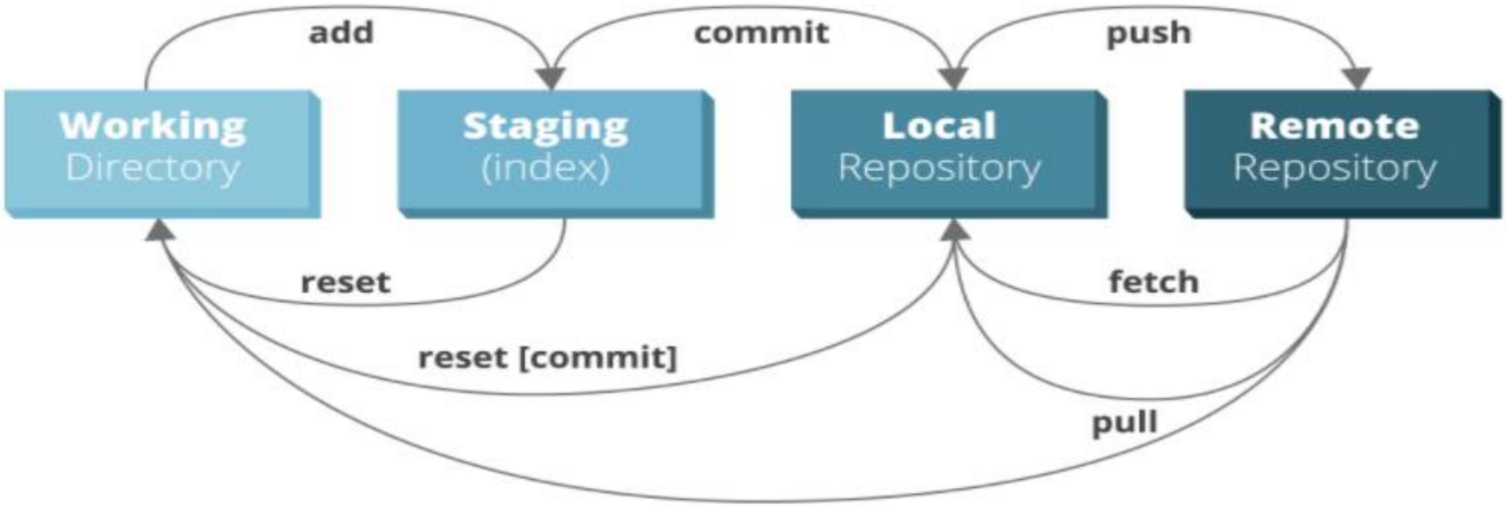
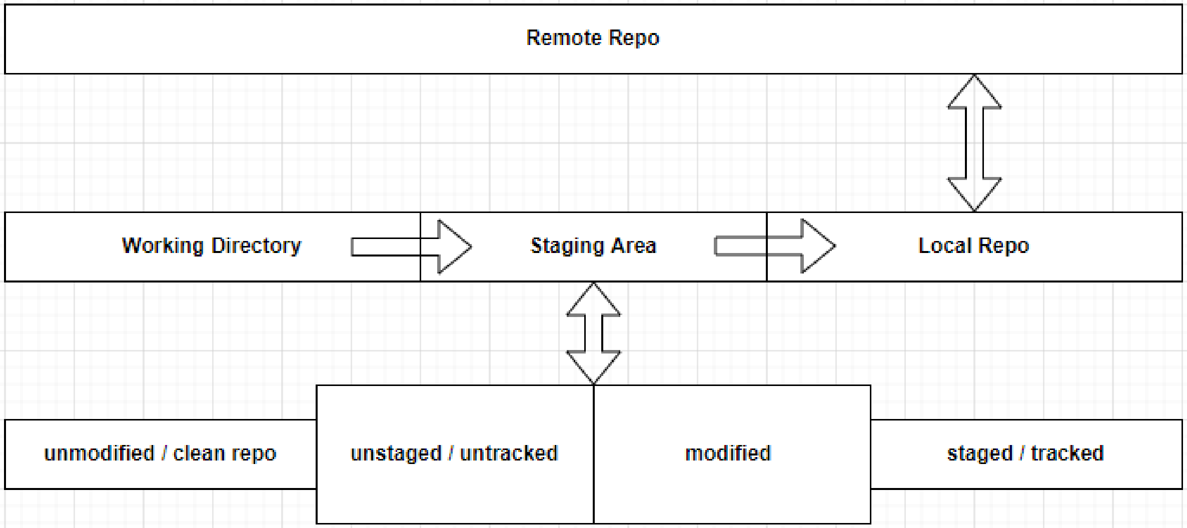
