📝 Mock DevOps Intern Interview Q&A (for 2 Years of Experience)

1. Tell me about yourself.

👉 *"I have 2 years of experience in IT/software, where I worked on [mention: e.g., system support, development, or cloud-related tasks]. During this time, I gained practical exposure to Linux environments, Git for version control, and supporting deployment processes. I also got interested in automation and containerization, so I started learning tools like Docker and basic CI/CD pipelines. I now want to fully focus on DevOps, and I see this internship as a chance to deepen my skills in cloud, automation, and modern DevOps practices."*

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2. Why do you want this internship if you already have experience?

👉 *"My experience gave me a strong foundation, but DevOps is a fast-growing and specialized area. I want structured learning, exposure to advanced tools like Kubernetes and cloud-native services, and a chance to work closely with teams that follow DevOps best practices. That's why I see this internship not as a step back, but as a focused step forward into DevOps as my long-term career path."*

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3. What do you understand by DevOps?

👉 *"DevOps is a culture and set of practices that bring development and operations teams together. The goal is faster and more reliable software delivery through automation, continuous integration, continuous deployment, and monitoring. Instead of working in silos, DevOps encourages collaboration, automation, and feedback loops to improve efficiency and reduce errors."*

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4. What tools have you worked with so far?

👉 *"In my previous role, I used Git daily for version control. I worked on Linux servers for tasks like managing processes, permissions, and writing shell scripts for automation. I've explored Docker for containerizing simple applications, and I have basic hands-on experience with AWS services like EC2 and S3. I'm also familiar with CI/CD concepts and have experimented with GitHub Actions for basic automation."*

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5. Can you explain CI/CD in simple terms?

👉 *“CI/CD means Continuous Integration and Continuous Deployment/Delivery.

- In CI, developers frequently merge their code into a shared repository, and automated tests run to ensure the code works.
- In CD, once the code passes tests, it’s automatically deployed to staging or production.
  This process makes software delivery faster, reduces manual errors, and gives quicker feedback to developers.”*

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6. What’s the difference between Git clone, pull, and fetch?

👉 *“git clone is used once to copy a remote repository to my local machine.*
git pull updates my local branch with the latest changes from the remote and merges them automatically.
git fetch only downloads the updates from the remote but doesn’t merge them into my local branch until I explicitly do so.”

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7. What is Docker, and how is it different from a virtual machine (VM)?

👉 *“Docker is a containerization tool that packages applications with all dependencies so they run consistently anywhere.*
The difference is that Docker containers share the host OS kernel, making them lightweight and faster, while VMs run a full guest OS, which makes them heavier and slower to start.”

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8. How would you troubleshoot if a server becomes very slow?

👉 *“I’d start by checking system resources with commands like top or htop for CPU/memory usage. Then, I’d look at running processes with ps, check disk usage with df -h, and review logs (journalctl, /var/log). If it’s a web service, I’d check whether the application or network (ping, curl) is the bottleneck. This helps me narrow down whether it’s resource exhaustion, a faulty process, or a network issue.”*

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9. What do you know about Kubernetes?

👉 *“Kubernetes is a container orchestration platform. It manages deployment, scaling, and operations of containers automatically. The main building blocks are pods (smallest deployable units), deployments (manage replicas and rolling updates), and services (expose applications to users). I’ve studied the basics and I’m eager to gain more hands-on experience in real projects.”*

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10. Why should we select you?

👉 *"I bring 2 years of practical experience in IT with exposure to Linux, Git, deployments, and cloud basics. At the same time, I have the enthusiasm of a learner who wants to grow into a full-fledged DevOps engineer. I believe I can contribute immediately with my existing skills while also picking up advanced DevOps practices quickly. That combination of experience plus eagerness to learn makes me a good fit for this internship."*

✅ **Tips for You in the Interview**:

- Always balance: **"I have done this"** + **"I am eager to learn this further."**
- Keep answers simple and confident; don't go too deep unless asked.
- Be ready with **1–2 small examples/projects** (even self-learning projects) that show your curiosity.

📌 DevOps Interview Quick Revision Cheat Sheet (For 2 Years Exp)

1. Linux Basics

- Common commands:
  - Navigation: ls, cd, pwd
  - File ops: cat, head, tail, cp, mv, rm
  - Permissions: chmod, chown
  - Processes: ps, top, kill
  - Disk/Memory: df -h, du -sh, free -m
- Logs: /var/log/, journalctl -xe

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2. Git Essentials

- git clone → first copy of repo
- git pull → fetch + merge changes
- git fetch → fetch only (no merge)
- git merge → combine branches
- git checkout -b → create new branch
- Conflict handling → edit file → git add → git commit

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3. CI/CD Basics

- **CI (Continuous Integration):** frequent commits, automated builds/tests
- **CD (Continuous Delivery/Deployment):** automated release to staging/prod
- Example pipeline: *Code → Build → Test → Deploy*
- Tools: Jenkins, GitHub Actions, GitLab CI

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4. Docker Quick Notes

- docker ps → running containers
- docker images → list images
- docker build -t name . → build image
- docker run -d -p 8080:80 name → run container

- Difference from VM: lightweight, shares host kernel

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5. Kubernetes Basics

- **Pod** → smallest deployable unit (container wrapper)
- **Deployment** → manages replicas/updates
- **Service** → exposes pods (LoadBalancer/ClusterIP/NodePort)
- Scaling: kubectl scale deployment app --replicas=3

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6. Cloud (AWS basics)

- **EC2** → virtual servers
- **S3** → object storage
- **IAM** → users/roles/policies
- **VPC** → networking for cloud resources
- Public vs Private IP → internet vs internal use

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7. Networking Quickies

- **DNS** → resolves domain → IP
- **HTTP vs HTTPS** → secure layer with SSL/TLS
- **TCP vs UDP** → TCP reliable (handshake), UDP fast (no handshake)

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8. Troubleshooting Flow

When app/server is slow/down:

1. Check **system resources** (top, df -h, free -m)
2. Check **logs** (journalctl, app logs)
3. Check **service status** (systemctl status)
4. Check **network** (ping, curl)
5. Restart service if needed

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9. Soft Skills / HR Prep

- Why DevOps? → *Bridge dev & ops, faster delivery, automation.*
- Why internship after 2 yrs? → *Foundation strong, now want focused DevOps exposure.*
- Why you? → *Experience + eagerness to learn + team player.*

✅ **Final Tip Before Interview:**

- Keep answers **short & clear** (2–3 lines max unless asked deeper).
- If you don't know → say *"I haven't worked on it yet, but I know the basics and I'm eager to learn."*
- Show **enthusiasm + confidence** — that's what will set you apart.