

Week 1: Emacs

emacs,linux

"The customizable, extensible, self documenting, real-time display editor."

Defining Features

- **customizable (no programming required)**
 - users can customize fonts, colors, etc. in `~/.emacs`
- **extensible (programming required)**
 - run Lisp scripts to define new commands (dired)
- **self-documenting**
 - `C-h r` (manual) and `C-h t` (tutorial)
- **real-time**
 - edits are displayed onscreen as they occur

Getting Started with emacs

- emacs comes preinstalled with linux
- has both a GUI and CLI
- all emacs commands start with C- or M-
 - C- is Control +
 - M- is Meta(Alt) +
 - If Alt key does not work, press Esc first (not simultaneously)
- starting emacs
 - `emacs <filename>`
- exiting emacs
 - `C-x C-c`

Basic Editing

- **insert text** by simply typing it
- **undo**: `C-x u`
- **save changes**: `C-x C-s`
- **copy, cut, paste**
 - `M-w` (copy), `C-w` (kill), `C-y` (yank)
- **command repetition**
 - `M-# <command>` (`M-2 C-n` goes next 2 lines)

Directory Edit (dired) (C-x d)

- creates an emacs buffer containing list of dir
- allows you to operate on files
 - remove, rename, encrypt, decrypt, edit
- allows you to navigate filesystem
 - switch to different directories and list content

Other emacs Tricks

emacs as shell

- run shell commands
- M-! <command>, M-x shell (interactive shell)

emacs as IDE

- compile programs
- M-x compile, then specify command to compile
- **tip for hw:** gcc hello.c -o hello
- run the executable by running the shell command
 - ./hello