30 Days DevOps Roadmap

This 30-day DevOps roadmap is designed to take you from a complete beginner to being interview-ready in one month. Each day focuses on a mix of theory and hands-on practice, ensuring you build skills that are relevant in real-world DevOps roles. Spend 1 hour on theory and 1 hour on practice daily. Document your progress on GitHub to showcase your learning journey.

Week 1 - Linux Fundamentals (Day 1-7)

- Day 1: Linux intro, basic commands (ls, cd, pwd, mkdir, rm), File system structure

- Day 2: File operations (cp, mv, cat, nano, vi), File permissions (chmod, chown, umask)

- Day 3: Users, groups, sudo, Environment variables

- Day 4: Package managers (apt, yum, dnf), Installing/updating software

- Day 5: Process management (ps, top, kill, nice), Background jobs

- Day 6: Disk usage (df, du), Networking commands (ping, curl, wget, netstat)

- Day 7: Bash scripting basics (variables, loops, conditions)

Week 2 - Git & CI/CD Basics (Day 8-14)

- Day 8: Git intro, installing Git, Creating repo, clone, commit, push

- Day 9: Branching & merging, Resolving merge conflicts

- Day 10: Git stash, revert, reset, GitHub/GitLab intro

- Day 11: CI/CD intro & concepts, Popular tools: Jenkins, GitHub Actions

- Day 12: Installing Jenkins/GitHub Actions, First pipeline creation

- Day 13: Automating builds & tests in pipeline

- Day 14: Integrating Git with CI/CD pipeline

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Week 3 - Containers & Orchestration (Day 15-21)

- Day 15: Intro to Docker & why use it, Installing Docker

- Day 16: Docker images & containers (docker build, docker run, docker ps)

- Day 17: Dockerfile basics, Building custom images

- Day 18: Docker volumes & networks

- Day 19: Kubernetes intro & core concepts, Minikube installation

- Day 20: Pods, deployments, services

- Day 21: Scaling, rolling updates in Kubernetes

Week 4 - Cloud, Automation & Monitoring (Day 22-30)

- Day 22: AWS intro (Free tier account setup), EC2 basics

- Day 23: S3 storage basics & permissions

- Day 24: Infrastructure as Code intro (Terraform basics), First Terraform script

- Day 25: Terraform variables, outputs, state files

- Day 26: Configuration management intro (Ansible basics), First playbook

- Day 27: Monitoring tools intro (Prometheus, Grafana), Installing Prometheus

- Day 28: Grafana dashboards setup

- Day 29: Full project: Deploy app -> Dockerize -> Push to registry -> Deploy on K8s -> Monitor

- Day 30: DevOps interview prep, Resume building + mock questions