# Week 1 Teacher's Guide: "Setting Up Your Gear"

## Professional Development Environment

**Feb 17-21, 2025 | 30 hours**

## Monday: "Gig Ready" Introduction, Command Line Mastery, Professional Identity Setup

**6.5 hours**

### Morning Session (3 hours)

1. **Welcome & Program Overview** (30 min)
   * Course structure and expectations
   * Introduce Agile sprint format
   * First standup demonstration
2. **Command Line Fundamentals** (2.5 hours)
   * Why use the command line?
   * Navigation: pwd, ls, cd
   * File operations: mkdir, touch, cp, mv, rm
   * Practice exercises: See monday\_cli\_exercises.sh

### Afternoon Session (3.5 hours)

1. **Professional Identity Setup** (2 hours)
   * Create GitHub account
   * Professional profile setup (photo, bio)
   * Configure Git: git config --global user.name and user.email
2. **First Repository** (1.5 hours)
   * git init, git add, git commit
   * Writing meaningful commit messages
   * Create personal README.md

**Deliverable:** GitHub account + first repository with README

## Tuesday: Git Fundamentals - Repos, Commits, Branching, Collaboration

**6.5 hours**

### Morning Session (3 hours)

1. **Git vs GitHub** (30 min)
   * Local vs remote repositories
   * The Git workflow
2. **Remote Repositories** (2.5 hours)
   * git remote add origin
   * git push, git pull, git clone
   * SSH key setup
   * See tuesday\_git\_basics.sh

### Afternoon Session (3.5 hours)

1. **Branching & Collaboration** (3.5 hours)
   * Create and switch branches: git branch, git checkout
   * Merge branches
   * Introduction to merge conflicts (controlled exercise)
   * Pair students for collaborative exercise

**Deliverable:** Collaborative repository with branch history

## Wednesday: IDE Optimization (VS Code), Productivity Tools, Professional Shortcuts

**6.5 hours**

### Morning Session (3 hours)

1. **VS Code Installation & Setup** (1.5 hours)
   * Download and install VS Code
   * Tour of interface
   * Integrated terminal
2. **Essential Extensions** (1.5 hours)
   * For JavaScript: ESLint, Prettier, JavaScript ES6 snippets
   * For Python: Python, Pylance, Python Test Explorer
   * Git Graph, GitLens
   * Live Server

### Afternoon Session (3.5 hours)

1. **Productivity & Shortcuts** (2 hours)
   * Command Palette (Cmd/Ctrl + Shift + P)
   * Multi-cursor editing
   * Find and replace
   * Split editor views
   * See vscode\_shortcuts.md
2. **Git Integration in VS Code** (1.5 hours)
   * Source Control panel
   * Staging changes visually
   * Commit and push from VS Code
   * Viewing history

**Deliverable:** Fully configured VS Code workspace

## Thursday: Agile Methodology, Standups, Sprints, User Stories

**6.5 hours**

### Morning Session (3 hours)

1. **What is Agile?** (1 hour)
   * Agile vs Waterfall
   * Why companies use Agile
   * Scrum framework overview
2. **Agile Ceremonies** (2 hours)
   * Daily Standup (What I did, What I'm doing, Blockers)
   * Sprint Planning
   * Sprint Review
   * Sprint Retrospective
   * Practice standup with class

### Afternoon Session (3.5 hours)

1. **User Stories** (2 hours)
   * Format: "As a [role], I want [feature], so that [benefit]"
   * Acceptance criteria
   * Examples and practice writing stories
2. **Estimation** (1.5 hours)
   * Story points concept
   * Planning Poker exercise
   * Team velocity

**Deliverable:** 5 user stories with acceptance criteria for personal project

## Friday: Project Management Tools (Jira, GitHub Issues), Estimation Basics

**4 hours**

### Morning Session (2 hours)

1. **GitHub Projects** (1.5 hours)
   * Create project board
   * Columns: Backlog, To Do, In Progress, Done
   * Converting user stories to issues
   * Assigning and labeling
2. **Jira Overview** (30 min)
   * Similar to GitHub Projects but enterprise
   * Demo account walkthrough

### Afternoon Session (2 hours)

1. **Sprint Planning Exercise** (1 hour)
   * Set up course project board
   * Add all Week 1-4 assignments as issues
   * Prioritize and assign
2. **Week 1 Sprint Review & Retrospective** (1 hour)
   * Students demo their GitHub profiles and first repos
   * What went well? What needs improvement?
   * Preview Week 2

**Deliverable:** Complete project board with all course assignments

## Week 1 Assignment: Professional Development Environment Setup

**Due: Friday 5 PM | 70 points**

Students must submit:

1. **GitHub Profile** (15 points)
   * Professional photo
   * Bio describing bootcamp goals
   * Pinned repository
2. **First Repository** (20 points)
   * Meaningful README.md
   * At least 5 commits with good messages
   * Evidence of branching
3. **VS Code Configuration** (10 points)
   * Screenshot showing installed extensions
   * Custom settings saved
4. **Command Line Practice** (10 points)
   * Complete all exercises in monday\_cli\_exercises.sh
   * Submit via GitHub repository
5. **User Stories** (10 points)
   * 5 user stories for a simple app concept
   * Proper format with acceptance criteria
6. **Project Board** (5 points)
   * GitHub Projects board set up
   * Course assignments added as issues

**Blog Post (Optional Bonus: +10 points)**

* "My Developer Journey" post on Medium, Dev.to, or personal site
* Link added to GitHub profile

## Files Referenced

* monday\_cli\_exercises.sh - Command line practice exercises
* tuesday\_git\_basics.sh - Git commands reference
* vscode\_shortcuts.md - Essential VS Code shortcuts
* week1\_javascript\_setup.js - JavaScript environment verification
* week1\_python\_setup.ipynb - Python environment verification

## Notes for Instructor

* Keep lectures under 30 minutes; prioritize hands-on practice
* Pair students with different skill levels
* Have backup plan if GitHub is down (local Git operations)
* Rotate pairs daily to encourage collaboration

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