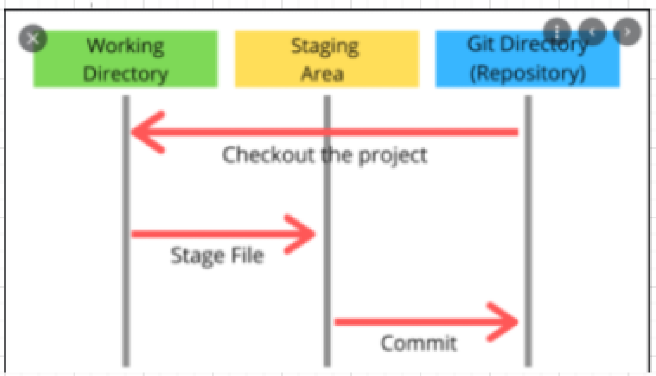
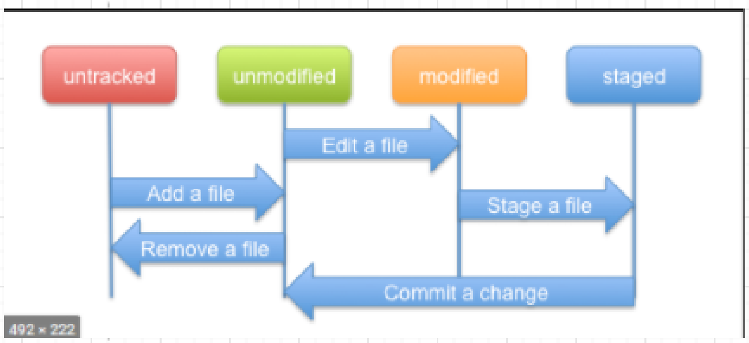
GIT Cheat Sheet



