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Chapter 1

Installation

I've fetched Emacs from the GitHub mirror repository. The source code resides in ~/developer/software/emacs. Installation instructions reside in the source directory in the file named "INSTALL". I've chosen to use a build directory named "build". From the build directory run configure with:

```
$ ./../configure --with-x-toolkit=gtk3 --with-mailutils \
                 --with-imagemagick --with-xwidgets
```

I'm currently using version 26.1, by running:

```
$ git checkout emacs-26.1
```

There is some issue with highlighting in version 27.050 (potentially font-lock?) that makes it very annoying to write code. In general I should only use stable releases, which are specified on the Emacs website.

Chapter 2

Package Setup

2.1 Gnus

Gnus was a huge pain to setup. I finally got it working with the information at this link.

2.2 Term

Ansi term uses 8 colors for the terminal GUI. We can redefine these colors in an Emacs terminal by customizing their values with `M-x customize-group RET term RET`. The colors must also be configured in `~/.bashrc`.

Chapter 3

Functionality

3.1 Code Tagging and Navigation

3.2 Code Completion

I'm currently using company with various backends for completion in different major modes. For C/C++ I'm using company-rtags. This potentially has the benefit of being aware of the current project (e.g. completions for functions I've defined and custom headers) although this is unconfirmed. However, it's a bit slow and some of the completions don't seem entirely accurate. Another option could be company-ycmd. I believe this is faster although it may come at the expense of being unaware of the environment. This should be verified.

Chapter 4

Structure

Chapter 5

Best Practices

This Emacs manual page contains principles to follow when customizing key bindings. Basically, `C-c <letter>` (but not `C-c` followed by another control character) as well as `<f5>` through `<f9>` are free for users to define how they wish.

Chapter 6

To-Do

6.1 Customize Mode Line

I can customize mode-line-format on a per-mode basis (see this StackExchange question). Also, see the Emacs documentation on the subject.

6.2 Disable cursor in pdf-view-mode

I'd like to disable the cursor when viewing a PDF. It's distracting and provides no value. I've tried these two additions to `init.el` to no avail:

```
(add-hook 'pdf-view-mode-hook
          (lambda ()
            (make-variable-buffer-local 'cursor-type)
            (setq cursor-type nil)))
(add-hook 'post-command-hook
          (lambda ()
            (setq cursor-type (if pdf-view-mode t 'nil))))
```

These are the links I've found that address related issues:

How to change the cursor type and color?

Cursor parameters

How can I make the cursor change to block in overwrite mode?

Changing Cursor Dynamically

Cursor Display

6.3 Get much better at Gnus

6.4 Company Backends

There are various company backends that don't work. At the very least company-reftex and company-auctex aren't working. Based on info from the company-backends variable, it sounds like only one backend can be used at a time. This might be the issue.

6.5 load-file from Emacs

This causes cursor color to change and potentially other behavior as well.

6.6 align-current AUCTeX

align-current works well for tables with limited text. However, it propagates line breaks and so takes up a needless number of lines for long text sections that have to be manually adjusted. Also, I'd like to be able to run this globally for a whole buffer. The most similar action is align-entire but this aligns all tables to one another; I'd like aligning to be done on a per-table basis.

6.7 Shortcut keys not working in Auctex

I have to manually load the init file after emacsclient -nc in order for C-i keybindings to work. This should work off the bat, and in general its weird that loading the init file has any effect at all.

6.8 align uses 2 spaces in Emacs

The align environment seems to use 2 spaces in Auctex instead of the 8 used by everything else. It should be 8.

6.9 C++ company completions are not always accurate

For instance, `find_last_not_of` has incorrect completions. The old configuration did provide correct completions.

6.10 When Emacs opens it is not completely maximized

The right side of the frame is not quite right.

6.11 Single quote delimeter not working

Pressing ́twice causes three single quotes to be inserted.

6.12 Command that closes all buffers for which underlying file was deleted

Probably better, just do this automatically. One worry is if file was accidentally deleted and buffer allows you to keep the file alive. Still, existing buffers shouldn't be used as a sort of backup.

6.13 Window recenters in term mode

Often, when I type a character in term mode the window recenters instead of just leaving the cursor position where it is. I want it to just leave it there. This seems to relate to scrolling, specifically scroll-conservatively, etc. This link is useful. This SO answer describes how window points work and may also be useful. This appears to be caused by an interaction with helm. Test this by fully disabling helm and then testing.