

WordMat

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Contents

This file has VBA-code attached. To see/edit the code press Alt+F11 (Mac: option+fn+F11) (or Visual Basic in the developer tab. Settings | Customize toolbar | check developer) To execute macros press Alt+F8 (Mac: option+fn+F8) or use the developer menu. *BackupThisDocument* | *ExportAllModules* | *ImportAllModules* | *GenerateKeyboardShortcutsWordMat* |

RunTestSequence / *RunTestSequenceNonInteractive* Exports all modules to folder 'VBA-modules'. VBA-modules is not overwritten, but changed to VBA-modules-Backup. Backup makes a copy of this file in subfolder Backup. Any existing Backup-file gets a number attached so not to overwrite previous backups.

For *ExportAllModules* and *ImportAllModules* to work you need:

- Add reference 'Microsoft Visual Basic for Applications Extensibility 5.3' in VBA-Ide tools/references
- Settings | Trust center | Settings for macros | always trust VBA project object model

Do not add buttons inside the document, it will increase loadtime.

Do not upgrade this file to a newer Word-version. It will break menu compatibility.

Do not add buttons inside the document, it will increase loadtime.

ImportAllModules

Imports all modules from subfolder 'VBA-modules' (Most recent backup from ExportAllModules). All existing modules in the document are deleted. Import cannot be run using a button.

Word Crash

Sometimes this document will crash when opened. Disable all macros in security center. Open the document. Open VBE and compile (Maybe make some code changes first). Save and close. Reenable macros and open the document again will often resolve the problem. If not try other code changes. RibbonCommanders VBA Code cleaner will also solve the problem.

Keyboard Shortcuts

Problems often occur with keyboard shortcuts. They can be in normal.dotm instead of WordMat.dotm. Also Keyboard shortcuts are not compatible with Mac because Mac uses option button instead of Alt.

Before a new release do this:

1. *Run CheckKeyboardShortcuts on Windows to check if Keyboard shortcuts are ok.*
2. *On Mac run GenerateKeyboardShortcuts and then CheckKeyboardShortcuts*

Special Character problem when editing on Mac and Windows

The VBE-Codefiles on Mac and Windows are not compatible. ASCII-characters(0-127) is not a problem. The problem comes from the extended ASCII-table (128-255), since Windows uses ANSI codepages, while Mac uses xx(Unicode?).

ASCII-characters: Extended Characters that are compatible: £ (163), ©,

μ

Problemsbothways :

ProblemsWindowstoMac : , .

ProblemsMactoWindows : §TherearefewproblemsfromWindowstoMac(,).Justdon'tusetthosecharactereditbacktoWindowsANSI,runthmacro : 'ReplaceToANSI'ThecharacterproblemonlyaffectscodfilesThismustberuneverytimeaMac–editasbeendone,orsethecharacterswillconverttorandomnewcharactersequences.YoucanthenopenthedocumentonWindowsandMacindependently.Howeverthecharacterswillshsequences.BeforebuildingtheinstallermakesuretorunReplaceToExtendedASCII.PreferablyindependAlsoifyouintroducemorenon–asciicharacters,makesuretorunReplaceToASCIIseqagain.Run'Generato

How to work with Git-hub and VBA-modules

The idea is to always end by exporting all VBA-modules to the folder 'VBA-modules'.

Whenever you start to code, start by importing. The advantage of this method is that Git can then track changes in the exported modules, and multiple people can work on the VBA-code. It cannot do that within a word-file. Sometimes Wordmat.dotm fails to open for unknown reasons. In that case a previous version of Wordmat.dotm can be opened and the most recent modules imported, to restore the document.

Don't use Export/import modules on Mac. It's not compatible with Windows export/import.

Functions in VBAmodul:

- *ImportAllModules*

Imports all forms, classes and modules from subfolder 'VBA-modules'.

Removes all existing modules before import, including VBAmodul

- *ExportAllModules*

Exports all forms, classes and modules from current project to subfolder 'VBA-modules'

(including VBAmodul) All current content in folder is deleted before export. A logfile with date is added to the folder.

- *RemoveAllModules*

Removes all forms, classes and modules from current project, except VBAmodul.bas.

The work process is

1. *You have a WordMat.dotm file you are working on in folder Word-Mat/Windows*

Before Building installer

1. Run *'ReplacetoExtendedASCII'* (if using strategy 2)
2. Run *'GenerateKeyboardShortcutsWordMat'*

1 2 must be run separately on Windows and Mac

[illegible] $K?$

"K" VBA.ChrW(8345)

1 Test section

-----*Quick test*-----

x	y
1	2
2	$5, 2$
3	6

$$x^2 = e^x + 3x$$

 \Updownarrow

OBS: Der blev anvendt numeriske metoder til at løse ligningen. Der kan muligvis findes flere løsninger.

