

WordStatix - User manual

Version 1.4.0

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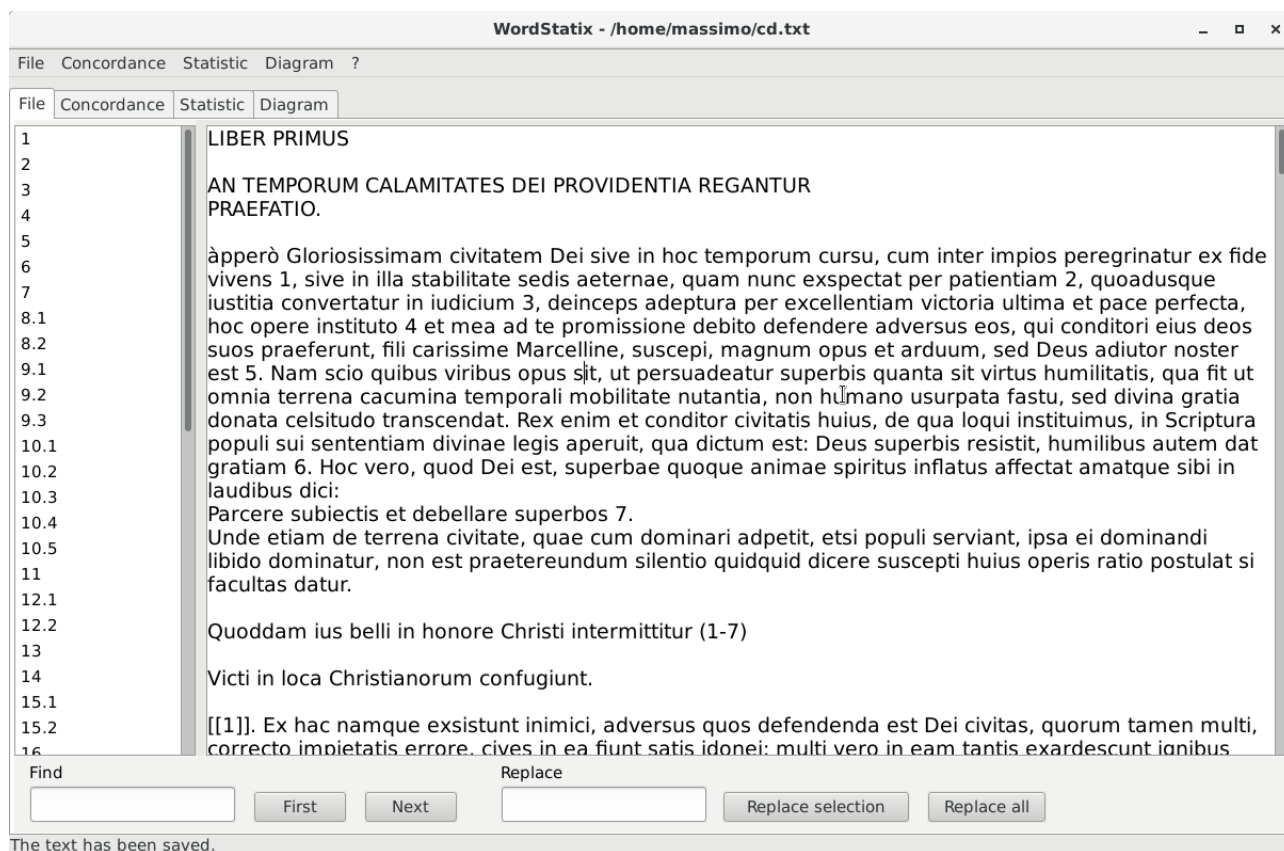
WordStatix is a free and multiplatform software useful to create concordances, that are lists of the words used within a document along with their recurrence and context. The document may be structured in chapters, numbers or in any another way. The software allows to track specific words by prefix or suffix, to skip those which are meaningless (like articles or prepositions) and to create a simple statistic and two related kind of diagrams of the recurrence of single words within the different sections of the document.

