Pimp My Terminal

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BU BUILDS

Follow Along!

Visit the companion repo for this presentation and workshop to follow along!

- *https://tinyurl.com/pimp-my-term-2025*
- *https://github.com/sharkbyte79/pimp-my-terminal-2025*

Disclaimer

Much of the functionality showcased here doesn't strictly apply for Windows users.

- Consider installing Windows Subsystem for Linux!

Meet Your Terminal

🟦 Some short history

Terminal emulators *emulate* the behavior of classic video terminals, such as DEC's VT100 series from the 1970s.

Video terminals were a serious evolution from the screenless hard-copy terminals that preceded them.

Meet Your Terminal (cont.)

■ Terminal Power

UNIX-like operating systems such as MacOS, GNU/Linux and the many breeds of BSD make the terminal a first-class citizen.

The terminal allows you to issue commands directly to the computer via the *shell*, plus:

- Navigate the filesystem GUI-free
- Run useful command line programs
- Easy installation of software with package managers
- Look like a hacker in cafes

Meet Your Terminal (cont.)

🟦 Many Options for Terminals

Most OS-s and DEs are shipped with a perfectly serviceable terminal emulator, but these all have lots to offer!

▨ Solid options for everyday use

- iTerm2 (MacOS only)
- Alacritty (Linux and MacOS)

▨ Shiny and new

- Kitty
  - Built in terminal multiplexing
  - Experimental **image** support
- Ghostty
  - Strong defaults
  - Written in *Zig*
  - Recently left private testing stage
- WezTerm
  - Configured in Lua, written in Rust!
  - Cross-platform (Windows, too!)

iTerm2, a popular terminal emulator for MacOS

Meet Your Shell

▇ What the Shell?

The **shell** is a command-line interface *run* by your terminal at startup.

- Works close to the operating system (interacts with the Kernel API)
- Your gateway to running CLI programs and coreutils (`cd`, `touch`, `rm`, etc.)
- Accompanied by a robust scripting language for complicated operations and automation

▇ Introducing Z Shell

Zsh (Z Shell) is the modern choice.

- Default login shell on MacOS since **2019** (Admittedly for licensing reasons...)
  - Highly extensible with a thriving ecosystem of community plugins
- Most Linux distros still default to Bash, but Zsh is available in their repos

Bash (Bourne-Again Shell)

Z Shell

Glyphs

🟦 Nerd Fonts

- CLI programs can take advantage of hundreds of glyphs and special symbols
- Nerd Fonts patches all of the best monospaced typefaces with icons for maximum compatibility

Pick your favorite at *https://www.nerdfonts.com/font-downloads*

Colors

■ Your Color Scheme

Terminal emulators are usually limited to 8 colors for display.

- • Each color gets a light and dark shade, for a total of 16

▦ Do It the Easy Way

Defining your own color schemes is absolutely doable, but there's tools to do it for you.

- • *https://terminal.sexy/*
- • *https://gogh-co.github.io/Gogh/*

Oh My Zsh

A community-driven, open-source framework for extending Zsh with plugins.

- Flashy, functional prompts
- Completions and autosuggestions
- Much more!

See more at *https://ohmyz.sh/*

Starship

◼ A prompt that's out of this world

Starship is a blazing-fast, customizable prompt for any shell.

- Use one of their *many* presets, or write your own!
- See your current Git branch, the language versions active in your cwd, etc., all in your prompt!

See more at *https://starship.rs/*

```
assigns/assign3/lib on ⌥ assign3 [!?] via 🐫 v5.2.1 (cs320-f25)
❯ echo Hello, World
Hello, World

assigns/assign3/lib on ⌥ assign3 [!?] via 🐫 v5.2.1 (cs320-f25)
❯ █
```

TMUX

■ Meet tmux

`tmux` is a *terminal multiplexer* that splits one terminal session into many!

Keep all your processes running *simultaneously* while you're:

- Editing code
- Testing in a REPL
- Running a server
- ssh'd into a remote machine

Available through Homebrew (MacOS) and your Linux distro's repositories.

▦ Don't go alone!

TPM is a plugin manager that makes theming and extending tmux a breeze.

```
set -g @plugin 'tmux-plugins/tpm'
set -g @plugin 'tmux-plugins/tmux-resurrect'
set -g @plugin 'tmux-plugins/tmux-continuum'

# Initialize TMUX plugin manager (keep this line at
the very bottom of tmux.conf)
run '~/.tmux/plugins/tpm/tpm'
```

Aliases

■ Why type more?

Aliases let you define *shorthand* for long or difficult to remember commands.

- Run utils with all the flags you like, every time

```
# in your .bashrc or .zshrc
alias c=clear
alias v=nvim
alias ls=eza -la
alias now='date +"%T"'
```

Honorable Mentions

■ Lest we forget...

- eza
- fastfetch
- btop
- presenterm
- topgrade