Git Command Cheat Sheet

Setup and Configuration

Command	Description
`git config --global user.name "Your Name"`	Set the name that will be attached to your commits
`git config --global user.email "your.email@example.com"`	Set the email that will be attached to your commits

Creating Repositories (On Github, then Downloading)

Command	Description
`git clone https://github.com/username/repo-name.git`	Clone a remote repository to your local machine

Basic Snapshotting

Command	Description
`git status`	Check the status of files (untracked, modified, staged)
`git add filename.txt`	Add a specific file to the staging area
`git add .`	Add all modified and new files to the staging area
`git commit -m "Commit message"`	Commit staged changes with a message
`git commit -am "Commit message"`	Add modified files and commit in one step (doesn't include new files)

Branching and Merging

Command	Description
`git branch -a`	List all branches (local and remote)
`git checkout branch-name`	Switch to a branch
`git checkout -b branch-name`	Create and switch to a new branch
`git branch -d branch-name`	Delete a branch (safe)

Undoing Changes

Command	Description
`git restore filename.txt`	Discard changes in working directory (Git 2.23+)
`git restore --staged filename.txt`	Unstage changes (Git 2.23+)

`git reset --soft HEAD~1`	Undo last commit, keep changes staged

Example Collaborative Workflow

> **BEST PRACTICES:** Always make sure to pull before starting your work! Your collaborators may have made changes that you'd want to update!

```
# Create or find a repository on https://github.com, then clone it
git clone https://github.com/your-username/forked-repo.git

# Create your own branch
git checkout -b my-branch

# Make changes to some files, add, commit, and push
git add .
git commit -m "Add feature"
git push -u origin my-branch

# Go to the repository on https://github.com, create a pull request (PR) to merge
it

# After PR approval, move back to main, pull new changes, delete the branch
git checkout main
git pull
git branch -d feature-branch
```