WordStatix is free software and is released under the GPL license version 3 or following. It has been created with Free Pascal and Lazarus (<http://www.lazarus.freepascal.org>).

The interface of WordStatix is divided in four sections, called “File”, “Concordance”, “Statistic” and “Diagram” which correspond to the main menu items with the same names and that can be selected with “Ctrl” + “1”, “Ctrl” + “2”, “Ctrl” + “3” and “Ctrl” + “4”. In the first section it’s possible to manage the document to be analyzed, in the second to create the concordance. in the third to see the recurrence of some selected words in the various sections of the document and in the fourth to create two kind diagrams to show visually the recurrence of selected words in the various sections of the document. Let’s take a look at each one of them.

File section

The File section, with some sample data, looks like this:



The bigger field on the right contains the document to be analyzed. It can be inserted in many ways:

- it can be opened or imported with the menu item "File – Open" or with the shortcut "Ctrl" + "O";
- it can be copied and pasted from other sources, like a word processor, a browser or a pdf file, with "Ctrl" + "V" or with the popup menu "Paste" available with a right click of the mouse on this field;
- it can be typed directly by the user.

The file formats that WordStatix can actually open or import are:

- text files, usually with ".txt" extension or with no extension at all, which are used natively by WordStatix and that can be created also with a word processor, saving the document in text format;
- Open Document (".odt") files, created with LibreOffice Writer or OpenOffice Writer; in this case the footnotes and the endnotes are shown within the text among single square brackets;
- Word files (".docx", not ".doc") files, created with Microsoft Word: in this case the footnotes and the endnotes are shown at the end of the text among single square brackets.

While opening a document, if a file with no extension or with ".odt" or ".docx" extensions is not visible, select the "Writer files", the "Word files" or "All files" filter in the opening form.

The menu item "File – New" is useful to clear everything and start a new document and the related concordance. The menu item "File – Save" or the shortcut "Ctrl" + "S" is useful to save the current

document in text format, if some changes have been made. The menu item “File – Save as...” is useful to change the name of the file to be saved. Note that if the user opens a file with “.odt” or “.docx” extension, the name of the file to be saved will have the “.txt” extension, since the software cannot save in other formats. The menu item “File – Exit” or the shortcut “Ctrl” + “Q” quits the software.

It’s also possible to clean a text pasted from another source if this contains unwanted carriage returns at the end of each line and double spaces. To do so, just separate each paragraph with an empty line and press “Ctrl” + “Shift” + “P”. Note that carriage returns, like punctuation marks, are not relevant for the concordance, so they can be added freely by the user.

The font size of the text may be enlarged and reduced with “Ctrl” + “Shift” + “+” or “Ctrl” + “Shift” + “-”, or using the mouse wheel while holding the “Ctrl” key.

The list on the left gathers all the bookmarks contained within the document. A bookmark is used to denote the beginning of a new section of the text, like a chapter, a number or the like. It has the following characteristics:

- it’s a single word, separated by the other words by spaces or punctuation marks;
- it doesn’t contain commas, spaces or carriage returns inside it;
- it’s not an asterisk, since this is a special virtual bookmark used to identity the part of a text which precedes the first real bookmark;
- it’s contained between double square brackets without spaces inside (like “[chapter1]”);
- it’s unique in the text to be processed, so a bookmark can be used only once inside it.

Anyway, the user doesn’t need to remember these rules, since the software checks the bookmarks and possibly changes them (removing commas, changing spaces with “_” and asterisks with dots) to make them match these requirements. If a bookmark is used more than once, the user will be warned about this bookmark and the bookmark list will be cleared. It will be still possible to create a concordance, but without any reference to the bookmarks. To fix this, find the repeated bookmark, possibly using the “Find” function, and modify all its recurrences to make them unique words., and update the list of bookmarks with with the menu item “File – Update bookmark list” or with the shortcut “Ctrl” + “U”.