Ligningen løses for x vha. WordMat.

$$x = -0,2421153$$

OBS: Der blev anvendt numeriske metoder til at løse ligningen. Der kan muligvis findes flere løsninger.

$$f(t) = t^2 - 1$$

$$22323232143 = 22323232143$$

$$x + y = 2$$

$$x-y=5$$

$$2+2x+1$$

$$2+3x$$

$$Definer:a=3$$

$$2+3x$$

$$Definer:g\left(x\right)=2x+2,b=3$$

$$Definer:f\left(x\right)=x^2$$

$$Definer:h\left(x\right)=2x$$

$$\left(x+2\right)^2+5=7\cdot e^{x^2}$$

$$c+d=9$$

$$2c-d=7$$

$$x+3=x+3$$

$$a$$

$$y^{'}=y$$

$$K_n=K_0\cdot\left(1+r\right)^n$$

$$f\left(2\right)$$

$$\frac{2}{4}=0,5$$

$$3+g\left(x\right)$$

$$Sletdefinitioner:$$

$$\text{-----} \textbf{Work in progress} \text{-----}$$

—

$$Sletdefinitioner:$$

$$\frac{1}{2\cdot 10^{14}\cdot x+1}=\frac{1}{200000000000000\cdot x+1}$$

$$\frac{1}{2,1\cdot 10^7\cdot x+1}=\frac{1}{2,1\cdot 10^7\cdot x+1}$$

$$5e4=5\cdot e4$$

$$2,1 \cdot 10^{14} = 2,1 \cdot 10^{14}$$

Differentialligningen løses med bibetingelsen $N(30) = 103$:

$$N' = 0,00526 \cdot N \cdot (209 - N)$$

Fejlen opstår når der anvendes Maxima som CAS-motor. Differentialligningen løses korrekt, når der anvendes GeoGebra som CAS-motor.

Tjekket med nye version 1.31.2 (og den forrige).

$$\text{Definer: } \vec{a} = \begin{pmatrix} 1 \\ 2 \end{pmatrix}, \vec{b} = \begin{pmatrix} 7 \\ -2 \end{pmatrix}$$

$$\cos(v) = \frac{\text{dot}(\vec{a}; \vec{b})}{|\vec{a}| \cdot |\vec{b}|}$$

$$y' = 0,0768 \cdot y^{\frac{2}{3}} - 0,0102 \cdot y$$

$$(x+5) \cdot y' = \sqrt{y}$$

Differentialligningen løses vha. WordMat's 'Løs differentialligning' funktion med startbetingelsen $y(-4)=1$

$$y = (\ln(|x+5|) + 2)^2$$

4

Sletdefinitioner :

$$f(x) = \ln(x^2 + 3)$$

$$f'(x) = \frac{2 \cdot x}{x^2 + 3}$$

$$L = \int_{-5}^5 \sqrt{1 + \left(\frac{(2 \cdot x)}{x^2 + 3}\right)^2} dx = 0$$

*Integrate(sqrt(1+((2*x)/(x^2+3))^2),x,(-5),5)*

----- **Not in testmodule** -----

$$\left| \left(\frac{\frac{100}{61}}{\frac{791}{61}} \right) - \left(\frac{43}{3} - \left(\frac{5}{6} \right) c \right) \right|$$

$$Hovedstol = Ydelse \cdot 1 - (1+r)^{-n} \frac{1}{r}$$

-----**-Run testmodule here**-----

Sletdefinitioner :

Alt+F8: RunTestSequence

$$(x-38)^2+(y-18)^2=17,5^2$$

$$(x-27)^2+(y-33)^2=9,4^2$$

⇕ *Ligningssystemet løses for x,y vha. WordMat's 'Løs Ligninger' funktion,*

$$x=21,9832 \wedge y=25,05068$$

Der er også et skæringspunkt ved (36,09 ; 35,4)

Sletdefinitioner :

$$x^2+1$$

$$y=2x+1$$

$$g(t)=t^2$$

$$2x-y+3=0$$

$$(x-2)^2+(y+3)^2=4^2$$

$$\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 2 \\ 3 \end{pmatrix} + t \cdot \begin{pmatrix} -1 \\ 2 \end{pmatrix}$$

$$a \cdot x + b$$

$$Definer : k=3$$

$$Definer : f(x)=x^{2,g(x)}=c+3x-k$$

$$Definer : \vec{a} = \begin{pmatrix} 1 \\ 2 \end{pmatrix}, \vec{b} = \begin{pmatrix} -1 \\ 2 \end{pmatrix}$$

$$2x+1$$

$$\overrightarrow{c}=(32)$$

Sletdefinitioner :

$$2+3x$$

Beregning foretaget vha. GeoGebra

$$(xy)=(23)+t\cdot((-2)5)$$

$$\begin{pmatrix} 2 \\ 8 \end{pmatrix}$$

$$\begin{pmatrix} 3 \\ -4 \end{pmatrix}$$

$$\begin{pmatrix} -3 \\ 4 \end{pmatrix} + \begin{pmatrix} 1 \\ 2 \end{pmatrix}$$

Sletdefinitioner :

$$(12)$$