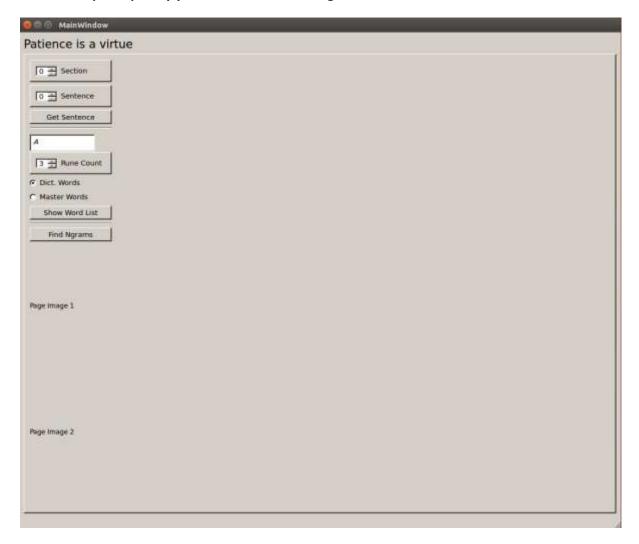
**It's way too big:** The way of separating n-gram data into many files makes access fast, but takes up much more space. This can probably be improved. But don't we all have many spare GB?

**Run:** LP\_Hangman.py

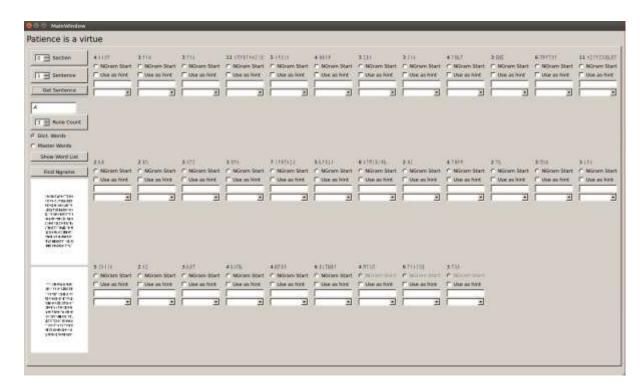
**Known Issues:** The Liber Primus sentences structure is basically correct, but without punctuation at the moment. Sentences with less than 4 words will result in undefined behaviour. Yeah ,we know there's a lot of data, we'll keep working on that.

MORE HELP: <a href="http://webchat.freenode.net/?channels=cicadasolvers">http://webchat.freenode.net/?channels=cicadasolvers</a>

# Hints and Tips: Hopefully you should see something like this:



Choose a section (by side images) and sentence (by 4-dots). Press "**Get Sentence**". This should build the main display with a GUI\_wordWidget for each word. The displayed image pages from the Liber Primus are not yet correct.



# Example GUI\_wordWidget



Each GUI\_wordWidget has:

Top label, with word-rune-count and runes

Ngram Start radio-Button, select to make this word the start of the 4-gram being considered

**Use as hint** check box, select if you want to use the current Text Entry as a hint when looking up n-grams

*Text Entry*, your chosen word (or first letters of a word)

Unique Words, Combo box that is filled with unique words after an N-gram search

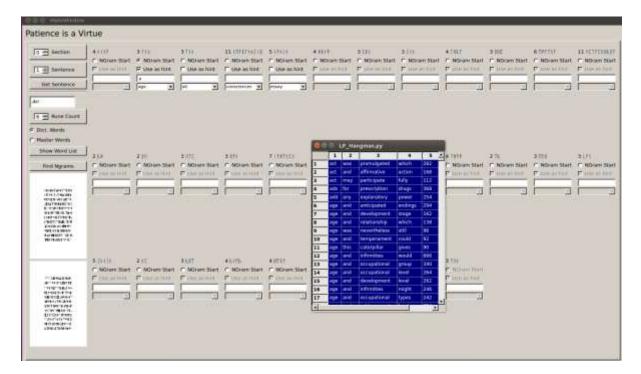
## **Choose an N-gram**

We work in 4-grams, choose an Ngram Start radiobutton, this will activate the current and next 3 GUI\_wordWidgets and deactivate the rest. The last 3 n-grams of the sentence should always be deactivated.

Press "Find Ngrams" this looks up mathching ngrams in the raw data. Each unique word will be added to the combo boxes, and a pop-up-window of all the complete n-grams will be displayed, with counts in the data.

For quicker results choose the first letter (or first few letters) of the first n-gram, and make sure "Use as hint" is checked. "Use as hint" for each word in the n-gram can be used to narrow your search.

While searching, the search criteria will be displayed in the Top Left.

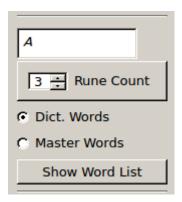


Once you've picked a word or two use them as hints and move on to a later ngram.

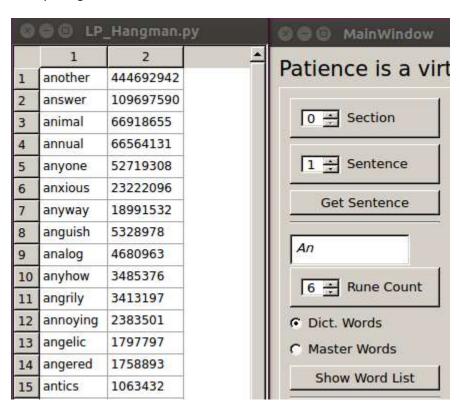
# oneGram\_Finder

Not sure of what words you can choose? Try the oneGram\_Finder, on the Left hand Panel. Choose your starting letters, word-rune-count, and press "Show Word List" to display a pop-up window of all matching words, with their count from the corpus.

#### **Controls**



## Example 1-grams:



## Master Words or Dict. Words?

This radiobutton limits the serachs to common words from the master list, or uses all words found In a typical dictionary.