A bookmarks must be typed by the user within the document before the beginning of a new section, but possibly also in any other place if it’s necessary to create a different structure of the document. Obviously the bookmarks will not be included in the concordance. It’s better to use bookmarks not longer than 10 or 15 letters, just to make them look nice in the diagrams.

To insert an existing word as bookmark, select it and use the menu item “File – Set Bookmark” or the shortcut “Ctrl” + “R”. In this case the list of the bookmarks on the left will be updated automatically. If no word is selected, this menu item will simply insert the double square brackets, and the user will have to type the bookmark inside them. In this case the bookmark list will not be updated automatically, but this can be done manually with the menu item “File – Update bookmark list” or with the shortcut “Ctrl” + “U”. The bookmark list will be update automatically before creating a concordance.

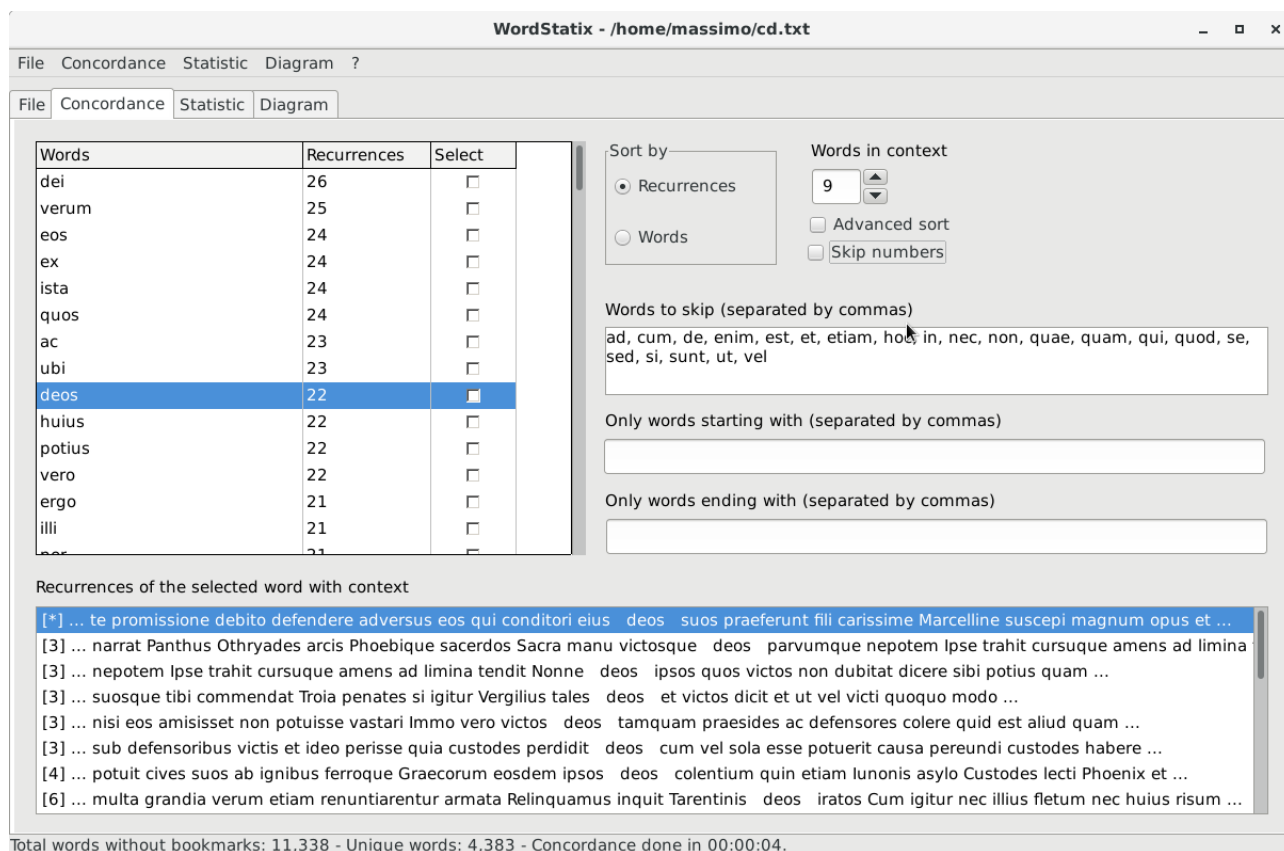
A click on a bookmark in the bookmark list selects the corresponding bookmark in the text. With this option it’s possible to check very easily that all the bookmarks are in the right place before creating the concordance.

