1 Installation

You can install Vim on Windows from www.vim.org/download.php. Just click on - PC: MS-DOS and MS-Windows - and download the latest version of the gvim.exe. This installer sets up everything you need.

If you have a Linux system then Vim is normally preinstalled. Otherwise you can find also all available downloads on the vim donwload page.

2 Folder structure

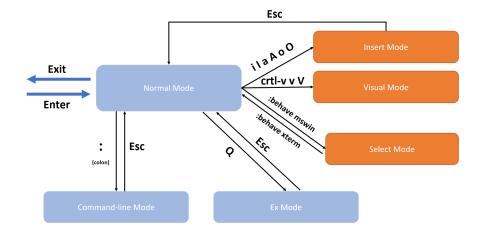
Windows: Vim Folder

- vim80 (folder containing the executables)
- vimfiles (folder containing all the plugins and addons)
- virmc (file containing all the settings and configurations)

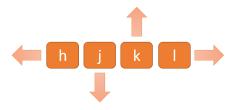
Linux:

- .vim (folder containing all the plugins and addons)
- .vimrc (file containing all the settings and configurations)

3 Concept of modes



Normal Mode



Generalizated action in normal mode: [changing-command] [number / option] move-command Move commands:

- w to the beginning of the next word
- e to the end of the word
- b to the beginning of the previous word
- 0 beginning of the Line
- \$ end of the Line

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```
\begin{array}{l} {\rm 1G\ -\ first\ Line} \\ {\rm \#G\ -\ Line\ Number\ \#} \\ {\rm G\ -\ Last\ Line} \end{array}
```

Changing commands: d - Delete y - Yank a - all

c - change

4 Made for programmers

Vim is made from programmers for programmers. It comes with many usefull commands, that can help to manage your code. The following commands are the most important (in my optionion):

```
: 5, 10 fo
                    fold from line 5 to 10
                    toggle fold
za
                    indent line
» «
=i\{
                    auto indention of the inner braces {...} part
%
                    jump to corresponding brackets
* oder #
                    find symbol under curser
\operatorname{gd}
                    goto definition (of variable etc.)
                    search for some Text
/sometext
:%s/old/new/gc
                    replace global in this file with confirmation
:find filename
                    fuzzy finder for files
```

For generating index files of nams in the source code the most common program is **ctags** http://ctags.sourceforge.net/. This additional program supports about 40 programming languages and the generated tags file can be found by vim. With commands like Ctrl-] you can than goto to a definition of a variable or function and Ctrl-t brings you back to where you come from.

More commands can be found with **:help** in normal mode. Interesting information about window-management in vim can be found with **:help window**.

5 Plugins

For installing Vim plugins *pathogen* provides a easy and fast way. Simply add the autoload folder of the vim-pathogen Git Repo to your vimfiles (.vim) directory and add the lines:

```
\begin{array}{l} \textbf{execute pathogen} \# \textbf{infect()} \\ \textbf{Helptags} \end{array}
```

to your vimrc file. All your plugins can be stored (cloned from Git etc.) into a **bundle** folder that you have to create in the vimefiles (.vim) directory. Now your plugins are going to be included at the vim startup and you have the whole:help support.

5.1 Useful plugins

```
NERDTree (directory tree) - https://github.com/scrooloose/nerdtree
Vim fugitive (Git integration) - https://github.com/tpope/vim-fugitive
Vim language server protocol - https://github.com/prabirshrestha/vim-lsp
```

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5.2 colors

Vim Colorschemes - https://github.com/flazz/vim-colorschemes

And set the colors in the vimrc with:

colorschemes < name >

6 Learn more

This Handout, the presentation, an example vimrc and more are available in my git repository: https://github.com/huebnerl/dotfiles/tree/master/e-portfolio

There you can also find some example command on how to remap commands and keys in vim.

For learning vim in a deeper way just use the integrated vim tutor: : **:help tutor**

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