Manual for DAVIS

To start the DAVIS shell you have to first have the DAVIS.zip. In the DAVIS.zip there will be a folder Project with the source code.

- 1. Go to DAVIS/Project/src with the command: cd DAVIS/Project/src
- 2. Execute the file DAVIS with the command: ./DAVIS (You may be asked to download gnuplot first. Please do this.)
- 3. Enjoy!
- 4. If you need help with some commands type help into DAVIS or check out the project report where each command is described.

Note: DAVIS was created to be used with UBUNTU 22.04.

In the next section you will see the commands we implemented and shortly how the are used.

clear

This command just clears the console.

USE: clear

echo

This command gives back the given text and prints it out on the console.

USE: echo {optional flags} <text>

FLAGS:

-b	blue font
-d	black font
-r	red font
-g	green font
-y	yellow font
-m	magenta font
-w	white font
-c	cyan font

-B	blue background
-D	black background
-R	red background
-G	green background
-Y	yellow background
-M	magenta background
-W	white background
-C	cyan background

-F	bold
-I	cursive
-U	underline

ALTERNATIVE USE: echo <text> » <files ...> -> prints text into specified files

help

This command just prints out the how to use each command.

USE: help

hist

This command lists the commands that were used previously.

USE: hist <flags> <number> FLAGS:

-a	lists all commands
-t	lists only correctly executed commands
-f	lists only wrongly executed commands
-е	executes command with $ID = number$

NUMBER: optional integer for desired amount of entries shown (DEFAULT=5)

latex

This command creates a LaTeX file and puts it into a folder (at the given PATH) which you can use for example with Overleaf.com to make a PDF.

There are three different templates: exercise, project-report and CV. Each template has different contents that have to be replaced. You can change some of them directly with the command arguments and some data has to be replaced in the LaTeX file manually.

USE: latex <path/filename> <template type> {optional arguments} ARGUMENTS:

Note: !Write $"_"$ instead of a space. This will be automatically changed back for you in the template!

exercise	
author: <name_surname></name_surname>	
course: <coursename></coursename>	
semester: <semester></semester>	
number: <sheet_number></sheet_number>	
picture:<./path/to/picture>	

project-report	
author: <name_surname></name_surname>	
$title:< title_of_project>$	
course: <coursename></coursename>	
semester: <semester></semester>	
university: <name_of_uni></name_of_uni>	
$ m picture{:}<./path/to/picture{>}$	

CV	
author: <name_surname></name_surname>	
$color:< template_color>$	
$\boxed{ \text{picture:} <./\text{path/to/picture} >}$	

EXAMPLES:

- latex ./LatexExerciseSheet exercise author:Max_Mustermann course:Operating_Systems semester:Spring Semester 2024 number:3 pic:./Desktop/testPic.png
- latex ./LatexProject project-report author:Max_Mustermann title:DAVIS_Shell course:Operating Systems uni:University of Basel pic:./Desktop/testPic.png
- latex ./LatexCV CV author:Max Mustermann color:red picture:./photos/profilpic.png

(Note that you don't have to give all arguments. The rest will be filled out with default values)

ls

This command lists all objects (files, directories, etc.) in a directory. USE: 1s {optional flags} FLAGS:

-l	displays current directory as a list
-a	includes invisible files as well
-r	improved readability

plot

This command plots a given input with the program gnuplot and shows the corresponding graph. USE: plot <./path/to/data> {optional flags} {optional arguments} FLAGS:

-b	removes top and right borders
-g	removes grid
-е	adds errorbars (only possible with three columns in data)
-p	graph with points
-l	graph with lines
-l & p	graph with lines and points
-d	disables darkmode
-s	saves graph as png directly

ARGUMENTS:

Note: !Write " " instead of a space. This will be automatically changed back for you in the plot!

title: <title></th><th>sets the title of the graph</th></tr><tr><td>xlabel:<xlabel></td><td>sets the horizontal xlabel</td></tr><tr><td>ylabel:<ylabel></td><td>sets the vertical ylabel</td></tr><tr><td>color:#ffffff</td><td>changes color of graph lines/points to hexa value</td></tr><tr><td>color:<color></td><td>changes color to corresponding color name</td></tr><tr><td>xrange:[<start>:<end>]</td><td>limits range of x-values to given input</td></tr><tr><td>yrange:[<start>:<end>]</td><td>limits range of y-values to given input</td></tr><tr><td>legend:<position></td><td>moves legend to different corner</td></tr></tbody></table></title>
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quit

This command just exits the shell.

USE: quit

wordle

This command leads you to the game wordle, where you can play it.

USE: wordle

More detailes about all the commands and also how to use them can be found in the section "Functionalities and Built-ins" in the DAVIS_report.