At the bottom of the section there are fields and buttons to find a text within the document in use and to replace the text found with another text. Fill the field “Find” with the text to look for and then click on the button “First” to select its first recurrence and on the button “Next” to select its next recurrences. Fill the field “Replace” with a text to replace the searched one, and then click on “Replace selection” to replace the actual selection, or “Replace all” to replace all the recurrences of the searched text. The search and the replacements are case sensitive, so the software will consider lowercase and uppercase letters as different. Note that the software will search and replace text also

within words and not only whole words, so use the “Replace all” function with care, to avoid to replace part of words corresponding to the text looked for.

Concordance section

The Concordance section, with some sample data, looks like this:



Words	Recurrences	Select
dei	26	<input type="checkbox"/>
verum	25	<input type="checkbox"/>
eos	24	<input type="checkbox"/>
ex	24	<input type="checkbox"/>
ista	24	<input type="checkbox"/>
quos	24	<input type="checkbox"/>
ac	23	<input type="checkbox"/>
ubi	23	<input type="checkbox"/>
deos	22	<input checked="" type="checkbox"/>
huius	22	<input type="checkbox"/>
potius	22	<input type="checkbox"/>
vero	22	<input type="checkbox"/>
ergo	21	<input type="checkbox"/>
illi	21	<input type="checkbox"/>
...	21	<input type="checkbox"/>

Sort by: ☒ Recurrences ☐ Words

Words in context: 9 ☐ Advanced sort ☐ Skip numbers

Words to skip (separated by commas): ad, cum, de, enim, est, et, etiam, hoc, in, nec, non, quae, quam, qui, quod, se, sed, si, sunt, ut, vel

Only words starting with (separated by commas):

Only words ending with (separated by commas):

Recurrences of the selected word with context

[*] ... te promissione debito defendere adversus eos qui conditori eius deos suos praeferunt fili carissime Marcelline suscepi magnum opus et ...

[3] ... narrat Panthus Othryades arcis Phoebeique sacerdos Sacra manu victosque deos parvumque nepotem Ipse trahit cursuque amens ad limina

[3] ... nepotem Ipse trahit cursuque amens ad limina tendit Nonne deos ipsos quos victos non dubitat dicere sibi potius quam ...

[3] ... suosque tibi commendat Troia penates si igitur Vergilius tales deos et victos dicit et ut vel victi quoquo modo ...

[3] ... nisi eos amisisset non potuisse vastari Immo vero victos deos tamquam praesides ac defensores colere quid est aliud quam ...

[3] ... sub defensoribus victis et ideo perisse quia custodes perdidit deos cum vel sola esse potuerit causa pereundi custodes habere ...

[4] ... potuit cives suos ab ignibus ferroque Graecorum eosdem ipsos deos colentium quin etiam lunonis asylo Custodes lecti Phoenix et ...

[6] ... multa grandia verum etiam renuntiarentur armata Relinquamus inquit Tarentinis deos iratos Cum igitur nec illius fletum nec huius risum ...

Total words without bookmarks: 11,338 - Unique words: 4,383 - Concordance done in 00:00:04.

