Exploring documentation of GNU Emacs and Org-mode

What these projects are doing right

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Emacs ancester: TECO (1962)

- ► TECO : Tape/text Editor and COrrector
- An editor and a language to write text editing macros
- ► The language was interpreted and imperative
- ▶ Bad reputation as a "write-only" language (APL, ...)
- "TECO is not a text editor, it is a programming language"
- ► TINT: TINT Is Not TECO (very first recursive acronym)
- MUNG: MUNG Until No Good (cli for TECO)

Emacs (1976): Editing MACroS running on TECO

- ▶ RMS extends TECO: real-time full-screen mode, active keys
- First Emacs (1976) was written as a set of TECO macros
- ▶ Both an editor and an environment to run editing macros
- ► Modeless editing by default (vs Vi modal editing)
- Emacs code-base is using C and Emacs Lisp

Emacs initial screen

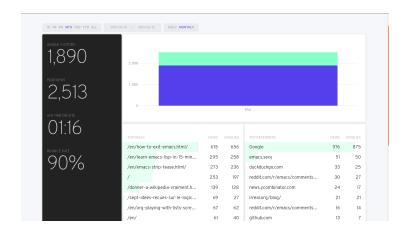


Emacs initial screen elements

- Link to a tutorial
- ► Link to a guided tour
- Link to the Emacs manual
- Link to ordering a manual
- Quick start: open a file/directory
- Quick help: recover a file

Anything missing?

(How to quit Emacs?)



(Not such a bad question after all)



Fundamental Emacs design elements

- menu-bar and tool-bar: make commands more accessible
- A buffer: the place to edit text
- ► A cursor: which state can give some information
- ► A modeline: a read-only place for quick info
- ► An echo area: a read/write place for quick interactions
- A fringe: where to display indicators
- ► A margin: for indicators (e.g. \ in the right margin)
- A header-line: for more modeline-like informations
- Transient regions: highlight selected text
- Scroll bars: visual clues on where you are
- Help text and tooltips: information on active text
- ► Text properties: for hints on syntax or actions
- Overlay properties: for more hints on actions



Beyond Emacs design elements

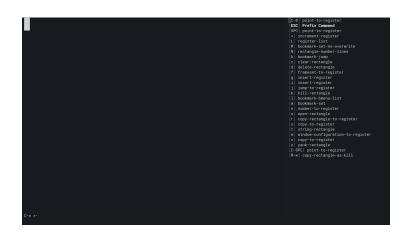
Emacs design extensible and configurable and place context at the heart of every interaction.

- ► linum-mode: display line numbers
- ▶ hl-line-mode: highlight current line
- guide-key-mode: display available keybindings
- ▶ helm-mode & ido-mode: contextual minibuffers
- ► M-x doctor RET: when you're really really lost

Example: Emacs scratch buffer

```
;; This buffer is for text that is not saved, and for Lisp evaluation.
;; To create a file, visit it with C-x C-f and enter text in its buffer.
```

Example: guide-key-mode



Emacs documentation-related commands

- C-h a : search for symbol or command
- C-h g : open the HTML manual in a browser
- ► C-h t : open the Emacs tutorial
- ▶ C-h k : type a key and get the command
- ► C-h f : search for function or commands
- ▶ C-h v : search for variables or options
- ► C-h C-d : help for debugging Emacs
- ▶ C-h C-h : display more help commands

There is a dedicated help-mode to display help information and documentation-oriented commands like info and man.

Emacs documentation materials and tools

Documentation materials:

- ► The GNU Emacs manual and guided tour
- Many online tutorials and screencasts
- ▶ https://www.emacswiki.org
- ▶ https://www.reddit.com/r/emacs/

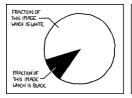
Documentation tools:

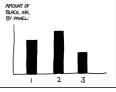
- GNU coding standards
- Recommandations on writing documentation
- ► M-x checkdoc RET: Emacs Lisp docstrings linter

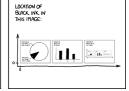
Emacs: really "self-documenting"?

