Alternative Setups: PowerShell & Android (UserLand)

AiCE Software Engineering Foundations — Setting Up Your Developer Environment

Not every laptop can run WSL, and not every student starting this course owns a laptop at all. This closing lesson covers two alternative paths: using PowerShell with a package manager called Scoop if your laptop can't run WSL, and using an Android app called UserLand if you don't yet have a laptop at all.

1. PowerShell — A Fallback for Laptops That Can't Run WSL

PowerShell is a terminal built into every Windows laptop by default. If your laptop's hardware doesn't support virtualization — or you simply can't get WSL working — PowerShell, paired with a package manager, gives you a working alternative for this course. The default PowerShell version on most laptops is outdated, so the first step is installing a current version.

Installing a Modern PowerShell

1. Open the Microsoft Store and search for PowerShell.

2. Select the official PowerShell app, then click Get to install it.

3. Wait for the download and installation to finish, then open it to confirm it works.

For quick access afterward, find PowerShell through the Windows logo menu (All → scroll to P), then drag it onto your desktop the same way you would drag any file: press and hold the left mouse button on it, move your cursor to the desktop, and release.

Navigating to a Safe Working Directory

Opening PowerShell for the first time typically places you inside System32 — a sensitive system directory you should avoid working in. Move to your home directory instead:

```
cd
```

Running cd with no destination takes you straight to your home directory — a safe place to install tools and do your work.

Installing Scoop — PowerShell's Package Manager

Recall from earlier in this unit that a package is simply software installed inside a terminal. On Ubuntu, apt is the tool that installs packages for you. PowerShell has no equivalent built in by default — you need to install one yourself. Scoop is that tool for PowerShell:

```
iwr -useb get.scoop.sh | iex
```

Wait for the installation to finish, then confirm it succeeded:

```
scoop --version
```

A version number confirms Scoop installed correctly. Scoop has its own set of commands, viewable with:

```
scoop help
```

The command you'll use most is install, which downloads and installs a named package — directly equivalent to apt install on Ubuntu.

Installing This Course's Packages With Scoop

The pattern is scoop install, followed by the package name. Install the same three tools you'd install on Ubuntu:

```
scoop install git
git --version
```

```
scoop install python3
python3 --version
```

```
scoop install vim
vim --version
```

Each install finishes with a version check, exactly like on Ubuntu — confirming git, python3, and vim are all ready to use.

Concept	Ubuntu (apt)	PowerShell (Scoop)
Package manager	Built in by default	Installed manually with a one-line command
Install syntax	sudo apt install package	scoop install package
Check a version	package --version	package --version (identical)

2. Ubuntu on Android — Using UserLand

If you don't have a laptop yet, you can still begin this course on an Android phone using an app called UserLand, which installs and runs a real Ubuntu terminal on your device. Typing code on a small phone screen is genuinely harder than on a laptop keyboard, so this is meant as a temporary starting point — by the time this course reaches the units with heavier amounts of code, plan to have a laptop in hand.

Installing UserLand

1. Open the Play Store and search for UserLand.

2. Install it, and open it once installation finishes.

3. Among the terminal options UserLand offers, select Ubuntu.

4. When prompted for a session type, choose Minimal, then Continue.

5. When asked what to launch, choose Terminal, then Continue.

The very first launch installs and sets up Ubuntu on your phone, which can take several minutes depending on your internet speed. Every launch after that opens immediately, with no reinstallation.

> **Exiting Properly**
> *To close the terminal session correctly rather than just switching apps, type exit and press Enter.*

For quick access, send the UserLand app to your phone's home screen, the same way you would with any other app shortcut.

Installing Packages Inside UserLand

Because UserLand runs a genuine Ubuntu terminal, every command from earlier in this unit works identically — same syntax, same package manager. Start by updating:

```
sudo apt update
```

Then install the same core packages:

```
sudo apt install vim
vim --version
```

```
sudo apt install git
git --version
```

```
sudo apt install python3
python3 --version
```

Use clear whenever you want a fresh screen along the way:

```
clear
```

Once vim, git, and python3 are all installed and verified, your Android phone has a fully working Ubuntu terminal — the same environment this entire course is built around, just running on different hardware.

Key Takeaways

PowerShell with Scoop is the fallback for laptops that can't run WSL — install a current PowerShell, install Scoop with one command, then use scoop install exactly where you'd use sudo apt install on Ubuntu. UserLand brings a genuine Ubuntu terminal to an Android phone, using identical apt commands to Ubuntu itself, and is meant to get you started while you work toward getting a laptop before this course reaches its heavier coding units. Whichever path brought you here — WSL, PowerShell, or UserLand — you now have a working terminal with vim, git, and python3 installed and verified, and you're ready to begin the very first working unit of this course.