

LEVEL 2: APPLIED AUTOMATION — TRAINING PLAN

Prepared for: Brock Merkwán

Focus: scripting + automation + containerization + security loops

Tools: macOS, Docker, Tailscale, RunPod, Git

Goal: Build self-running scripts, automate updates, and create a tiny CI/CD system.

Module 1 — Automation Basics in Action

Goal: Turn simple one-liners into reusable automation scripts.

Project: build `update.sh` and `backup.sh` for your dev-notes repo.

Sample script:

```
#!/bin/zsh
LOG=~/.Projects/dev-notes/daily_logs/$(date '+%F')_update.log
git pull
git add -A
git commit -m 'auto: daily update $(date '+%F')'
git push
echo '■ update complete $(date)' >> $LOG
```

Module 2 — Scripting with Purpose: System Health & Audit

Goal: collect system data + security info automatically.

Project: `sys_audit.sh`

```
#!/bin/zsh
mkdir -p ~/.Projects/dev-notes/security/audits
OUT=~/.Projects/dev-notes/security/audits/$(date '+%F')_mac_audit.txt
echo 'System Audit $(date)' > $OUT
uname -a >> $OUT
df -h >> $OUT
vm_stat >> $OUT
brew outdated >> $OUT
sudo system_profiler SPFirewallDataType >> $OUT
echo 'Audit saved to $OUT'
```

Module 3 — Docker Automation Loop

Goal: use Docker + bash to spin up, test, and destroy lab containers.

```
docker pull vulnerables/web-dvwa
docker run -d -p 8080:80 vulnerables/web-dvwa
# test at http://localhost:8080
docker rm -f $(docker ps -q --filter ancestor=vulnerables/web-dvwa)
```

Module 4 — GitHub Actions Mini-CI

Goal: learn CI/CD by publishing Markdown notes to HTML using GitHub Actions.

```
name: Build Dev Notes
on: [push]
jobs:
  build:
    runs-on: ubuntu-latest
    steps:
      - uses: actions/checkout@v3
      - name: Install MkDocs
        run: pip install mkdocs
      - name: Build site
        run: mkdocs build
```

Module 5 — RunPod Automation Bridge

Goal: launch Docker tasks remotely via Tailscale.

```
ssh runpod 'cd ~/discordbot1.0 && git pull && docker restart discordbot'
```

FINAL CAPSTONE

Combine all modules into an automation_suite/ folder in your repo. Tag completion as v2.0 to mark milestone achievement.

Prepared by: ChatGPT (Training Director) — October 2025