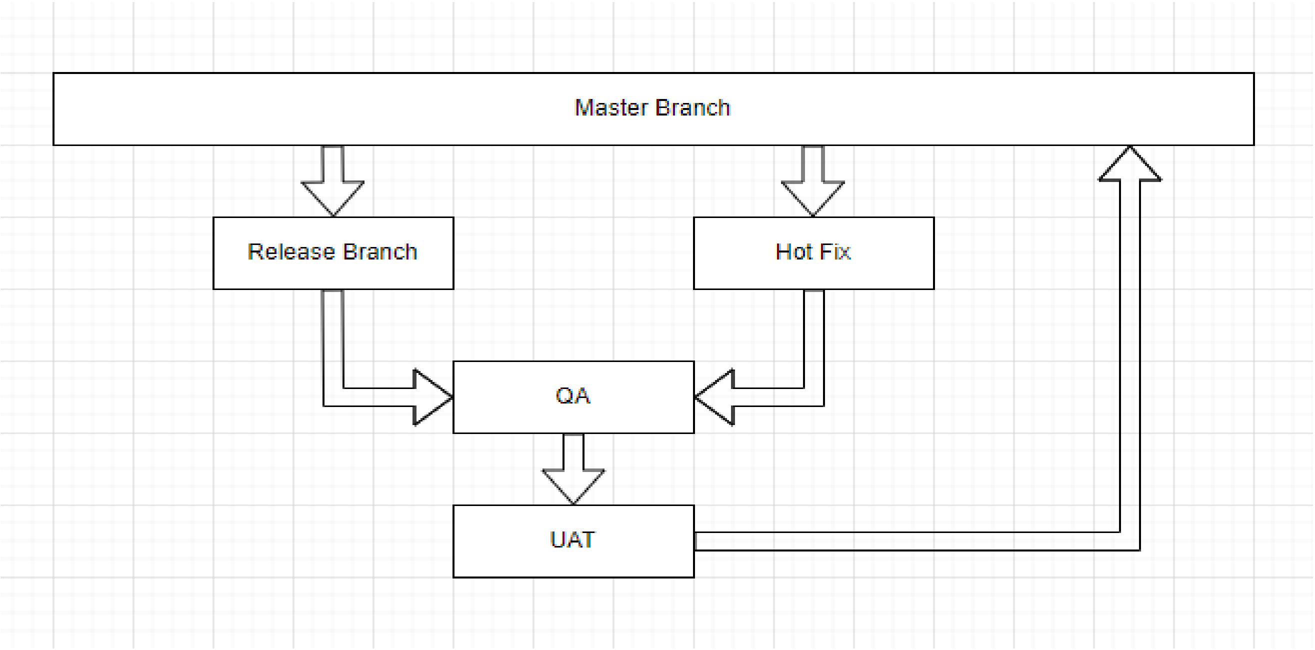


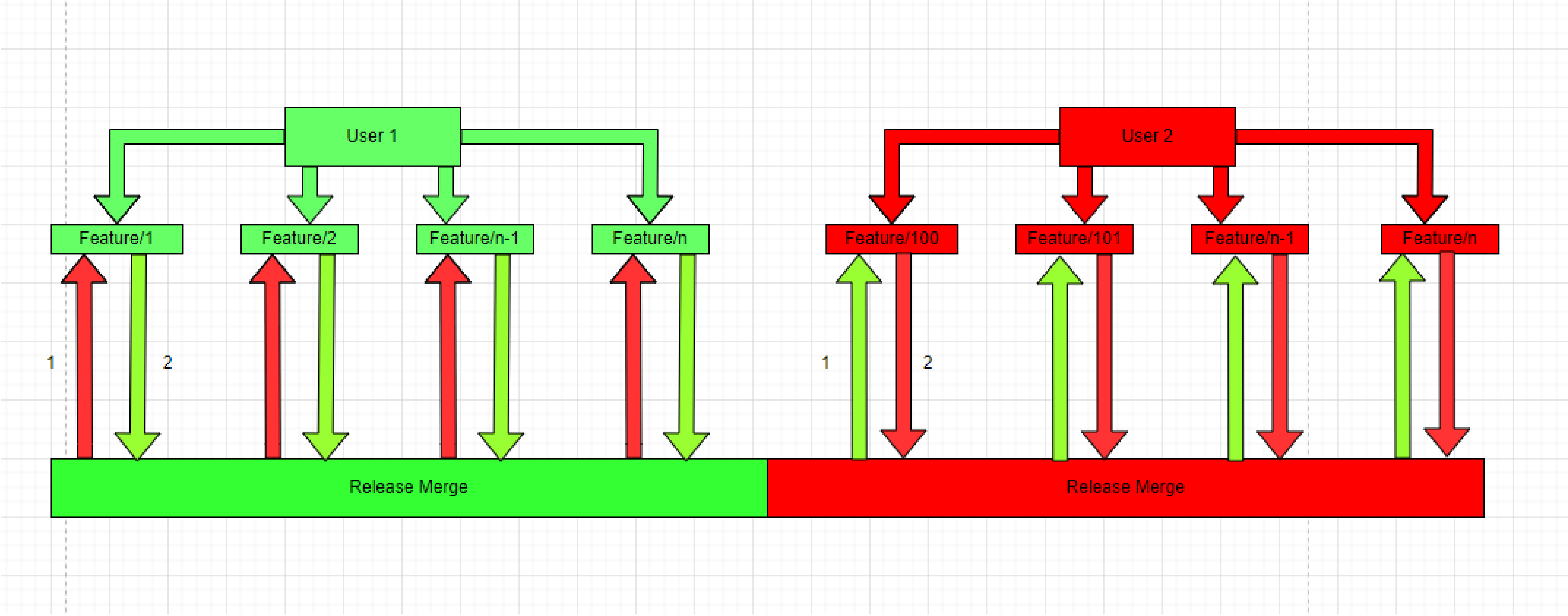




Unstaged Means - **NEW FILE** - User added a new file but git doesn't add the file to stage

modified means - **EXISTING FILE** (Modified) - git already tracked the file, user modified the file


