NAME
> Spreadsheet_Manip − Manipulate (OOXML) spreadsheet files

SYNOPSIS
> require 'spreadsheet_manip'
>
> **document = Spreadsheet.instance()**
>
> **document.file=FILE_NAME**
>
> **sheet = document.sheet(SHEET#)**
>
> **sheet.remove_line_be(REFERENCE, EXPR)**
>
> **sheet.remove_line_bv(REFERENCE, VALUE)**

DESCRIPTION
> At the time of this writing, "*spreadsheet_manip*" proposes two functions to delete lines from spreadsheet tables. More will follow. Each function is also represented in an executable which is installed with the Ruby−Gem: *delete_line_be* and *delete_line_bv*.
>
> Only OOXML is supported, meaning that the spreadsheet file has to be in XLSX (®Microsoft Excel) or PMDX (®SoftMaker PlanMaker) format.

MOTIVATION
> Automation of manipulations in spreadsheets is often asked for. At the same time, the unavailability of OLE and COM under Linux necessitate a different approach than that of the VBA environments which are available in ®Microsoft Windows.
>
> While Office Suites may attempt to immitate the behaviour of their Windows−based counterparts, the freely available programming environments under Linux are already amply sufficient and allow an interested person to manipulate as much as the XML−libraries for her/his preferred programming languagee allow.
>
> Ruby is just one programming language of so many. The best that you can do with this *spreadsheet_manip* gem is take it as an example for your own creations. The second best would be, maybe, to use it as the base for your own extensions.

PARAMETERS
> *FILE_NAME*
>> The name of the spreadsheet−file. Should be *.pmdx or *.xlsx, but independent of the file−extension, the mime−type of the files will be checked prior action.
>
> *SHEET#*
>> The number (position) of a spreadsheet table within the workbook. The first sheet is 1.
>
> *REFERENCE*
>> For the two remove_line functions, reference is a column, like A, AC, Y. Lower−case letters are allowed, too.
>
> *EXPR* Is an expression which identifies cells. For the two remove_line functions, if the expression evaluates to TRUE, the lines which contain the cell will be entirely removed from the table.

RETURN VALUES
> None of the interesting methods does currently return (usable) values. The result of all action must be verified in the altered spreadsheet−file.

PREPARATORY ACTION
> Manipulations on a spreadsheet necessitate that methods of a *sheet* object be called. The sheet is one of many in a spreadsheet workbook.

Initially, you must create a spreasheet object, then set the file−name of the spreadsheet file to work on.

document = Spreadsheet.instance()

document.file=FILE_NAME

Next, indicate the position of the table in the workbook (the first being 1).

sheet = document.sheet(SHEET#)

Example

document = Spreadsheet.instance()

document.file = /home/user/plan/figures_2019/proposal.pmdx

sheet = document.sheet(2)

EXECUTABLE FILES

The two remove_line functions come with an executable file, each, meaning that you do not actually have to programm anything, but can right away remove lines from a given spreadsheet file by calling one of *delete_line_be* or *delete_line_bv*.

You can call each of these utilities with an argument −*h* or −−*help* to see the short help text.

NOTE 1 The operators in expressions must be enclosed by spaces, like in 'c = 100'.

NOTE 2 delete_line_bv does basically the same as delete_line_be, if the equation operator ('=') is used in the expression.

NOTE 3 For the time being, the executables will always create a backup−copy of the spreadsheet−file, even if the −b option is not used. The file−name of the copy is prefixed with "BAK_" and stored in the same directory as the original spreadsheet.

NOTE 4 The executables accept sheet−names instead of numbers.

Examples

Remove from the second table in file test.xlsx all lines where the cell in column 'E' is empty:

:˜$ delete_line_be −d"E empty" −s2 test.xlsx

Remove from the table "new preview" in the file simmulation.pmdx all lines which have the string 'approximation' in column 'B':

:˜$ delete_line_bv simmulation.pmdx −s"new preview" −d"B = approximation"

OTHER INFORMATION

Source−code

"Spreadsheet_Manip" had been developed in Ruby and is distributed as a ruby−gem. If you installed the program from the gem−file (with *gem install*), then you find all the source−files in the gem−folder for your Ruby−version. Otherwise, you can also unpack the gem−file (with *tar*), then uncompress the data−archive and take a look at the files in the resulting, new folders *bin* and *lib*.

License

"Spreadsheet_Manip" is released under the conditions of the GNU General Public License, version 3.0.

Version

0.1 of 2019/12/10

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