

Git Cheatsheet For Small Business Owners Supercharge Your Workflow

Swipe through to learn Git basics and commands you can use today!





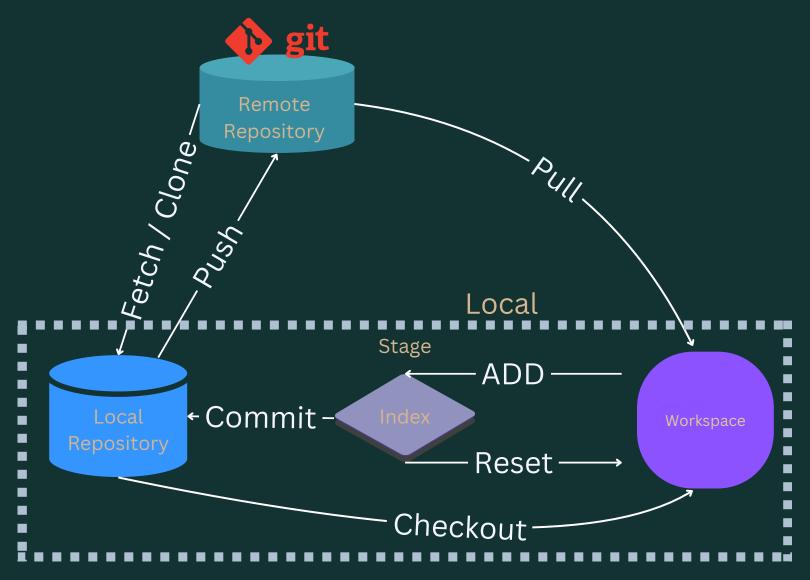
Why small businesses need Git?

- Track changes to files effortlessly.
- Collaborate with your team seamlessly.
- Safeguard your data with version control.
- Cost-effective and open source!



What is Git?





A version control system that helps manage changes in your files and projects.

Local vs. Remote Repositories:

- Local: Stored on your computer.
- Remote: Stored on platforms like GitHub or GitLab.

Version control is essential for managing changes in any project. Whether you're a developer or a small business owner exploring tech, understanding Git can help you streamline collaboration and track your progress. Here's a quick Git cheatsheet to get you started, with a detailed guide linked at the end.

Quick Git Basics



Key Terms:

- Local Repo (Repository): A directory on your computer that stores all the files and history of your project.
- Remote Repository: An online version of your local repository, hosted on platforms like GitHub, GitLab, or BitBucket.
- Cloning: The act of making a duplicate of a repository in a new directory.
- Commit: A saved snapshot of your project that you can revisit.
- Branch: A separate copy of the project for isolated development work without affecting the main code.
- Merge: The process of combining changes from different branches into one.

Advanced Terms:

- .gitignore File: A configuration file that specifies files or directories Git should ignore (e.g., private files or large datasets).
- Staging Area: A temporary space where changes are held before being committed.
- Git Stash: A temporary storage for changes you're not ready to commit but want to save for later.
- Commit ID (Hash): A unique identifier for each commit, used to reference specific snapshots.
- HEAD: A pointer to the most recent commit in the current branch.





Setting Up Git

Installation:

- Mac: \$ brew install git
- Linux: \$ sudo apt-get install git
- Windows: Download from <u>Git for Windows</u>. follow the steps.





Credentials & Configuration:

```
# Set your email
$ git config --global user.email "you@example.com"

# Set your name
$ git config --global user.name "Your Name"

# Create an alias named gc for the git commit command
$ git config --global alias.gc commit
$ gc -m "New commit"

# Create an alias named ga for the git add command
$ git config --global alias.ga add

# List configurations
$ git config --list
```





Daily Git Commands

Starting a Repo:

- # Create a new repository
- \$ git init
- # Clone an existing repository
- \$ git clone <repo_url>

Tracking Changes:

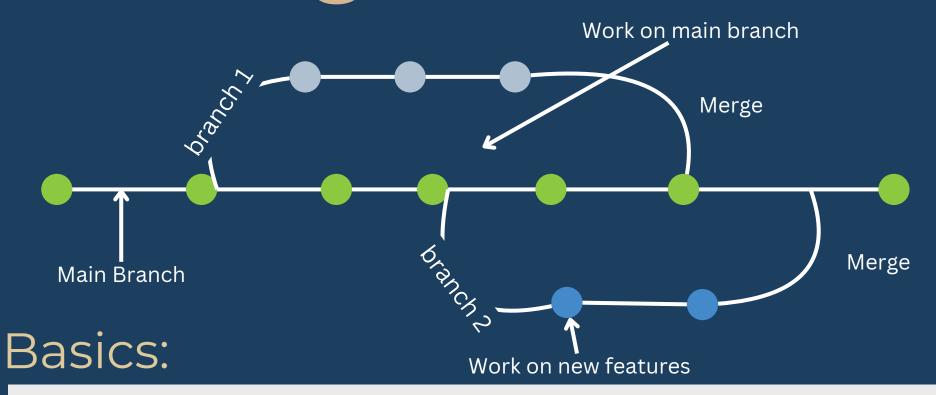
- # Add files to staging
- \$ git add <file_name>
- # Save a snapshot of staged changes
- \$ git commit -m "Your commit message"
- # Combine adding and committing
- \$ git add . && git commit -m "Quick commit"

Viewing Changes:

- # Compare changes since last commit
- \$ git diff

Tip: Remember to always write meaningful commit messages!

Working with Branches



- # List branches
- \$ git branch
- # Create a new branch
- \$ git branch <branch_name>
- # Switch to a branch
- \$ git checkout <branch_name>
- # Merge a branch into the main branch
- \$ git checkout main
- \$ git merge <branch_name>
- # Safe delete (merged branches)
- \$ git branch -d <branch_name>
- # Force delete (unmerged branches)
- \$ git branch -D <branch_name>

Collaborating with a Team



Syncing Changes:

```
# View changes to your files.
$ git status

# Pull updates from the remote repo
$ git pull

# Push commits to the remote repo
$ git push

# Undo a specific commit without affecting later
git revert < commit_id>
```

Managing Remotes:

```
# Add a remote repository
```

- \$ git remote add origin <url>
- # Remove a remote repository
- \$ git remote rm origin

Tips: Always check git status before committing! -



Advanced Commands

Fixing Mistakes:

- # Undo the latest commit (keep changes)
- \$ git reset HEAD~1
- # Discard all changes since last commit
- \$ git reset --hard HEAD~1

Stashing:

- # Temporarily save changes
- \$ git stash
- # Reapply saved changes
- \$ git stash pop

Logs and History:

- # View commit history
- \$ git log
- # Recover lost commits
- \$ git reflog

Start using Git today and streamline your business!

www.aitransformers.org



Learn More ...

For a deeper dive into Git workflows, troubleshooting conflicts, and advanced commands, check out our detailed blog post here. You can also read it on our website here

Empower your small business with effective version control today! Git isn't just for developers; it's a tool for anyone managing projects and collaborations.