The top left grid shows the list of the words and their recurrence in the document in use. To create the concordance and fill it, use the menu item “Concordance – Create concordance” or the shortcut “Ctrl” + “N”. To interrupt the creation of the concordance already started, use the shortcut “Ctrl” + “Shift” + “H”. While creating the concordance, which may take some time, no other section of the software may be selected, and many menu items are not enabled. The status bar at the bottom of the form reports the words analyzed, and at the end of the procedure also the time spent. The concordance list is sorted by words of by number of recurrences, according to the value of the field “Sort by”. Changing this value, the sorting will be updated correspondingly. If a concordance is sorted by number of recurrences, the words that have the same recurrence and which are contiguous will be sorted by their name.

The option “Advanced sort” makes the software to sort properly special characters like accented letters. Without this options, the sort will be faster, but these special letters will be ordered after the common ones. If this doesn’t matter, leave this option unchecked.

The option “Skip numbers” makes the software to skip the words that contain only numbers and punctuation marks. Without this options, the concordance will be processed faster, so if this doesn’t matter leave this option unchecked.

In the field “Words to skip (separated by commas)” the user may type some words, separated by commas, that should not enter in the concordance since they are meaningless, like articles and propositions. The filter is not case sensitive, so the software will not distinguish among lowercase and uppercase letters. It’s possible to type the words to skip in this list , or to add to it a word already present in the concordance grid with the menu item “Concordance – Add current word to skip list” or with the shortcut “Ctrl” + “Shift” + “K”. In this way, that word will be also removed from the concordance. To remove just the word from the grid without inserting it in the skip list, use the menu item “Concordance – Remove current word” or the shortcut “Ctrl” + “K”.

The skip list will be remembered by the software. Anyway, it's possible to save it in a text file with the menu item "Concordance – Save skip list...", and open an existing skip list file with the menu item "Concordance – Open skip list...". In this way the user may keep different skip lists corresponding to different languages or kind of documents to analyze.

In the field "Only words starting with (separated by commas)" it's possible to type one or more prefix of words separated by commas. When creating the concordance, only the words beginning with one of those prefix will be shown. The filter is not case sensitive, so the software will not distinguish among lowercase and uppercase letters.

In the field "Only words ending with (separated by commas)" it's possible to type one or more suffix of words separated by commas. When creating the concordance, only the words ending with one of those suffix will be shown. The filter is not case sensitive, so the software will not distinguish among lowercase and uppercase letters.

When the user adds new items to the fields "Words to skip (separated by commas)", "Only words starting with (separated by commas)" and "Only words ending with (separated by commas)", the software sorts them automatically, so that they can be tracked more easily.

When a word is selected in the concordance grid, in the bottom list "Recurrence of the selected word with context" is shown each single recurrence of that word in the document in use. Each recurrence will be reported in a single row of the list along with its context, that are the words before and after it. The number of words before and after the selected one are determined by the field "Words in context", whose value can be changed by the user and will be remembered by the software. At the beginning of each recurrence, among single square brackets, is shown the last bookmark before that recurrence, to indicate the section of the document in which it's located. If no bookmark is present, an asterisk will be shown.

A single recurrence of a word in the bottom grid "Recurrence of the selected word with context" can be removed, if for some reason it's not to be included in the concordance. To do this, use the menu item "Concordance – Delete selected recurrences" or the shortcut "Ctrl" + "Shift" + "D". To restore the removed recurrences, just recreate the concordance.

The words in the concordance grid may also be individually selected with a click on the check box in the column "Selected" or with the space bar when the grid is selected. Then it's possible to show only the words that are selected in this way with the menu item "Concordance – Show only selected words" or with the shortcut "Ctrl" + "L". When this filter is enabled, the same menu item will remove it and will show all the words.

It's possible to save the concordance in a text file or in a HTML file with the menu item "Concordance – Save concordance..." or with the shortcut "Ctrl" + "Shift" + "S". To save the concordance in HTML format, add the extension ".html" (not just ".htm") to the file to be saved. If the extension is different, the concordance will be saved in text format. The HTML file may be opened in a browser or with a word processor, and the single words will be formatted as Heading 2 paragraphs, to be tracked more easily. Before saving the file of the concordance, the software will ask for a possible title to be inserted at the beginning of the concordance.

