

# **Terminal Basics**

Your Workflow, Your Way

**Building Productive Development Environments**

# The Big Picture

"Create your own workflow and work environment that works for **you**."

This is a **starting point** based on collective experience.

The end goal: **Make you as productive as possible** to perform the task at hand.

# Why Terminal Skills Matter

- **Speed:** Commands execute faster than clicking through menus
- **Automation:** Repeat tasks with a single command
- **Remote Work:** Essential for SSH and cloud environments
- **Universal:** Works across Mac, Linux, and Windows (WSL)
- **Power:** Access to tools GUIs don't expose

*The terminal isn't scary—it's liberating.*

# Learning Path Overview

Terminal Apps → Shells → Editors → Navigation →  
Redirection → Advanced Topics → Mastery

**Today's Focus:** The foundation you need to start building your workflow

**Your Mission:** Experiment, customize, make it yours

# 1. Terminal Applications

## Built-in Options

- [Terminal.app](#) (Mac) - Simple, reliable, always there
- Good for: Quick tasks, beginners

## Power User Alternatives

- [iTerm2](#) - Split panes, customization, hotkeys
- [Terminus](#) - Cross-platform, modern UI
- [Warp](#) - AI-powered, IDE-like features

**Choose based on:** Your needs, not hype

## 2. Understanding Shells

### What is a Shell?

The interpreter between you and the operating system

### The Big Three

- **sh** - The original, maximum portability
- **bash** - The workhorse, most common
- **zsh** - Modern features, macOS default

**Pro Tip:** Learn bash first, explore zsh for daily use

# Shell Superpowers: oh-my-zsh

## Transform your zsh experience

- 300+ plugins (git, docker, kubectl)
- 150+ themes for beautiful prompts
- Auto-completion on steroids
- Community-driven

**Installation:** One command, instant productivity boost

*Make your terminal work harder so you don't have to.*

# 3. Text Editors

## **nano** - The Friendly One

- Commands shown on screen
- No learning curve
- Perfect for quick edits

## **vim** - The Power Tool

- Steep learning curve, massive payoff
- Available everywhere
- Muscle memory = speed

**Start with nano, graduate to vim when ready**

# 4. Filesystem Navigation

## Essential Commands

```
pwd      # Where am I?  
ls       # What's here?  
cd       # Take me there  
mkdir   # Create space  
rm       # Remove (carefully!)
```

**Master these, master your environment**

*Tab completion is your best friend*

# 5. Redirection & Pipes

**The Unix Philosophy:** Do one thing well, chain them together

```
command1 | command2 | command3
```

## Real Power

- > Save output to file
- >> Append to file
- | Chain commands together

*This is where terminal becomes magical*

# 6. Advanced Topics

## Level Up Your Game

- **Environment Variables** - Configure your environment
- **Aliases** - Create shortcuts for common commands
- **Command History** - Never retype commands
- **File Permissions** - Security and access control
- **Terminal Multiplexers** - screen/tmux for persistence

*Small optimizations compound into massive productivity gains*

# Your Action Plan

**Week 1:** Pick a terminal app, get comfortable

**Week 2:** Learn basic navigation and file operations

**Week 3:** Master your editor (start with nano)

**Week 4:** Explore pipes and redirection

**Month 2:** Customize with aliases and oh-my-zsh

**Month 3:** You're dangerous (in a good way)

# The Training Plan

## Comprehensive Guide Available

- 6 detailed sections with exercises
- Quick reference cheat sheets
- Troubleshooting tips
- Progressive learning path

**Location:** `terminal-basics/terminal-training-plan.md`

*Your roadmap to terminal mastery*

# Remember

- ✓ **There's no "right" way** - only what works for you
- ✓ **Start simple** - complexity comes with time
- ✓ **Practice daily** - even 5 minutes counts
- ✓ **Customize everything** - make it yours
- ✓ **Share knowledge** - we all learn together

# Key Takeaway

The terminal is not a destination

It's a tool to make you more productive

**Your workflow. Your rules. Your productivity.**

# Questions?

**Let's discuss how to make the terminal work for YOU**

Resources: `terminal-basics/terminal-training-plan.md`

# Thank You

**Now go build something amazing**

*The terminal is waiting...*