🐙 GitHub Cheat Sheet

Your quick reference guide for essential GitHub commands and workflows.

🔗 Repositories

✅ Create a New Repo

- Click the **+** icon in the top-right corner → New repository
- Name it, add description, choose visibility
- Optional: Initialize with README, .gitignore, license

🌐 Clone a Repository

```
git clone <repo-url>
```

🔄 Remote Management

🔍 View Remotes

```
git remote -v
```

➕ Add Remote

```
git remote add origin <repo-url>
```

🔄 Change Remote URL

```
git remote set-url origin <new-url>
```

🚀 Push & Pull

🔼 Push to GitHub

```
git push -u origin main
```

⬇️ Pull from GitHub

```
git pull origin main
```

🌿 Branching

📂 Create Branch

```
git branch <branch-name>
```

🔄 Switch Branch

```
git checkout <branch-name>
```

➕ Create & Switch

```
git checkout -b <branch-name>
```

❌ Delete Branch

```
git branch -d <branch-name>
```

🔀 Merging & Conflicts

🔀 Merge Branch

```
git merge <branch-name>
```

❌ Abort Merge

```
git merge --abort
```

🔧 Forks & Pull Requests

🍴 Forking

- Go to a repo → Click **Fork** (top-right) → Choose your account

🔃 Submit Pull Request

1. Fork → Clone → Create a branch → Make changes → Push
2. On GitHub, go to your repo → **Pull Request** → Compare and submit

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💻 GitHub CLI (Optional)

🛠️ Setup

```
gh auth login
```

📂 Create a repo

```
gh repo create <name>
```

🔃 Create pull request

```
gh pr create --fill
```

🔒 Security & Settings

- Use `.gitignore` to avoid pushing sensitive files.
- Set up **branch protection rules** on GitHub for `main`.
- Enable **2FA** for better account security.

📝 README Tips

- Use markdown for formatting.
- Include project title, description, setup, usage, and license.
- Add badges (CI status, license, stars, etc.).

📘 **For More Help**:

- GitHub Docs
- GitHub CLI
- GitHub Learning Lab