## Terminal Customization

Aditya & David

#### **Attendance Link**

https://tinyurl.com/terminalextratation

## Choosing a terminal emulator

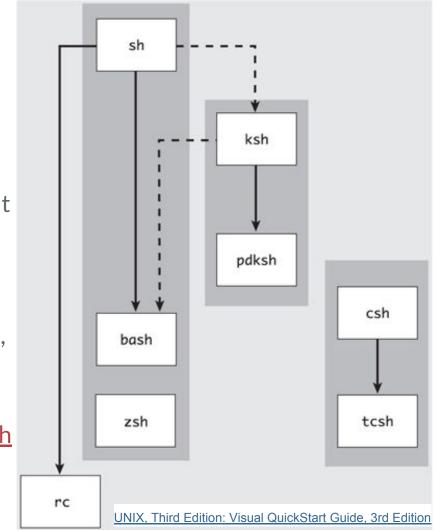
#### **Terminal emulators**

- Linux:
  - Default options GNOME Terminal, KDE Konsole, xterm
  - Low-latency options are alacriTTY and ST
- MacOs:
  - Really no reason to use anything other than iTerm2
- Windows:
  - o Bash on Ubuntu on Windows terminal
  - MobaXTerm
- Link to latency analysis by Dan Luu:
  - https://danluu.com/term-latency/

## Choosing a shell

#### **Traditional Shells**

- Always write scripts for either bash or sh.
  - If you write scripts for bash, use a shebang because some Unixes default to sh otherwise
- For interactive use, the most relevant are
   bash and zsh
- Most of these shells are POSIX-compliant, with the exception of csh and tcsh
  - Avoid these at all costs
  - http://harmful.cat-v.org/software/csh



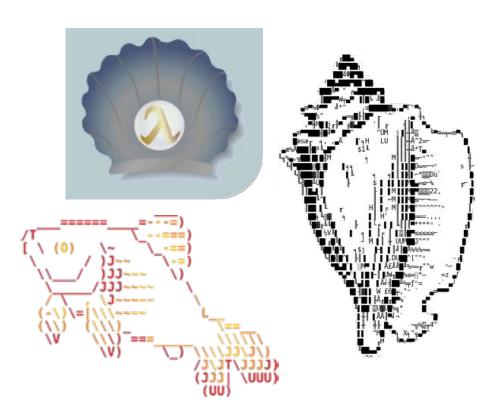
#### Oh my ZSH

- Starter pack for ZSH
  - Includes basically everything you could ever want
- This is the Spacemacs of terminal configuration
- https://ohmyz.sh/



#### Nontraditional shells

- Scheme shell (scsh)
  - https://scsh.net/
- The Friendly Interactive Shell (fish)
  - https://fishshell.com/
  - This is the most well-supported nontraditional shelll
- XONSH
  - https://xon.sh
  - Python-based shell
  - My personal favorite <3</li>
- None of these are POSIX-compliant, but all of them are awesome



# Choosing a terminal multiplexer

#### Terminal multiplexers

- These are programs that let you split and manipulate "windows" inside of your terminal
- The two main contenders are **tmux** and **screen** 
  - You should probably always use tmux
- Byobu is the starterpack for terminal multiplexers
  - Compatible with both tmux and screen
- Unfortunately, tmux and screen don't share the same editing language as Vim for manipulating windows, so I usually just work inside of Spacemacs
  - But a lot of people swear by terminal multiplexers, so definitely check them out!

### Configuring Bash

#### **Bash dotfiles**

 Bash reads from a complicated set of files, depending on whether a bash session is a login and/or interactive shell

```
/bin/bash
The bash executable
/etc/profile
The systemwide initialization file, executed for login shells
~/.bash_profile
The personal initialization file, executed for login shells
~/.bashrc
The individual per-interactive-shell startup file
~/.bash_logout
The individual login shell cleanup file, executed when a login shell exits
~/.inputrc
Individual readline initialization file
```

#### Using vi-mode in Bash

• In the ~/.inputrc file:

set editing-mode vi

set keymap vi-command

#### Configuring the prompt

- Bash has two main prompts: PS1 and PS2
  - PS1 is the main prompt, at the start of each command
  - PS2 is the continuation prompt, if you press enter before finishing a command
- To set the PS1 prompt, add something like the following to your bashrc:
  - export PS1="[\u@\h \W]\\\$"
  - There is an editing language for customizing your prompt
  - Or you can use a nifty site like this to create the string for you:
    - https://www.kirsle.net/wizards/ps1.html