Git Usage Notes
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REFERENCES
- ChatGPT 4o mini
- https://www.atlassian.com/git/tutorials/syncing
- Engineering Large Software Systems course at the University of Toronto

COMMANDS

git remote: manage and interact with remote repositories. "git clone" automatically creates the "origin" remote connection pointing to the cloned repo.

git remote	List short names of remotes configured.
git remote -v	List remotes with fetch and pull URLs.
git remote add [name] [url]	
git remote remove [name]	
git remote rename [old-name] [new-name]	
git remote get-url [name]	
git remote set-url [name] [new-url]	
git remote show [name]	Display detailed info on a remote.

git checkout: branch switching and file restoring.

git checkout branch	Switch branch.
git checkout -b branch	Create and switch to branch.
git checkout [commit] -- [file-path] git checkout HEAD~1 -- path/to/file.txt	Restore file from commit. HEAD~1 is the commit just before current HEAD.

git push: push changes to remote repository.

git push --set-upstream origin branch	--set-upstream is used when branch has yet to be pushed to remote
git push -u origin branch	-u is alias of --set-upstream
git push origin branch	Pushing without setting upstream if it's already set up

USAGE
Syncing a Forked Repository (Merge Commit)

1	git remote add upstream git@github.com:org/repo.git	Add upstream remote
2	git remote	Check remote added.
3	git fetch upstream	Fetch changes from upstream repo.
4	git checkout main	Switch local branch.
5	git merge upstream/main main	Merges upstream main into local main. Fast forward if no conflicts.
6	git push origin main	

Syncing a Forked Repository (Rebase)
Identical first few steps as merge commit.

4	git checkout main	Switch local branch.
5	git pull --rebase upstream main	Rebase branch onto upstream branch.
6	git push origin main --force	Force push to fork if pushed commits before rebase.