Master Branch
Release Branch
Hot Fix
QA
UAT


User 1
User 2
Feature/1
Feature/2
Feature/n-1
Feature/n
Feature/100
Feature/101
Feature/n-1
Feature/n
1
2
1
2
Release Merge
Release Merge

Linux commands

To create a directory.	mkdir NewFolder
This will add an empty file in current working directory.	touch sairam.txt
To move to the child directory.	cd NewFolder
To move to the previous or parent directory.	cd ..
This command is to clear the terminal	clear
This will add a new file and insert the file content.	echo Ranjith > sairam.txt echo Name: Ranjith > Rajagopal/Ranjith.txt
This will add a content in the existing file name. If file not exists it will create a new file.	echo Ranjith >> sairam.txt
This will delete the file on the current working directory.	rm sairam.txt
This will rename the file from filename to filename1. If file not found, it will throw an error.	mv sairam.txt ram.txt
This will move the file from one path to another path with same of different name.	mv sairam.txt newpath/sairam.txt (OR) mv sairam.txt newpath/ram.txt
To display all the content in the directory.	ls
To display all the content including hidden files in the directory.	ls -a
To delete the file or folder.	rm -rf .git rm -rf sairam.txt rm -rf Rajagopal/Ranjith.txt

Git Version

To display the git version installed.	git version

Display remote details

This will display the git origin details.	git remote -v
To add an origin	git remote add origin https://github.com/Demo.git

Git Global Config

Set the user name globally.	git config --global user.name “Ranjith Rajagopal”
Set the user email globally.	git config --global user.email “ranji.r@gmail.com”

Initialize a repo

Initialize a new repo.	git init

Clone a repo

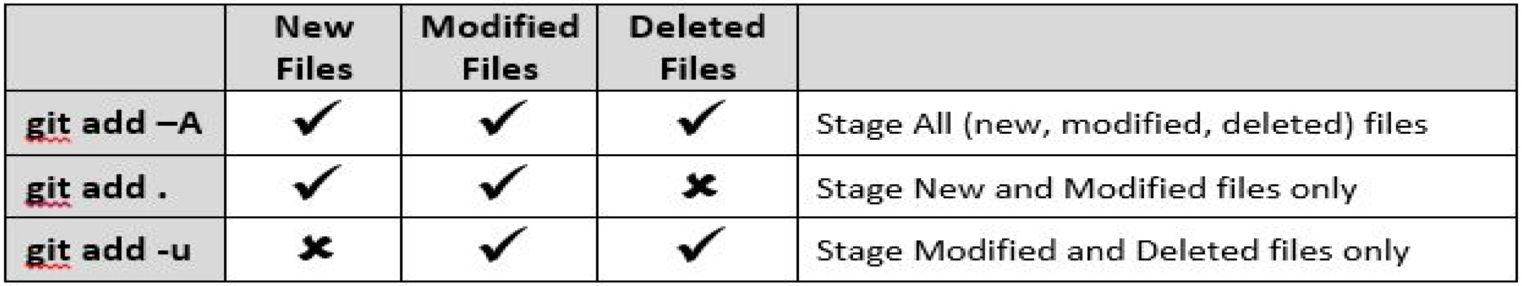
Clone the repo to local directory.	git clone https://github.com/Demo.git
Clone the repo to the destination path.	git clone https://github.com/Demo.git C:/temp/test/

