The Hacker Within: The Org-mode for the Disorganised

Chen Wei Zhu (Birmingham Law School)

13:00pm, 20 May 2019 (UG05 Murray Learning Centre)

Beginning: Emacs installation

- cross-platform: Linux/Mac/ Windows
- Linux distros (e.g. Manajaro, MX Linux, Ubuntu etc.)
- ▶ [e.g.] install emacs26 on Ubuntu from ppa:kellyk/emacs

sudo add-apt-repository ppa:kelleyk/emacs -y
sudo apt-get update
sudo apt install emacs26

Part I Introducing Org-mode SLIDE

What is Org-mode? SLIDE

- "Org mode is for keeping notes, maintaining TODO lists, planning projects, and authoring documents with a fast and effective plain-text system."
- initiated by Carsten Dominik in 2003
- maintained by Bastien Guerry and developed by many others
- see https://orgmode.org/

Why Org-mode? (some reasons...) SLIDE

- ▶ note-taking + task management + publishing
- plain text + markup language
- cross-platform
- synchronisation among devices

Org-mode vs Evernote/Onenote SLIDE

- open formate vs proprietary format
- importance of "grep-ability" (for regular expression search)
- note-taking and drafting for writing projects

Org-mode vs Markdown SLIDE

- ▶ bullet point: * versus #
- ► task management (esp. agenda view)
- evaluating code blocks
- citation /bibliographical management (e.g. integration with Zotero)

Demonstration **SLIDE**

Org-mode Basics SLIDE

- Bullet points (a bit like markdown): using asterisks
- ► folding & unfolding: TAB
- moving trees/subtrees/paragraphs: Alt + arrow keys (up & down)
- assign task priority: Shift + arrows keys (up & down)

Scheduling tasks **SLIDE**

- key chord: Ctrl-x C-s
- select a calendar date: Shift + arrow keys
- enter a time: e.g. 1pm
- change date/time: Shift + arrow keys (NB: the time duration will remain the same)

Set deadlines SLIDE

- key chord: C-x C-d
- select a calendar date
- ▶ finish a task in three weeks' time [enter: "+3w"]

Scheduling tasks (examples) SLIDE

TODO [#A] give a talk on org-mode at THW

IN-PROGRESS [#A] give a talk at THW

TODO [#A] mark/feedback on student essays

DONE [#B] read Walter Benjamin's Book *Illumination*

Customising the TODO sequence

```
#+SEQ_TODO: TODO(t) IN-PROGRESS(p) WAITING(w) | DONE(d)
```

Agenda view SLIDE

- ► Alt-x: org-agenda-file-to-front /or/using the key chord: Ctrl-c [
- Alt-x:org-agenda /or/using the key chord: Ctrl-c a (e.g. in Spacemacs)
- ▶ in the agenda view

f forward b back q quit

Org-mode Table SLIDE

column1	column2	column3
stallman	torvalds	gosling
gnu	linux	java

► swap columns/rows: Alt + arrow keys

Evaluate code block (org-babel) SLIDE

- ▶ literate programming
- <s TAB</p>

Python SLIDE

```
word = "The Hacker Within Meeting today 20 May 2019"
for char in word:
    print (char)
    print (" ")
```

Shell command

```
echo today is `date`
echo "## level 2" | pandoc
```

Emacs lisp **SLIDE**

(car '(1,2,3,4))

Org-mode easy templates

```
s \#+BEGIN_{SRC} ... \#+END_{SRC}
q \#+BEGIN_{QUOTE} ... \#+END_{QUOTE}
c \#+BEGIN_{CENTER} ... \#+END_{CENTER}
C \#+BEGIN_{COMMENT} ... \#+END_{COMMENT}
```

Part II Spacemacs + Org-mode ${\tt SLIDE}$

Emacs configuration files

- 1. ∼/.emacs
- 2. ~/.emacs.el
- $\textbf{3. } \sim /.emacs.d/init.el$

Spacemacs installation **SLIDE**

- download spacemacs into ~/.emacs.d/
- \$ git clone https://github.com/syl20bnr/spacemacs
 ~/.emacs.d
 - ~/emacs.d/
 - ► ~/.spacemacs

Spacemacs configuration **SLIDE**

```
M-m f e d \sim/.spacemacs
M-m f e R reload spacemacs
M-m f e D .spacemacs diff mode
```

- ► NB: M-m (emacs keybiding) = SPC (evil mode)
- Set the scratch buffer (from the text-mode) to lisp-interaction-mode or any mode you like

Useful spacemacs layers

- ▶ org
- bibtex
- markdown
- deft (a mode emulating notational velocity)
- zotero (private layer)

Org layer keybinding (random examples) SLIDE

- Pomodoro clock: SPC m p
- ► Org-present: SPC SPC org-present (or Alt+m org-prensent)

Description
previous slide
next slide
quit

spacemacs zotero layer (a private layer) SLIDE

- install zotxt in zotero & eamcs: https://github.com/egh/zotxt/releases https://melpa.org/#/zotxt ("Tools to integrate emacs with Zotero via the zotxt plugin")
- create a private layer: "Alt-x configuration-layer/create-layer"
- download the below two files from this link: https://github.com/psamim/dotfiles/tree/master/spacemacs/private/psamim-org-zotero download packages.el and README.org into ~/.emacs.d/private/psamim-org-zotero
- ▶ add the psamim-org-zotero layer to ~/.spacemacs

summary: some useful spacemacs key chords SLIDE

- ▶ Undo: C-/
- ► Undo Tree: C-x u ("q" for quit)
- Exporting to PDF: C-c C-e (I) (p)
- Org-zotex-mode: Alt-m m z i (zotero insert)
- Deft: Alt-m a n
- ► Pandoc: Alt-m P /

Thank you

```
#+TITLE: The Org-mode for the Disorganised
```

#+AUTHOR: Chen Wei Zhu (Birmingham Law School)

#+EMAIL: c.w.zhu@bham.ac.uk

#+DATE: 13:00pm, 20 May 2019 (UG05 Murray Learning Centre)

#+LICENCE: Creative Commons--Attribution 4.0 International