

Absolutely. Here's a **comprehensive Git command cheat sheet** tailored to real-world scenarios like yours — including recovering from lost environments, pushing updates, avoiding merge conflicts, and more.

Git Command Help Sheet – Practical Scenarios

INIT & SETUP

Task	Command
Initialize a new Git repo	<code>git init</code>
Add a remote origin (GitHub repo)	<code>git remote add origin <URL></code>
Check current remotes	<code>git remote -v</code>
Clone a repo from GitHub	<code>git clone <URL></code>

STAGING & COMMITTING

Task	Command
Stage all changes	<code>git add .</code>
Commit changes with message	<code>git commit -m "Your message"</code>
See what changed (unstaged/staged)	<code>git status</code>
See the diff of unstaged changes	<code>git diff</code>
View commit history	<code>git log --oneline --graph --all</code>

PUSHING & PULLING

Task	Command
Push code to GitHub (first time)	<code>git push -u origin main</code>
Force push (overwrite GitHub version)	<code>git push --force</code> or <code>git push -f</code>
Pull with unrelated histories (e.g. after re-init)	<code>git pull origin main --allow-unrelated-histories</code>
Pull latest changes from GitHub	<code>git pull origin main</code>
Set the default branch to main	<code>git branch -M main</code>

CONFLICT RECOVERY & SAFE BACKUP

Task	Command
Stash (temporarily save) your local changes	<code>git stash</code>
Apply stashed changes	<code>git stash pop</code>
View stash list	<code>git stash list</code>
Back up local files (manual)	<code>cp -r ./project ./project_backup</code>
Recover from GitHub by cloning again	<code>git clone <repo-url></code>

COMMON ERRORS & FIXES

Issue	Fix
You have to pull first	<code>git pull --rebase</code> OR <code>git pull --allow-unrelated-histories</code>
Remote already exists	<code>git remote set-url origin <new-url></code>
"fatal: refusing to merge unrelated histories"	<code>git pull origin main --allow-unrelated-histories</code>
"Repository not found"	Check URL and access permissions
GitHub push denied (SSH vs HTTPS conflict)	Use the correct protocol or re-add remote

TESTING & DRY RUNS

Task	Command
Preview what will be committed	<code>git diff --staged</code>
See last commit	<code>git show</code>
See what files changed in history	<code>git log --stat</code>

RESETTING & CLEANUP

Task	Command
Discard all local changes (DANGER)	<code>git reset --hard</code>
Remove staged files	<code>git reset</code>
Remove untracked files	<code>git clean -f</code>
Reset to specific commit	<code>git reset --hard <commit-id></code>

ADVANCED & SAFETY

Task	Command
Create a new branch	<code>git checkout -b new-branch</code>
Switch branches	<code>git checkout main</code>
See current branch	<code>git branch</code>
Delete a branch (local)	<code>git branch -d branch-name</code>
Tag a release	<code>git tag v1.0</code>
Push tag to remote	<code>git push origin v1.0</code>

GITHUB-SPECIFIC COMMANDS

Task	Command
Push to GitHub with SSH	<code>git remote set-url origin git@github.com:user/repo.git</code>
Push to GitHub with HTTPS	<code>git remote set-url origin https://github.com/user/repo.git</code>
Authenticate with personal access token	Use <code>https://<username>:<token>@github.com/user/repo.git</code>
Change visibility on GitHub	Go to Settings > Danger Zone > Change visibility

Best Practices

- Always `git status` before and after staging.
 - Use descriptive commit messages: `git commit -m "Fix API auth error"`
 - Pull before you push if you're unsure: `git pull origin main`
 - Never `--force` unless you're sure what you're overwriting.
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