Note that the only the words that are actually visible in the concordance grid will be saved in the file. The concordance is not case sensitive, so lowercase and uppercase letters will be considered as the same and printed always in lower case. On the contrary, the list of the recurrences is case sensitive, so each word is typed as it is in the original text. If only lowercase or uppercase recurrences of a word have to be tracked, just delete the recurrences that contain the wrong version of the word.

Statistic section

The Statistic section, with some sample data, looks like this:

WordStatix - /home/massimo/cd.txt																
File Concordance Statistic Diagram ?																
File	Concordance	Statistic	Diagram													
	*	1	2	3	4	5	6	7	8.1	8.2	9.1	9.2	9.3	10.1	10.2	
dei	3	1	0	0	1	0	0	0	7	0	1	0	0	0	0	1
verum	0	0	2	1	0	0	1	0	0	0	0	1	0	0	0	0
deos	1	0	0	5	1	0	1	0	0	0	0	0	0	0	0	0
vero	1	3	0	1	1	0	1	0	2	0	0	0	0	0	0	0
deus	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
deorum	0	1	1	0	4	1	3	0	0	0	0	0	0	0	0	0
deo	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1
deum	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
civitas	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0
civitatem	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
civibus	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
veritas	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
civitatis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
civitate	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
civitates	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
civitati	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	10	8	4	8	8	2	7	0	9	3	3	1	2	2	2	2