"Is Emacs better at documenting itself than Google?" Terminology is still a blocker for beginners:

- ▶ yank => copy
- ▶ kill => cut
- ▶ window => pane
- ► frame => window
- ▶ kill buffer => close buffer







What about Org-mode?

```
#+TITLE: Example .org file
#+AUTHOR: Bastien
#+DATE: 2012-09-08 sam.
* Make a new website for orgmode.org
** TODO Make screenshots
   SCHEDULED: <2012-09-07 ven.>
   NEXT [#A] Add them to the website
   SCHEDULED: <2012-09-08 sam.>
** NEXT Publish the new website
   DEADLINE: <2012-09-09 dim.>
* Plain-text tables and spreadsheet...
* Working with source code
   website.org Top L27 [0] [(Org +5 Fill)] sam. sept. 8 08:15 0.30
```

Eating our own dogfood

- Org-mode is both a text editing/publishing tool and a todo list manager
- Org-mode is used to write documentation (and README.org on Github)
- Org-mode is used to track and display bugs (M-x debbugs-org RET)

worg/worg-todo.org

TODO central file for Worg

{Back to Worg's index}

This file is the central page for inserting tasks related to Worg.

If you keep a local copy of worg in ~/org/Worg/, then you can add ~/org/Worg/worg-todo.org to the list of your agenda files.

Then a simple git pull will update the tasks in this file, and your agenda view will be populated with Worg-related tasks.

Tutorials

Gather examples of custom agenda views from the mailing list

Tutorial about links (export and abbrev)

Tutorial about the LaTeX exporter

General tasks

TODO Create a "user" directory where users can have their own pages

TODO Build the FAQ from the survey

TODO Define column views for important files in Worg

TODO Start a FAQ for Org from the mailing list

TODO Make a better .css file for the HTML export?



Org-mode and the Joel test

Do you use source control?	Yes, Git
Can you make a build in one step?	Yes
Do you fix bugs before writing new code?	Generally
Do you have a spec?	For elements
Do you use the best tools money can buy?	Yes, Emacs
Do you have testers?	Yes, users
Do you do hallway usability testing?	Not enough
Do you have a bug database?	NO (Well, yes.)

See The Joel Test: 12 Steps to Better Code

Basic facts about org-mode development

- ► There are 22087 commits as of 2019-03-28
- We don't have a roadmap (but good willing users)
- We don't use Github (but code.orgmode.org)
- We don't have a bug tracker (but a mailing list)
- We have a single mailing list for developers and users

Github made it easy to report issues and to start projects: it does not mean this "default" widely used interface is not questionable.

Facts about org-mode and its documentation

- ▶ We have both a manual and a "compact" guide
- We have a book version of the manual for Org 7.0
- ▶ We started Worg, a git-based collaborative documentation
- The Org manual, guide and worg docs are .org files
- We taught users how to give useful feedback in the manual
- ▶ We promote the notion of "ECM" (complete minimal example)
- ► The mailing list is welcoming, a place to learn

For the Org 7.0 book, we received the help of a professional editor, which taught us a lot.

Worg: collaborative documentation

Hello Worg, the Org-Mode Community!

Sitemap and index

Introduction to Org-Mode and Worg

Org-mode is a powerful system for organizing your complex life with simple plain-text fi integrates all your notes, mindmaps, TODO lists, calendar, day planner, and project scher that can be easily searched (e.g. by grep), encrypted (e.g. by GnuPG), backed up and sync imported/exported, and accessed on the go (e.g. on an iPhone or Android smartphone). I authoring web pages and documents.

Check out some screenshots of Org-mode in action. See what people have to say about Org-mode, and read a few user stories!

Org.mode is distributed as part of the popular Emacs text editor and runs wherever Emacs runs, including on GNU-Linux, Windows, and Mac. Written by Carsten Dominik, it is currently maintained by Bastien Guerry and used by many helpful people who, like you, are desperate to get and stay organized.

The page you're reading is part of Worg, a section of the Org-mode web site that is written by a volunteer community of Org-mode fans. It includes tutorials, ideas, code snippets, etc., shared to make your introduction and customization of Org-mode as easy as possible. Worg is maintained by Matthew Lundin, a group of Worg contributors, and maybe you.

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 Latest changes to the Worg git repository
- Git'r done!



A mailing list as a bug tracker, are you insane?

- ► Bugs get a very large exposure
- ▶ It promotes a collective sense of responsability
- ► Each bug is discussed in a unique place (a thread)
- It is easy to refer to bugs with a simple URL
- Patches are all discussed on the list

Yes, we can do better

- Enhance documents about Org syntax and elements
- Fix obsolete resources on Worg
- ► Test Org-mode with beginners
- Test Org documentation with beginners
- ▶ Publish documentation for the Org stable and unstable
- **.** . . .

Resources

- ► fr.wikipedia.org/wiki/TECO
- ► fr.wikipedia.org/wiki/Emacs
- ▶ Where does the name "Emacs" come from?
- Stack Overflow: Helping One Million Developers Exit Vim
- ► How do I undo the most recent commits in Git?
- How to effectively use the self-documenting system of Emacs?
- ► The Joel Test: 12 Steps to Better Code

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