View Status

Full status.	git status
Shorthand status.	git status -s

Staging Files

Stages a single file.	git add sairam.txt
Stages a multiple file.	git add sai.txt ram.txt
Stages with a pattern.	git add *.txt
This will stage only the modified and deleted files.	git add -u
Stages all the file in the current working directory and the child directory and it will ignore any files which start with "." e.g. .gitignore.	git add *
Stages all the file in the current working directory and the child directory also it will add any files which begins with "."e.g. .gitignore.	git add .
Stages all files in the working directory of the git.	git add -A



	New Files	Modified Files	Deleted Files	
git add –A	✓	✓	✓	Stage All (new, modified, deleted) files
git add .	✓	✓	✗	Stage New and Modified files only
git add -u	✗	✓	✓	Stage Modified and Deleted files only

Undo the staging Change

Remove the changes in working directory	git restore sairam.txt **or** git restore .
When we add the changes behind the scenes git add a temporary head. This command will remove the temporary head. Note: This is not useful command.	git reset --soft
This command will remove the temporary head and move the files to working directory. This command will mark the file as untracked or unmodified.	git reset --mixed
This command will permanently remove the files both from staging and working area.	git reset --hard
This command will undo the staging changes for one file. Meaning this command will change the file status from staging area to working directory.	git reset sairam.txt OR git reset HEAD -- sairam.txt
Clear all the files on the staging area.	git clean --f

Commit the files

This command will commit the files in the current directory. Meaning it will push the file from staging area to git repo.	git commit -m “Initial Commit”
This command will commit the files only from the staging area. It will skip any files available on working directory.	git commit -am “Initial commit”
This command will delete the following commits from the git. **DON’T USE THIS COMMAND.** Please be aware the following commit shouldn’t be pushed to remote.	git reset --hard f6hg6t3y
This will revert the last two commits.	git revert HEAD~2
This command will keep the history and it will revert to the older commit. This command will preserve the older commit history.	git revert f6hg6t3y

To view the detailed commit

Shows the given commit.	git show 921a2ff
Shows the last commit.	git show HEAD
Two steps before the last commit.	git show HEAD~2
Shows the version of file.js stored in the last commit.	git show HEAD:file.js

View log

Full log status.	git log
Shorthand log status.	git log --oneline
Shorthand log status with last 5 commits.	git log --oneline -5
To view the log in reverse order (from first commit to last commit).	git log --reverse

Branch

To create new branch.	git branch branchname OR git branch newbranchname oldbranchname OR git switch bugfix
To show all branch.	git branch
To checkout to new branch.	git checkout branchname
Creates and switches.	git switch -C bugfix
To delete the branch.	git branch -d branchname

Push

To push the changes to remote.	git push origin master
To Push the changes to upstream.	git push upstream master

Stash

Creates a new stash. This command will add the changes from working directory to stash and it will clear the working directory.	git stash OR git stash push -m “New tax rules”
Lists all the stashes.	git stash list
Applies the given stash to the working directory.	git stash apply 1
Deletes the given stash.	git stash drop 1
Deletes all the stashes.	git stash clear

Merge

Merges the bugfix branch into the current branch.	git merge bugfix
Creates a merge commit even if FF is possible.	git merge --no-ff bugfix
Performs a squash merge.	git merge --squash bugfix
Aborts the merge.	git merge --abort

Cherry pick

The command will act like a merge. It will merge the specific commit to the destination branch.	git cherry-pick dad47ed

Rebase

Changes the base of the current branch.	git rebase master

Tag

Tags the last commit as v1.0.	git tag v1.0
Tags using a commit.	git tag v1.0 5e7a828
Lists all the tags.	git tag #
Deletes the given tag.	git tag -d v1.0 #

Rename or move files

This command will remove the files from working directory and staging area.	git mv fileone.js filetwo.js

Remove Files

This command will remove the files from working directory and staging area.	`git rm file.js`
This command will remove files only from staging area.	`git rm --cached file.js`

This command will remove all the folder and it sub directories recursively (-r means recursive).	`git rm -r --cached myFolder`
	OR
	`git rm -rf <directory_name>`