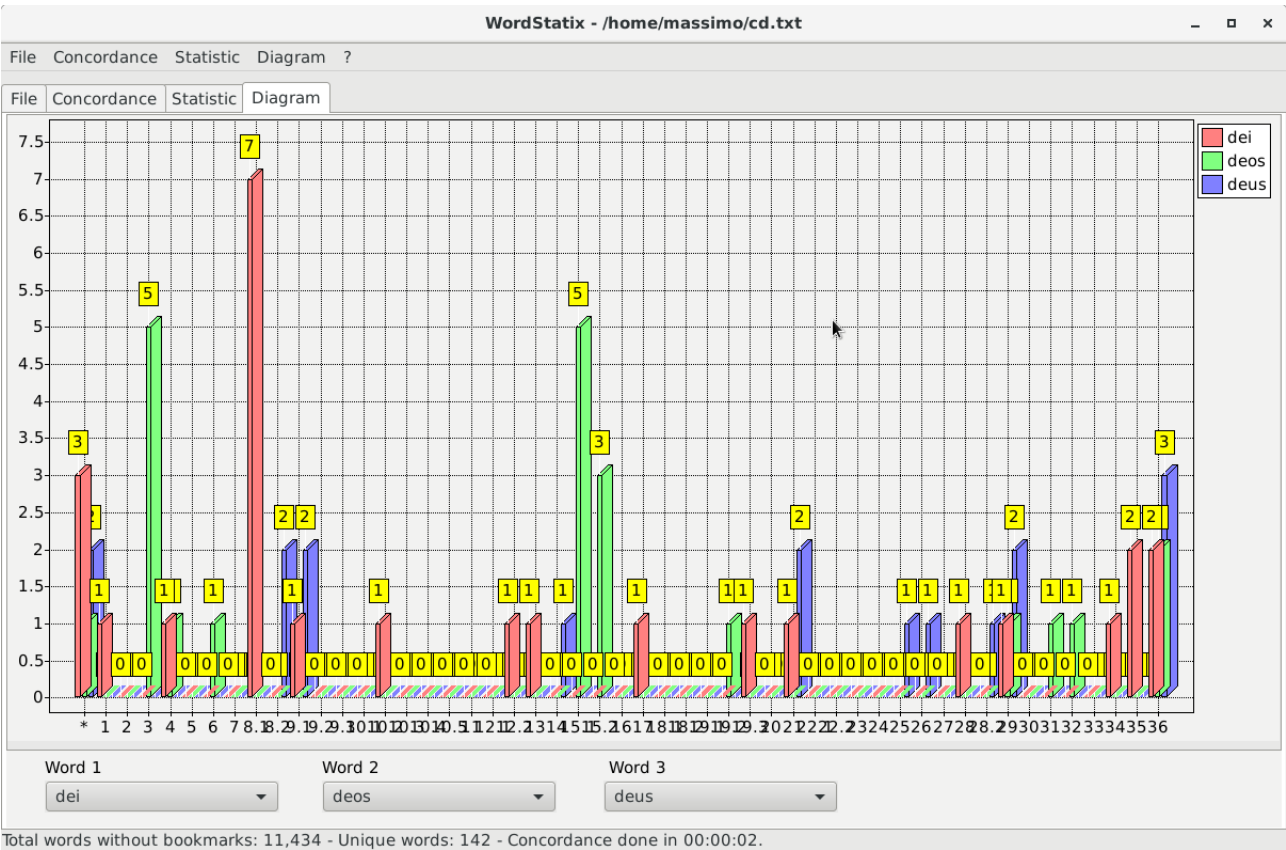
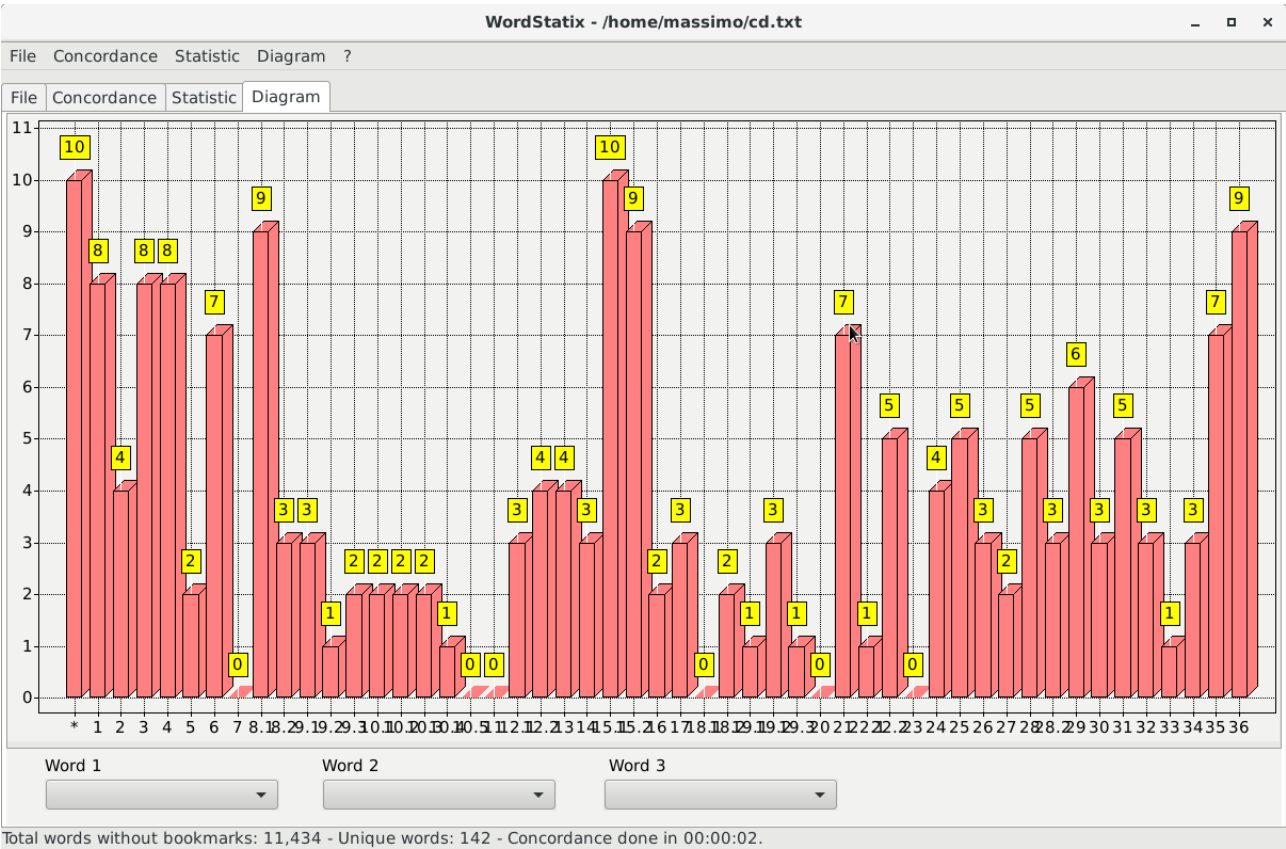
Total words without bookmarks: 11,434 - Unique words: 142 - Concordance done in 00:00:02.

