

# Introduction to Emacs

Ulrik Nyman

November 17<sup>th</sup> 2007

Last updated: November 17, 2008

## Today's Agenda

- Emacs - what is it and what does it do?
- AUCT<sub>E</sub>X
- The basic commands
- Exercises

## Text Editing

- An editor is the most important tool for a software developer
- Becoming good at an editor will save you heaps of time
- It does not have to be Emacs
  - But today, Emacs is being taught

## What is Emacs

- Emacs is an Editor
  - Somewhat old, +30 years
  - Reflected in user interface - not bad, just different
- Very flexible and extensible
  - This means a steeper learning curve
- Has a build-in tutorial
- There is an online reference card
  - Google for “emacs reference card”
- WWW: <http://www.gnu.org/software/emacs/>
- Windows:  
<http://www.gnu.org/software/emacs/windows/ntemacs.html>

## Emacs Features

- Everything conceivable!
- Syntax highlighting
- Search and replace
- Possible to create and redefine keybindings
- Has its own programming language (elisp)
  - Can be used to create new commands
- Have build-in: Mailreader, newsreader, tetris game, psychiatrist. . .

## AUCT<sub>E</sub>X

- AUCT<sub>E</sub>X is an Emacs environment for writing L<sup>A</sup>T<sub>E</sub>X
  - Makes it a lot easier to write L<sup>A</sup>T<sub>E</sub>X
- Features
  - Keybindings for creating sections, item lists, etc.
  - Compiling part of document and viewing it
- Has quite good documentation (but you have to read it)
- AUCT<sub>E</sub>X should start automatically when editing a .tex file.
  - Can be started manually with M-x latex-mode RET
- WWW: <http://www.gnu.org/software/auctex/>
- Emacs + AUCT<sub>E</sub>X prepackaged:  
<http://www.gnu.org/software/auctex/download-for-windows.html>

## Emacs: Basic Keystrokes

- Good news: The basic keys work as you expect them to
- C-x Means control and x
- M-x Means meta and x (alt is your meta key)
  
- Opening a file: C-x, C-f
- Saving a file: C-x, C-s
- Abort: C-g
- Quitting: C-x, C-c

## Emacs: Basic Keystrokes 2

- Undo C-\_
- Searching forward: C-s
- Searching backwards: C-r
  
- Set marker: C-space
- Cut region: C-w
- Copy region M-w
- Paste region: C-y



## Exercise 1: Install and start Emacs

- Install Emacs and AUCT<sub>E</sub>X, or:
- Use it from the application server (e.g., homer or marge)
  - Start an SSH tunnel with X support, and write `emacs&`
- Start up Emacs
- Open a file, write some stuff in it, and save it.

## Exercise 2: .emacs

- Fetch the sample .emacs from the course web page
- Go through it. Use the things you want, comment the rest out
- Enjoy your new Emacs settings

## Exercise 3: AUCT<sub>E</sub>X

- Open a L<sup>A</sup>T<sub>E</sub>X file
- Creation sections: C-c, C-s
- Creating environments: C-c, C-e
- Teletype font: C-c, C-f, C-t (easier than it looks like)
- Italic font: C-c, C-f, C-i
- Bold font: C-c, C-f, C-b
- Comment out region: Mark region and C-c ;
- Note: Tab completion is supported most places
- Get an overview of the AUCT<sub>E</sub>X documentation

## Exercise 4: Doctor and Tetris

- Talk to the doctor
  - ① Create a scratch buffer: C-x b RET
  - ② Start the doctor: M-x doctor RET
- Tetris
  - ① Create a scratch buffer: C-x b RET
  - ② Start Tetris: M-x tetris RET
- You kill the buffer with: C-x k RET

## Exercise 5: The Emacs tutorial

- Emacs tutorial
  - ① Again, create a scratch buffer: `C-x b RET`
  - ② Start the build-in tutorial with: `C-h t RET`
- The tutorial is rather long, so you can skip certain parts
- Exit when you've had enough.

## Exercise 6: Just use it

- Use Emacs for writing and coding

## Summary

- An editor is the most important tool for a software developer
- Advise: Become good at using one editor
- Will save you heaps of time
- Emacs is an editor - very flexible and powerful
- AUCTEX is a L<sup>A</sup>T<sub>E</sub>X environment for Emacs
  - Makes writing L<sup>A</sup>T<sub>E</sub>X less tedious
- The only way to become good at an editor is to use it