In this section it's possible to show a grid with the recurrence within each section of the document (so, within each chapter, number, etc.) of the words selected in the concordance grid with the menu item "Concordance – Show only selected words" or with the shortcut "Ctrl" + "L". The words are shown on the left column, while the bookmarks are shown in the top row. The words that precedes the first possible bookmark will be gathered under the "*" bookmark.

To create or update the statistic, use the menu item "Statistic – Create statistic" or the shortcut "Ctrl" + "T". This series of values can be exported in a CSV file, which can be easily opened by a spreadsheet like Calc. To export this file, use the menu item "Statistic – Save statistics...".

Diagram section

The Diagram section, with some sample data, looks like this:



In this section it's possible to visualize in a diagram the numeric data of the statistic, with two different kind of diagrams:

- a diagram of the recurrence within each bookmark of at maximum three words, chosen among those used in the statistic (first picture above);
- a diagram of the total recurrence within each bookmark of the words used in the statistic (second picture above).

To create the first kind of diagram, obviously after having created a statistic, select at maximum three words, chosen among those have been used to create a statistic, in the three fields called "Word 1", "Word 2" and "Word 3", at the bottom of the section. Then use the menu item "Diagram – Create diagram of single words" or the shortcut "Ctrl" + "I". At the bottom of the diagram are shown the names of the various bookmarks (so chapters, numbers, etc.), while the various bars indicate the recurrences of each one of the three words for each bookmark. The words that precedes the first possible bookmark will be gathered under the "*" bookmark. Note that the field "Word 1" must contain a word. To remove any word from one of the other two fields and leave it empty, select it and press the "Del" or the "Backspace" key.

To create the second kind of diagram, use the menu item "Diagram – Create diagram of total words" or the shortcut "Ctrl" + "Shift" + "I". At the bottom of the diagram are shown the names of the various bookmarks (so chapters, numbers, etc.), and the various bars indicate the total of the recurrences of all the words used in the statistic for each bookmark. The words that precedes the first possible bookmark will be gathered under the "*" bookmark.

The diagram may be zoomed in with the menu item "Diagram – Zoom in" or with the shortcut "Ctrl" + "+" to see more clearly the various items and values. It can be zoomed out with the menu item "Diagram – Zoom out" or with the shortcut "Ctrl" + "-". The normal view of the diagram can be restored with the menu item "Diagram – Normal width" or with the shortcut "Ctrl" + "0". Note that when the windows of the software is resized, the diagram will be resized as well to the normal width.

The menu item "Diagram – Show values" allows to show or to hide the values of the bars of the diagram, which are shown in yellow boxes.

The menu item "Diagram – Save diagram" allows to save the shown diagram in jpeg or png format. Note that the diagram will be saved with the zoom level which is actually active, and with or without the values shown in yellow boxes according to the state of the menu item "Diagram – Show values".

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